



2017 New Construction and Major Renovation



Douglas Kot

Head of Section • DNV GL
LEED-accredited • USGBC member



Introduction to the **LEED v4** RATING SYSTEMS

Douglas Kot, AIA, AICP, LEED Faculty



INTRODUCTIONS

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HOW MANY HAVE WORKED ON A LEED PROJECT?

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HOW HAS LEED IMPROVED FOR V4?

- INCREASED **TECHNICAL RIGOR**
- INCREASED PERFORMANCE **THRESHOLDS**
- ESTABLISHED RATING SYSTEM **ALIGNMENT**
- IMPROVED PROJECT **TEAM EXPERIENCE**
- STREAMLINED** SERVICES
- IMPROVED **DOCUMENTATION**

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LEARNING OBJECTIVES

- Define LEED v4 system goals and the connection to credit requirements
- Identify key improvements in LEED v4 from previous versions of LEED
- Identify **synergies** between credits both within and between credit categories
- Recognize how rating system structure and credit requirements **improve project team experience**
- Recognize how credit requirements lead to **higher performing buildings** and market transformation

DTE Energy



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AGENDA

INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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CONTINUING EDUCATION



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INTRODUCTION TO LEED V4

- System goals + weightings process
- Development + improvements
- Foundations

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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MARKET TRANSFORMATION

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MINIMUM PROGRAM REQUIREMENTS

1. Must be in a permanent location on existing land
2. Must use reasonable site boundaries
3. Must comply with project size requirements

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What hasn't changed



100 point based system

Regional Priority points

Innovation points

LEED AP credential

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What's changed



Added new credit category

Addresses 21 market sectors

Includes international in requirements

Focused on performance

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LEED 2009 vs. LEED V4

IMPACT CATEGORIES

CLIMATE CHANGE
INDOOR ENVIRONMENTAL QUALITY
RESOURCE DEPLETION
HUMAN HEALTH CRITERIA
WATER INTAKE
HUMAN HEALTH - CANCEROUS
ECOTOXICITY
EUTROPHICATION
HABIT ALTERATION
HUMAN HEALTH - NONCANCEROUS
SMOG FORMATION
OZONE DEPLETION
ACIDIFICATION



SYSTEM GOALS

CLIMATE CHANGE
HUMAN HEALTH
BIODIVERSITY
WATER
SUSTAINABLE MATERIALS
COMMUNITY
ECONOMY

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LEEDV4 SYSTEM GOALS



Reduce contribution to **global climate change**



Enhance individual **human health**



Protect and restore **water resources**



Protect and enhance **biodiversity and ecosystem services**



Promote **sustainable and regenerative** material cycles



Build a **green economy**



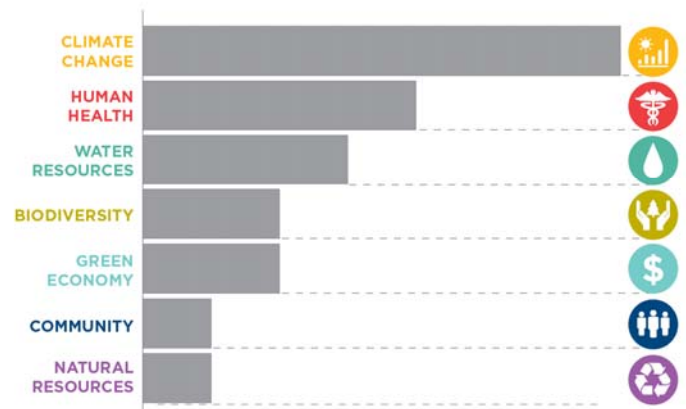
Enhance **community quality of life**

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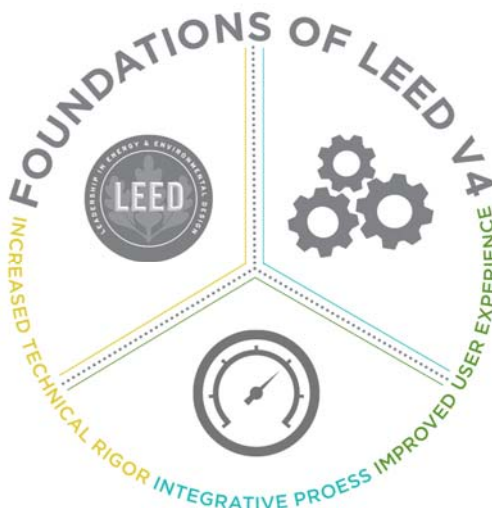
Allocating Points in LEED

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BIGGEST POINT VALUE = BEST OUTCOME



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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

- **GLOBALIZATION**
- Adaptations
- Alignment

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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147 COUNTRIES & TERRITORIES
AROUND THE WORLD

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BD+C, ID+C, AND EBOM EQ PREREQUISITE MINIMUM INDOOR AIR QUALITY PERFORMANCE



U.S. Standard: ASHRAE 62.1-2010
European Standards: CEN EN 15251:2007
EN 13779:2007
A local standard is available as well.

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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

- Globalization
- **ADAPTATIONS**
- Alignment

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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**THINK
ABOUT IT**

**What type of
projects have you
done with LEED?**

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BD+C

NEW CONSTRUCTION
HEALTHCARE
CORE AND SHELL
DATA CENTERS
HOSPITALITY
WAREHOUSE AND
DISTRIBUTION CENTERS
SCHOOLS
RETAIL

ID+C

COMMERCIAL INTERIORS
HOSPITALITY
RETAIL

EB: O+M

EXISTING BUILDINGS
HOSPITALITY
DATA CENTERS
WAREHOUSE AND
DISTRIBUTION CENTERS
SCHOOLS
RETAIL

HOMES

HOMES
MID RISE

ND

NEIGHBORHOOD
DEVELOPMENT PLAN
NEIGHBORHOOD
DEVELOPMENT

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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

- Globalization
- Adaptations
- **ALIGNMENT**

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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Improved Documentation



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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

- Overview/Background
- Integrative Process in LEED v4

PERFORMANCE IN LEED V4 CREDITS

WRAP UP AND RESOURCES

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INTEGRATIVE PROCESS

noun.

1. an iterative, collaborative approach that involves a project's stakeholders in the process from visioning through completion of construction and throughout building operation.

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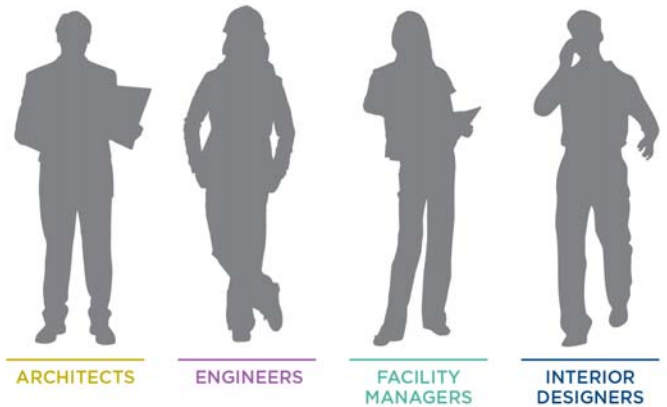
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“Ideally, each member of the project team in integrative design will have a clearly defined role and area of expertise.”

Fundamentals of Integrated Design for Sustainable Building
by M. Keeler and B. Burke

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ROLES & RESPONSIBILITIES



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The Benefits

- Hear from all voices
- Map the process with milestones
- Add value in process
- Benefit all phases with life cycle approach
- Use resources efficiently (energy/water)
- Achieve higher value building
- Reduce costs
- Reduce change orders

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IP Credit
Integrative Process
1 point

- Conduct preliminary research and analysis related to energy and water use.
- Engage the project owner and primary project team in a goal-setting workshop.
- Evaluate the proposed goals and performance targets for feasibility by exploring possible energy and water strategies.
- Document how analysis informed – and potentially changed – design and building form.

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LEEDv4 CREDIT:
INTEGRATIVE PROCESS



IDENTIFY AND USE OPPORTUNITIES TO ACHIEVE SYNERGIES
ACROSS DISCIPLINES AND BUILDING SYSTEMS

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**ENERGY-RELATED
SYSTEMS**



DISCOVERY IMPLEMENTATION

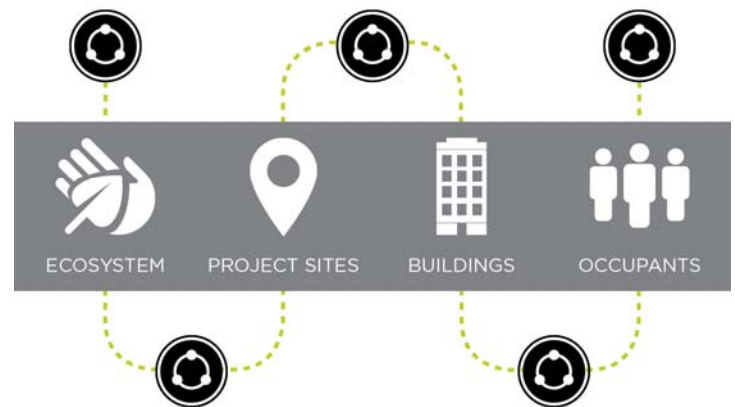
**WATER-RELATED
SYSTEMS**



DISCOVERY IMPLEMENTATION

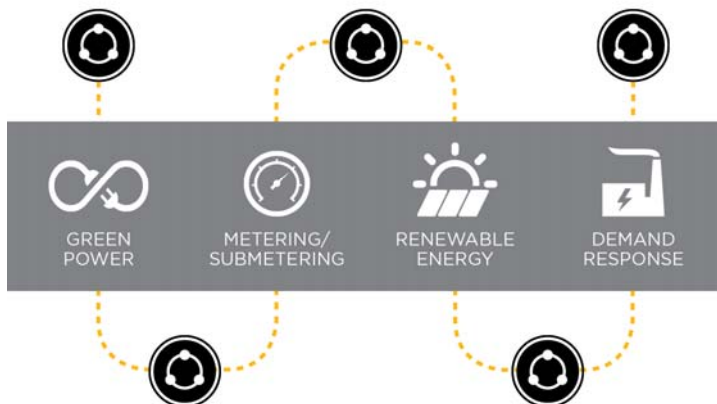
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INTEGRATIVE PROCESS + **SUSTAINABLE SITES**



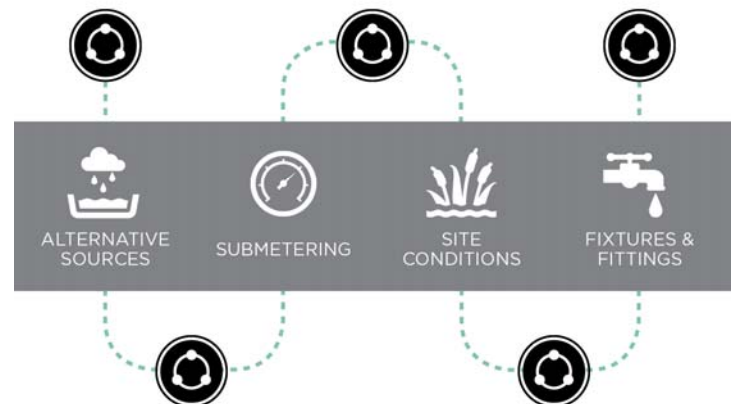
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INTEGRATIVE PROCESS + **ENERGY IMPROVEMENT**



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INTEGRATIVE PROCESS + **WATER IMPROVEMENT**



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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

- Foundation in LEED v4
- Performance in credit categories

WRAP UP AND RESOURCES

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You can't
manage
what you
don't
measure.



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LEEDv4 SYSTEM GOALS

-  Reduce contribution to **global climate change**
-  Enhance individual **human health**
-  Protect and restore **water resources**
-  Protect and enhance **biodiversity and ecosystem services**
-  Promote **sustainable and regenerative** material cycles
-  Build a **green economy**
-  Enhance **community quality of life**

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HOMES AND MULTI-FAMILY

NEIGHBORHOOD DEVELOPMENT

BUILDING DESIGN & CONSTRUCTION

EXISTING
BUILDINGS
OPERATIONS &
MAINTENANCE

INTERIOR DESIGN & CONSTRUCTION



DESIGN



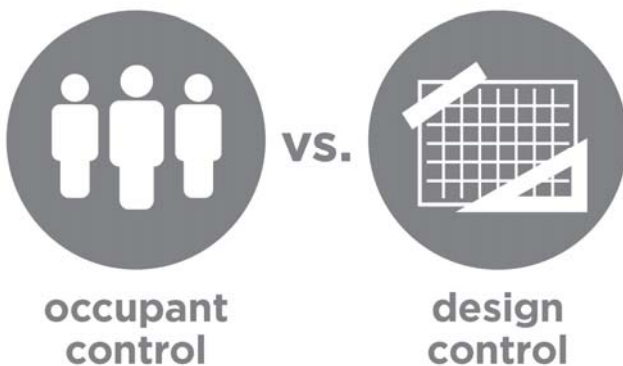
CONSTRUCTION



OPERATIONS

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PERFORMANCE OUTCOME



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ACTIVITY

Getting started with LEED v4

Working in a small group, define a common project type that some in the group are working on or that you are most familiar with.

Try to identify the LEED V4 Credits that may be the most difficult to achieve and those that may be easiest to achieve within the region.

What credits are the most important to achieve?

Mark your checklist (Easy as "Yes," difficult as "Maybe")

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BREAK

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LOCATION AND TRANSPORTATION

SUSTAINABLE SITES

WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

INDOOR ENVIRONMENTAL QUALITY

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LOCATION & TRANSPORTATION

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:

LEED FOR NEIGHBORHOOD DEVELOPMENT LOCATION



Photo Credits: Heather Beal

Alternative compliance path to all of the LT credits in LEED BD+C and ID+C

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LT Credit
Access to Quality Transit

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:

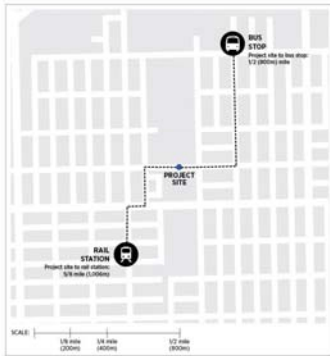
ACCESS TO QUALITY TRANSIT



MULTIMODAL TRANSPORTATION CHOICES

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IDENTIFY TRANSIT STOPS WITH ½ MILE WALKING DISTANCE



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MINIMUM DAILY TRANSIT SERVICE FOR PROJECTS

WITH MULTIPLE TRANSIT TYPES (BUS, STREETCAR, RAIL, OR FERRY)

WEEKDAY TRIPS	WEEKEND TRIPS	POINTS BD&C (EXCEPT C CORE AND SHELL)	POINTS BD&C (CORE AND SHELL)	POINTS ID&C
72	40	1	1	2
144	108	3	3	5
360	216	5	6	7

BONUS POINTS FOR DIVERSITY OF TRANSIT TYPES - WITH COMMUTER RAIL OR FERRY SERVICE ONLY

WEEKDAY TRIPS	WEEKEND TRIPS	POINTS (ALL PROJECTS)
24	6	1
40	8	2
60	12	3

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LT Credit Reduced Parking Footprint

CASE 1

For projects *not* meeting
either: Surrounding
Density and Diverse
Uses or Access to
Quality Transit

CASE 2

For projects achieving at
least 1 point for either:
Surrounding Density and
Diverse Uses to Access to
Quality Transit

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Estimate
parking demand

Use strategies to
reduce parking
demand

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CREDIT STRATEGIES

- 1 Telecommuting
- 2 Shuttle services
- 3 Shared parking
- 4 Sell units separately
- 5 Transit subsidy
- 6 Compressed work week schedules

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LT Credit Green Vehicles

OPTION 1

Electric
vehicle
chargers

or

OPTION 2

Liquid,
gas, or
battery
facilities

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SUSTAINABLE SITES

WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

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SUSTAINABLE SITES

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SS Credit
Site Assessment

Investigate and document site elements to inform
project design and performance
1 point

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LEEDv4 BD+C PERFORMANCE-RELATED CREDIT:
SITE ASSESSMENT



EARLY ANALYSIS OF SITE FACTORS

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LEEDv4 BD+C & EBOM PERFORMANCE-RELATED CREDIT:
SITE DEVELOPMENT - PROTECT OR RESTORE HABITAT



VEGETATION
REQUIREMENTS
TO INCLUDE THE
BUILDING FOOTPRINT



SETBACK
REQUIREMENT
REPLACED
WITH MINIMUM
PRESERVATION
STANDARDS



EXPANDED SOIL
REQUIREMENTS
INCLUDE DISTURBED
AND COMPACTED
SOILS

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SUSTAINABLE SITES

WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

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WATER EFFICIENCY

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WE Prerequisite Outdoor Water Use Reduction 30% reduction

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http://www.epa.gov/watersense/water_budget/application.html

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Obtain precipitation data
and evapotranspiration rates

Determine vegetated area

Identify plant types
and coverage

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WE Prerequisite Building-level Water Metering

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LEEDv4 BD+C & EBOM PERFORMANCE-RELATED CREDIT:

BUILDING-LEVEL WATER METERING



WHOLE BUILDING WATER
METERING AND DATA SHARING

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DETERMINE METERS FOR YOUR PROJECT

multiple
sources of
potable water



multiple
meters

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SUSTAINABLE SITES

WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

INDOOR ENVIRONMENTAL QUALITY

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ENERGY AND ATMOSPHERE

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**THINK
ABOUT IT**

**How do you think
holistically about energy
demand, efficiency,
and sources?**

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EA Prerequisite

Building-level Energy Metering

Capture data on total building-level
energy consumption

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LEEDv4 BD+C & EBOM PERFORMANCE-RELATED CREDIT:
BUILDING-LEVEL ENERGY METERING



TRACK AND PROVIDE BUILDING-
LEVEL DATA REPRESENTING TOTAL
BUILDING ENERGY CONSUMPTION

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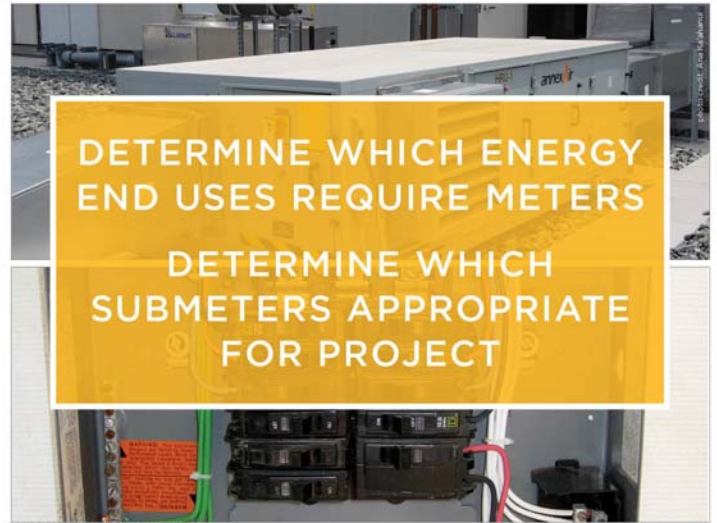


EA Credit

Advanced Energy Metering

Track system-level energy use
1 point

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DETERMINE WHICH ENERGY
END USES REQUIRE METERS

DETERMINE WHICH
SUBMETERS APPROPRIATE
FOR PROJECT

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EA Credit Optimize Energy Performance

OPTION 1

Whole-building
energy simulation

1-18 POINTS
1-16 POINTS (SCHOOLS)
1-20 POINTS (HEALTHCARE)

or

OPTION 2

Prescriptive
compliance:
ASHRAE Advanced
Energy Design
Guide

6 POINTS POSSIBLE

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REFERENCED STANDARD

ANSI/ASHRAE/IESNA
Standard 90.1-2010

www.ashrae.org

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then:

ASHRAE 90.1-2007

now:

ASHRAE 90.1-2010

**IMPROVED LIGHTING
CONTROLS**



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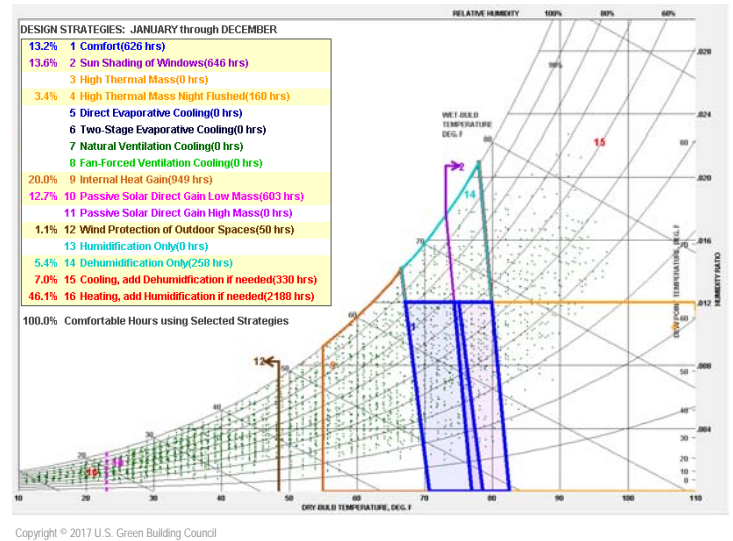
OPTION 1.

Whole-building energy simulation

Identify requirements for
concept-level energy modeling

Engage qualified energy
modeler to create
preliminary model

Analyze various
efficiency measures



OPTION 2. ASHRAE 50% Advanced Energy Design Guide

Select building type and
review requirements

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OPTION 3. Advanced Buildings™ Core Performance™ Guide (Prerequisite only)

Achieve requirements of
Sections 1 & 2, and parts
of Section 3 of CPG

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EA Credit Demand Response

CASE 1

Demand response
program available

2 POINTS

or

CASE 2

Demand response
program not
available

1 POINT

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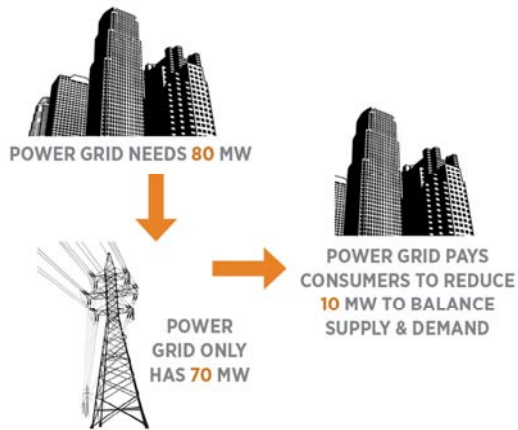
LEEDv4 BD+C & EBOM PERFORMANCE-RELATED CREDIT: DEMAND RESPONSE



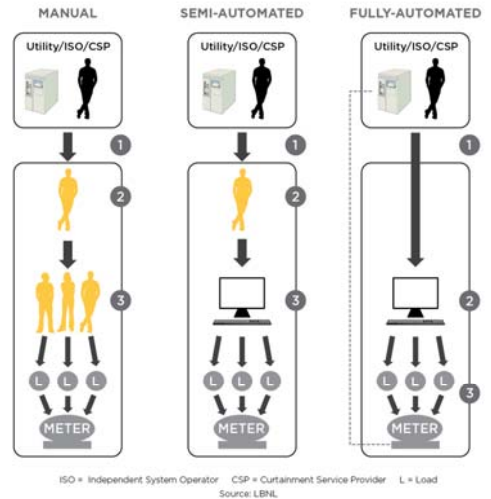
PARTICIPATE IN DEMAND
RESPONSE PROGRAMS THROUGH
LOAD SHEDDING OR SHIFTING

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DEMAND RESPONSE



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WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

INDOOR ENVIRONMENTAL QUALITY

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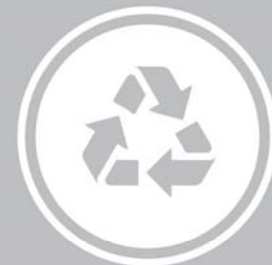


MATERIALS AND RESOURCES

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MR Prerequisite and Credit
Construction and Demolition Waste Management

PREREQUISITE
CWM plan developed
Final waste report

CREDIT
Meet diversion thresholds
for identified waste streams

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
CONSTRUCTION & DEMOLITION WASTE MANAGEMENT



REDUCE AND DIVERT
CONSTRUCTION WASTE

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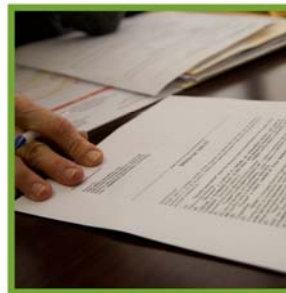


material streams
must be diverted

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
**BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION –
ENVIRONMENTAL PRODUCT DECLARATIONS**



DISCLOSURE PATH



OPTIMIZATION PATH

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SINGLE ATTRIBUTES

MULTIPLE ATTRIBUTES



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transparency brief

(noun) Short version of an Environmental
Product Declaration

program operator

(noun) The entity that registers an
Environmental Product Declaration

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cradle-to-gate

(noun)

Analysis of a product's partial
life-cycle, from resource extraction
(cradle) to factory gate (before it is
transported for distribution and sale).

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LOCATION AND TRANSPORTATION





LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
INTERIOR LIGHTING



PROVIDE LIGHTING CONTROL
AND LIGHTING QUALITY

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
ACOUSTIC PERFORMANCE



PROMOTE OCCUPANTS' WELL-BEING,
PRODUCTIVITY, AND COMMUNICATIONS

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
QUALITY VIEWS



GIVE BUILDING OCCUPANTS A CONNECTION
TO THE NATURAL OUTDOOR ENVIRONMENT

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LEEDv4 BD+C & ID+C PERFORMANCE-RELATED CREDIT:
LOW EMITTING MATERIALS



ENTIRE ASSEMBLY OF MATERIALS
MUST MEET THRESHOLDS FOR
LOW EMISSIONS

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VOC Budget

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INTRODUCTION TO LEED V4

A FLEXIBLE RATING SYSTEM

INTEGRATIVE PROCESS

PERFORMANCE IN LEED V4 CREDITS

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SUMMARY

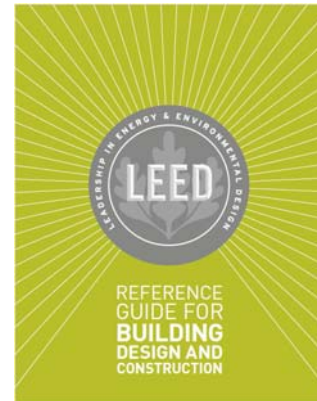
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usgbc.org/resources/leed-v4-user-guide

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RATING
SYSTEM
LANGUAGE

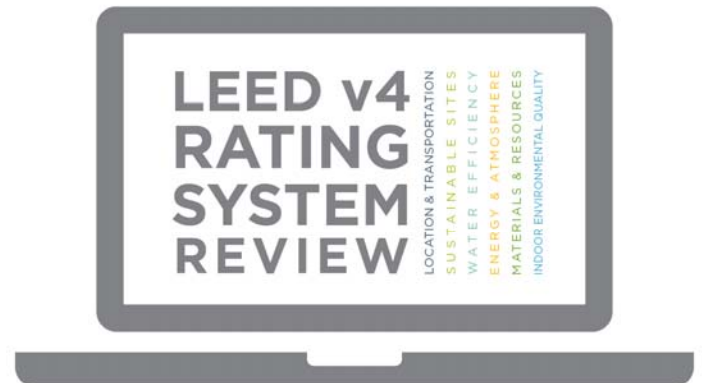


REFERENCE
GUIDES



LEED
ONLINE

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QUESTIONS

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THANK YOU

For questions contact:
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Douglas Kot, email: douglas.kot@dnvgl.com

MICHIGAN STATE UNIVERSITY
Eli Broad College of Business

MEC

U.S. GREEN BUILDING COUNCIL
CHAPTER

DTE Energy



Mark Atkinson

Outreach/Energy Advisor



Agenda

- Program Overview
- Program Incentives
- New Construction and Major Renovation
 - Choosing an Approach
 - Systems Approach
 - LEED Whole Building Approach
 - LEED Design Review Assistance
- Program Catalog & Applications
- Downloading the Catalog & Application
- Special Offers
- About our Designated Trade Allies



Program Overview

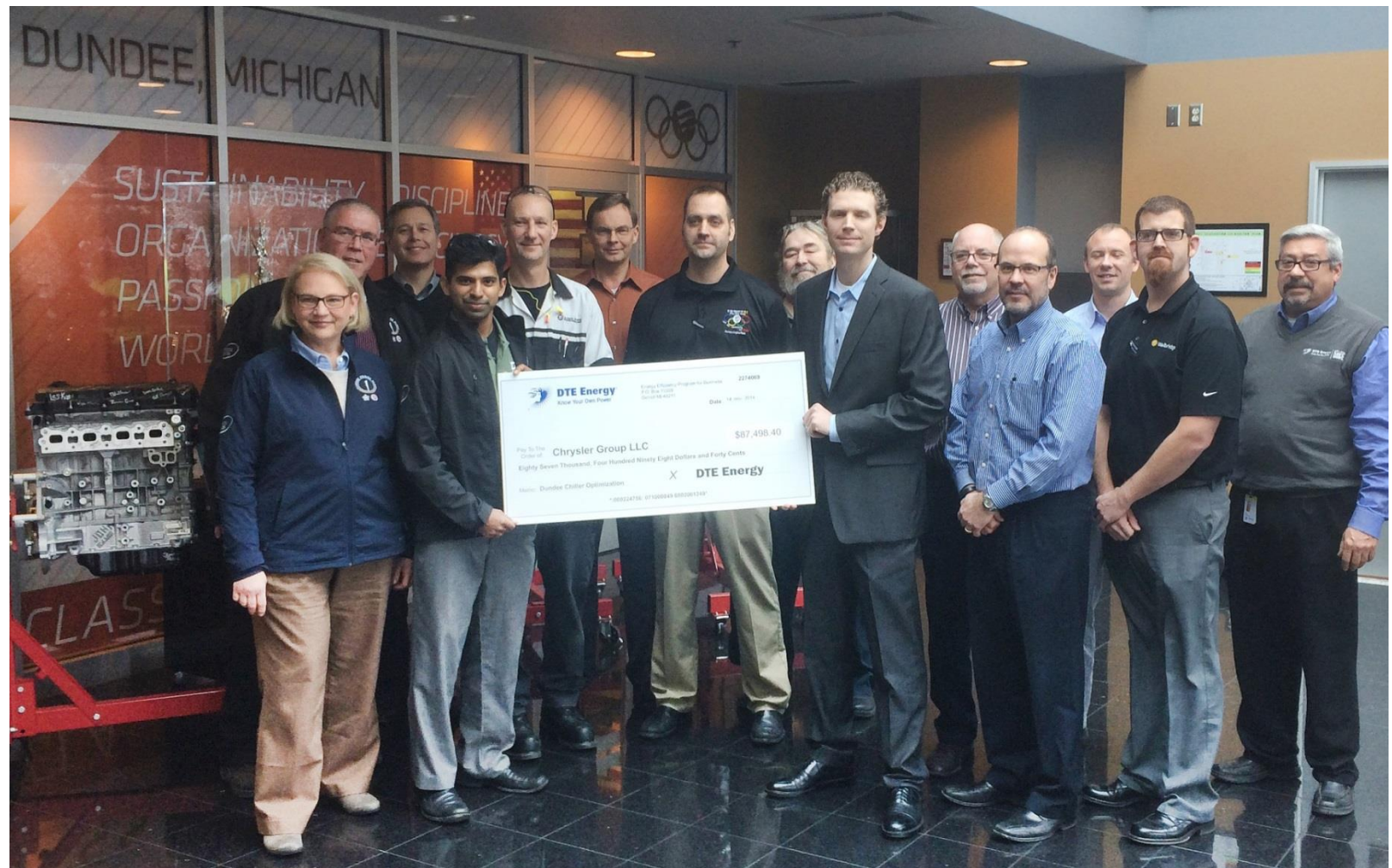
Program funding

- **Michigan Public Act 295 (2008): statewide “Energy Optimization Surcharge” added to all ratepayers’ bills to:**
 - Help customers save energy, manage costs.
 - Help reduce generation, offset new capacity.
- **This “surcharge” is rebated through the program as cash incentives that:**
 - Target specific energy-saving equipment and technologies.
 - Encourage energy-efficiency building and systems design.



Since 2009:

- More than **\$127 million** in cash incentives has been paid to Michigan business customers
- More than **41,000 projects** have been completed



**As of September 2016*



Impact of saving energy

Our customers have realized savings of:

- **13 million Mcf** in natural gas
- **5,000 GWh** in electricity
- **\$400 million** in total energy costs



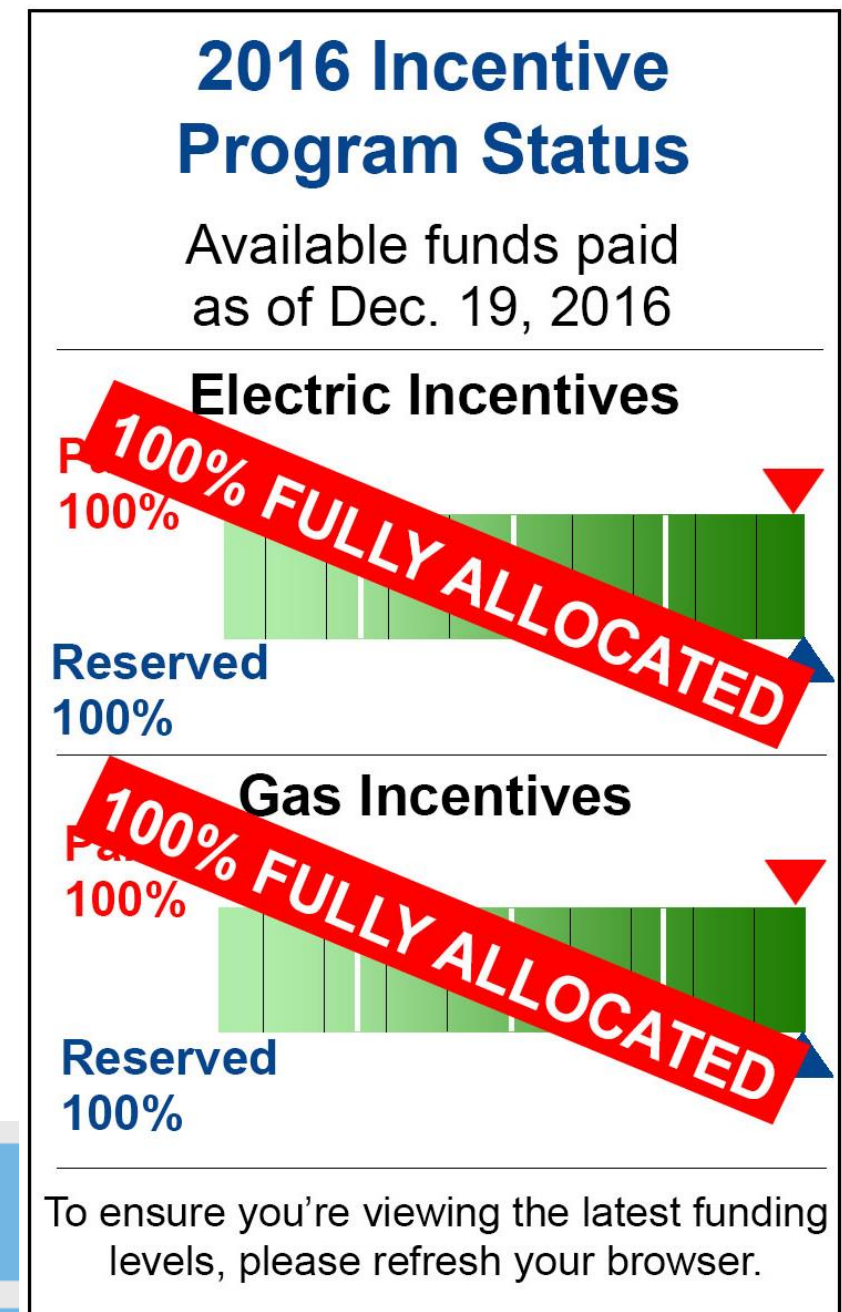
These energy savings translate into 4 million tons of CO₂ not being pumped into the atmosphere

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

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

Program Funding Levels

- Funding gauges are posted and updated every week to provide real-time information on the Program's progress throughout the year:
 - www.dteenergy.com/savenow (below)
 - www.dtetradeally.com (right)



2016 Rebate Funds Available
as of 09/19/2016



98%
Natural Gas Reserved



100%
Electric Reserved

2016 Rebate Funds Available
as of 09/19/2016



51%
Natural Gas Paid



60%
Electric Paid

For a customer to receive incentives

- Qualified measures must be installed at facilities served by DTE
- Projects must involve a **capital investment** that results in an improvement in energy efficiency of a system or building
- The equipment installed must be new and meet the specifications spelled out in the Catalog
- For each site, there must be at least one meter that is on an eligible rate schedule
- You must be in good standing with DTE Energy and **not** be a Residential or Multifamily customer
 - *We have an agriculture program for those on a residential meter*

These do not qualify for an incentive

- Customers who self-direct (and have opted out of the program)
- Load shifting/demand limiting projects
- Renewable energy projects
- Power quality improvements
- Fuel switching projects
- On-site electricity generation
- Changes in operational and/or maintenance practices or simple control modifications that do **NOT** involve capital costs



Program Incentives

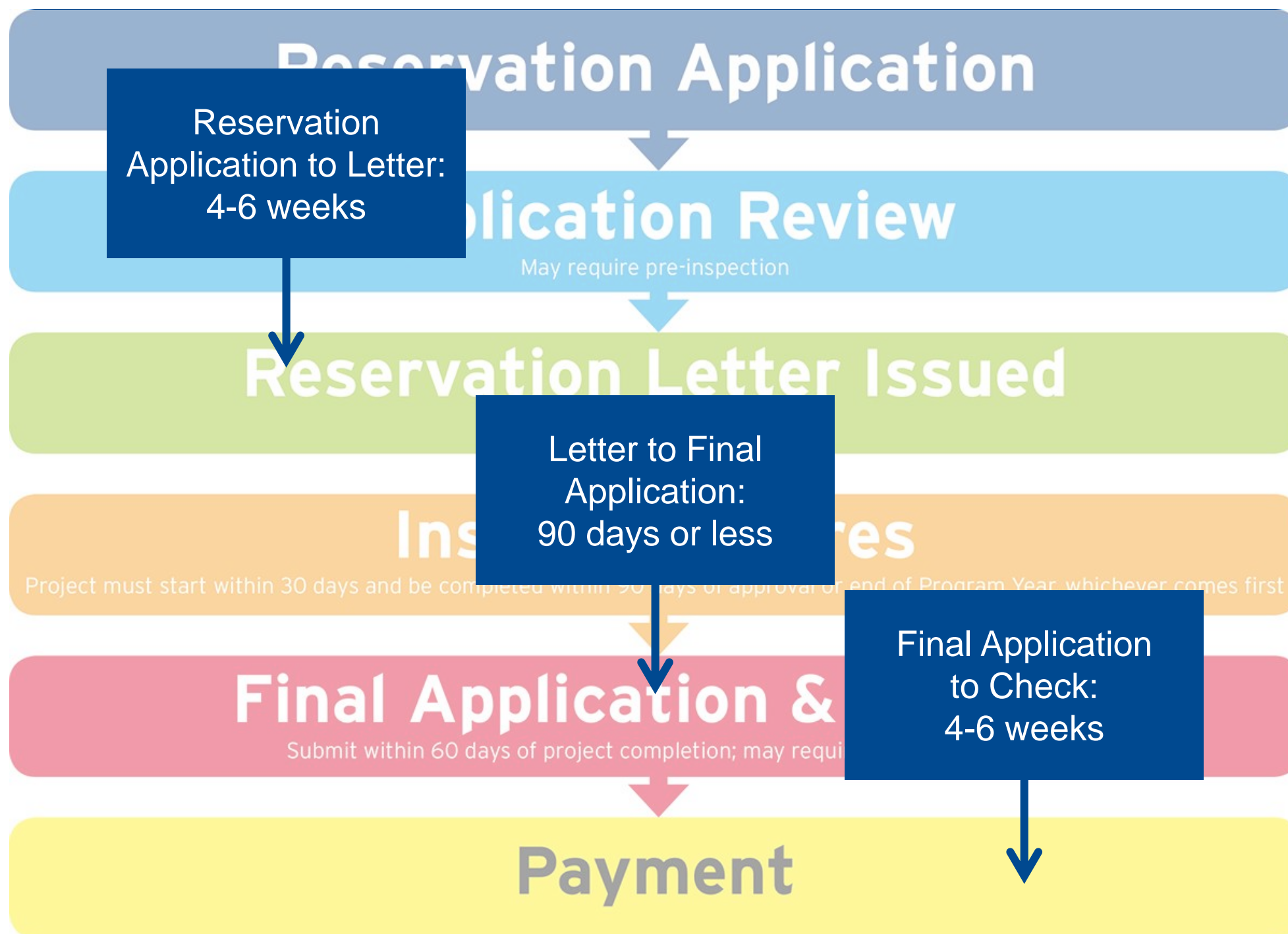


The Timeline





The Timeline



Three types of program incentives

Prescriptive

- **Defined** measures and incentives for the installation of one-for-one energy efficiency improvements
- Incentives average 20%-50% of the incremental cost

Custom

- **Capital investment** projects that are **NOT** eligible for prescriptive incentives may qualify
- Incentives are calculated on a case-by-case basis and are paid per-kWh/Mcf of energy saved

New Construction Major Renovation

- **New facilities or the major renovations** of existing facilities
- Change of use projects
- Adding load

Project Reservations

Prescriptive

- Reservation Applications are not required for most prescriptive measures, **BUT** they are **highly recommended**.
- It **is required** for certain measures; check the Application for details.

Custom

- A Reservation Application **is required** for all Custom projects.

New Construction Major Renovation

- A Reservation Application **is encouraged** for all New Construction and Major Renovation projects
- It **is required** for the LEED Design Review Assistance incentive

If you submit a Reservation Application, do **NOT** start your project until you receive a **Reservation Letter!***

Prescriptive

Prescriptive Incentives: How they work

- **Pre-determined** measures with specific energy savings and cash incentives in these categories:

ELECTRIC

- Lighting
- HVAC
- Miscellaneous
- Process
- Food Service

NATURAL GAS

- Hot Water & Laundry
- HVAC
- Insulation
- Process
- Food Service
- Boiler/Furnace Tune-up

Custom

Custom Incentives: How they work

- Capital investment projects that are **NOT** eligible for a Prescriptive incentive may qualify
- Custom Incentives are determined on a case-by-case basis and are paid per-kWh or per-Mcf
 - Examples include:
 - ✓ Heat recovery
 - ✓ Lighting retrofits not 1-for-1

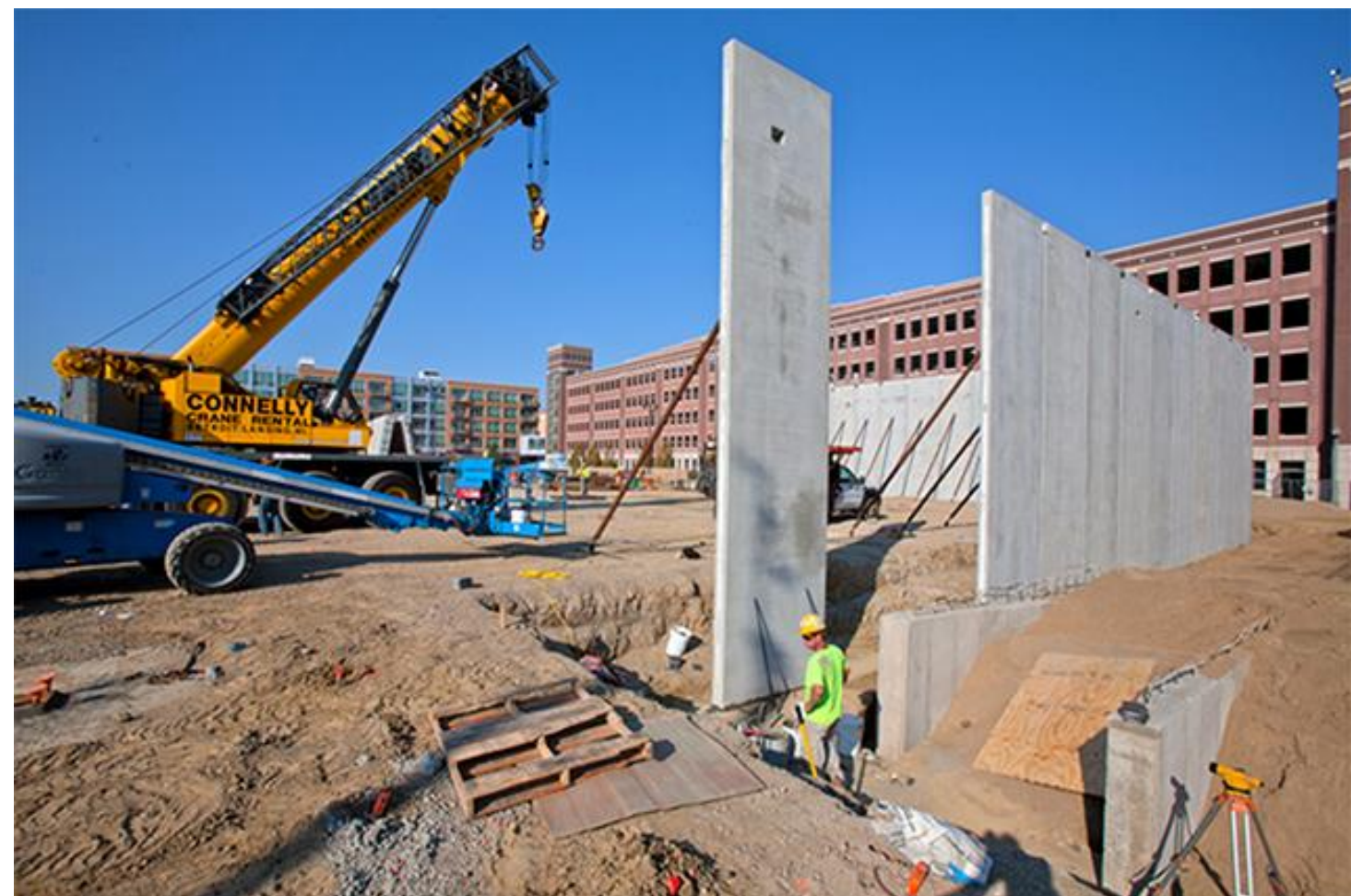


New Construction Major Renovation Incentives

New Construction Major Renovation

New Construction/MR: How it works

- New facilities or major renovations of existing facilities
- Change of use
- Adding load



New Construction Major Renovation

New Construction/MR: Incentives

- **Systems Approach**
 - Pre-determined measures designed to optimize efficiency of individual systems
 - ✓ Measures found in the prescriptive section of Application
 - ✓ Lighting Power Density found in back of Application
- **LEED Design Review Assistance**
 - \$1,500 for LEED project certification
- **LEED Whole Building Approach**
 - Incentives based on three levels of LEED certification

New Construction Major Renovation

Important Information: Deadlines

- Projects that are pursuing LEED certification are reserved only for the current Program year.
 - If projects need to be extended into the next Program year, they will be subject to the new Program incentive levels.
- There is a 90-day reservation period for LEED Design Review Assistance and Systems Approach projects.

New Construction Major Renovation

Important Information: Deadlines

- You must complete your project by the date indicated on the Reservation Letter or by Nov. 30, 2017, whichever comes first
- Final Applications must be submitted within 60 days of project completion or by Nov. 30, 2017, whichever comes first
- Any incomplete Final Application submitted on Nov. 30, 2017, may be cancelled
- Any Final Application submitted after Nov. 30, 2017, may be cancelled

New Construction Major Renovation

New Construction/MR: Which Approach?

Do you have an eligible New Construction or Major Renovation Project?

Yes

Will you be pursuing
LEED Certification?

No

Apply for Systems Approach
(prescriptive) Incentives

Yes

Have you received your LEED
Design Review Decisions?

No


Apply for LEED Design Review
Assistance Incentive

Yes

Apply for LEED Whole Building Approach Incentives



New Construction Major Renovation

Systems Approach: How it works

Incentives for select equipment (now found in the Prescriptive section of the Application – look for this icon: ):

- Lighting Power Density Improvements (interior/exterior)
- Sensors & Controls for Daylighting
- HVAC
- Process Electric
- Water Heating
- Food Service & Refrigeration

Other HVAC

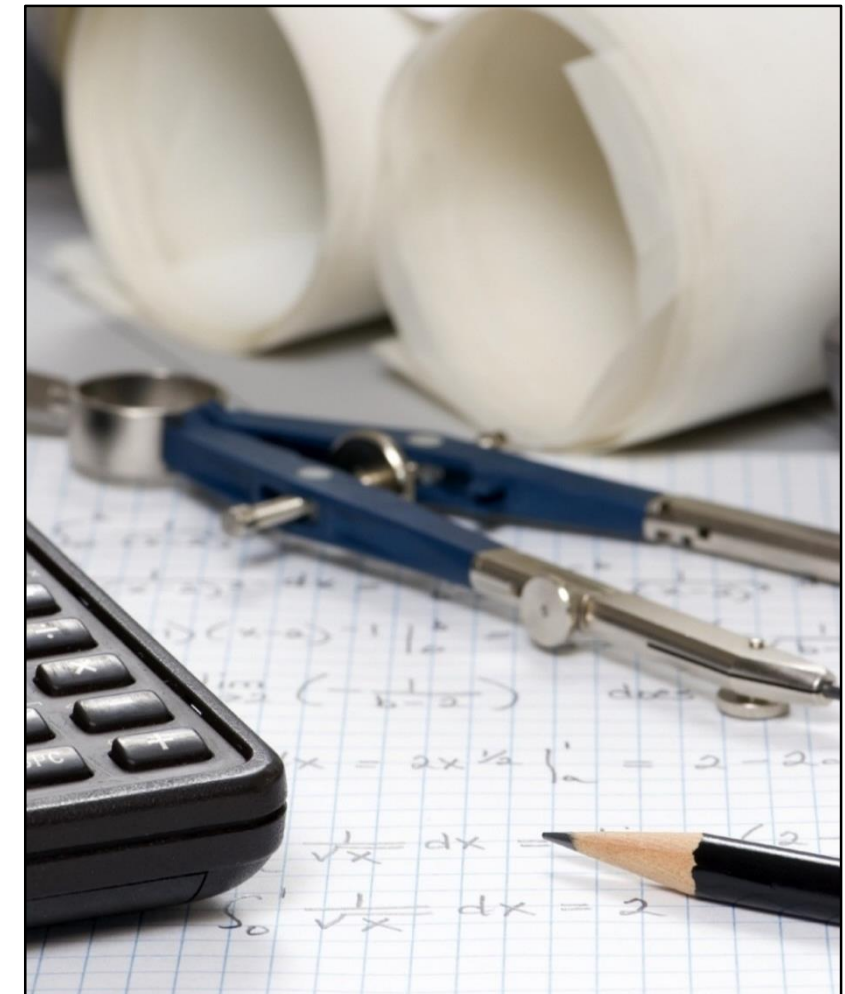
Ref #	Measure Name
HE-39	Variable Frequency Drive – VAV Supply
HE-40	Variable Frequency Drive – Secondary
HE-41	Economizer
 HE-42	Cool Roof (\$0.02 per Sq. Ft.)
HE-43	High Performance Glazing in Window
HE-44	Window Film (\$0.30 per Sq. Ft.)
 HE-45	EC Motors on Small Commercial Furn
HE-46	Efficient Chilled Water Pump
HE-47	Efficient Hot Water Pump

New Construction Major Renovation

Systems Approach: Advantages

Systems Approach:

- Is ideal for smaller, less complex projects (< 20,000 sq. ft.) without modeling
- Is suited for projects that are further along in the design process
- Encourages developers to meet performance standards in lighting-power density and HVAC equipment



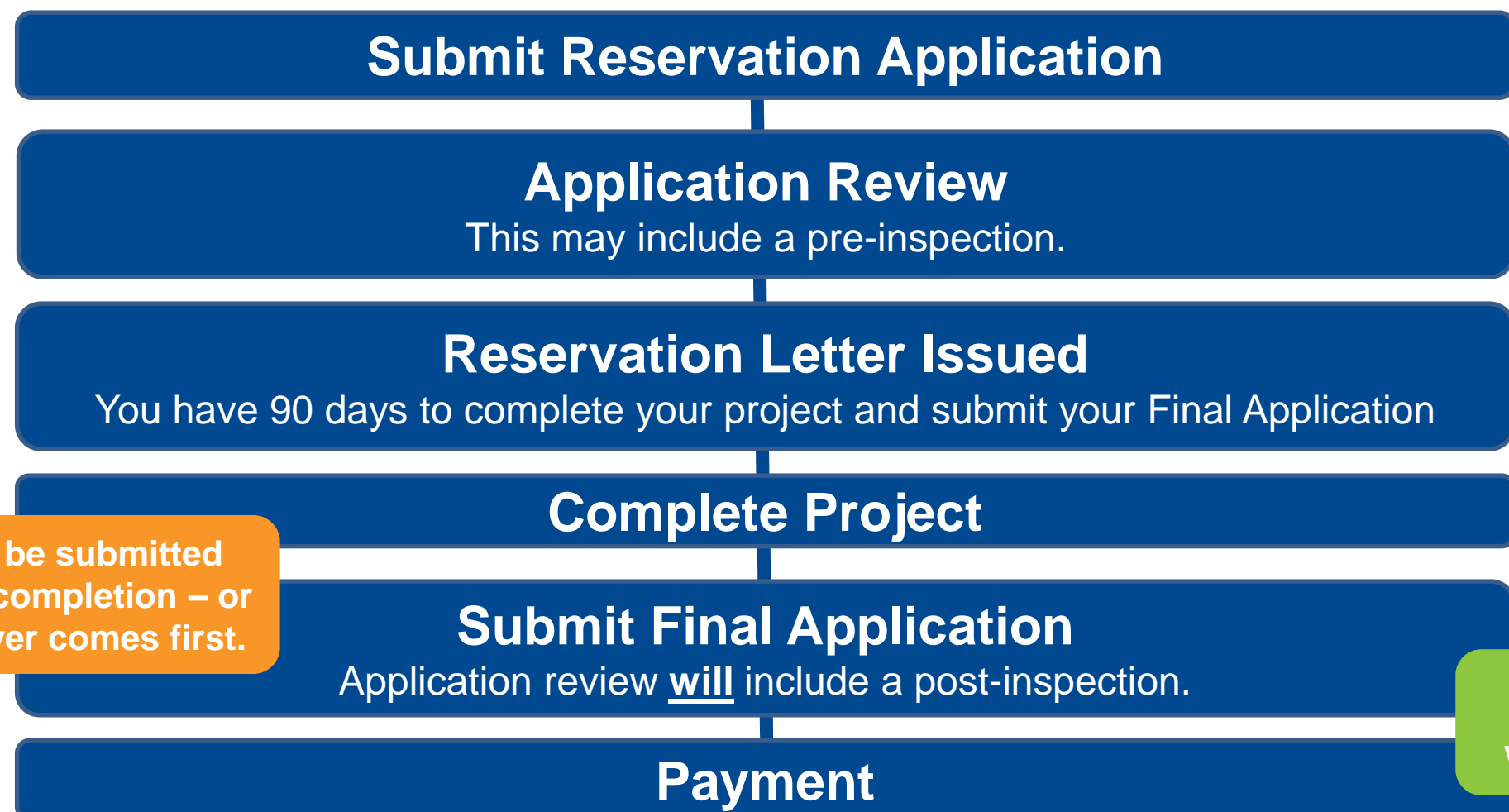
New Construction, Major Renovation Incentives



DTE Energy
Know Your Own Power®

New Construction
Major Renovation

Systems Approach: Timeline



Final Applications must be submitted within 60 days of project completion – or by Nov. 30, 2017, whichever comes first.

**4-6
weeks**

New Construction Major Renovation

Systems Approach: Lighting Power Density

- Based on watts per square foot compared to ASHRAE 90.1 2007
- Baseline broken down by building area type
- LPD must show reduction of at least 10% below baseline
- Limited to 50% reduction
- Requires COMcheck (more than 5,000 sq. ft.)

New Construction Systems Approach - Lighting Power Density							
New Construction Interior Lighting Incentive Worksheet (Attach Interior Lighting COMcheck file to Application)							
Ref #	Building Area Type	Lighting Power Density Maximum* (W per Sq. Ft.) (A)	Watts (B)	Building Area (Square Foot) (C)	Actual LPD* (W per Sq. Ft.) (B / C = D)	Kilowatts Reduced** ((A - D) x C) / 1000 = E)	Incentive (\$200/kW) (E x \$200.00)
LD-17	Automotive facility	0.9					
LD-17	Convention center	1.2					

New Construction, Major Renovation Incentives







New Construction Major Renovation

Systems Approach: Other Lighting

- Lighting Controls
- Tubular Skylights
- LED Refrig. Case Door Lighting

○ New Construction measures can be identified by the  icon.

○ Some measures qualify for the **Michigan-made bonus**

Daylighting	
Ref #	Equipment Type
 LO-11	Tubular Skylights (Light Tubes)
Food Service Lighting	
Ref #	Equipment Type (Standard)
 LL-32	LED Refrigerated Case Door Lighting
 LL-33	Occupancy Sensors for LED Refrigerated Case Lighting
Equipment Type (DLC Listed)*	
Product ID	
 LL-32D	LED Refrigerated Case Door Lighting

Controls			
Ref #	Equipment Type		Incentive
LO-1	Interior Occupancy Sensors	≤ 500 Watts Controlled	\$20
LO-2		> 500 Watts Controlled	\$50
LO-3	Interior Central Lighting Control (\$0.06 per Sq. Ft.)		\$60
LO-4	Interior Switching Controls for Multilevel Lighting (\$0.05 per Sq. Ft.)		\$50
LO-5	Interior Daylight Sensor Controls (\$0.09 per Sq. Ft.)		\$90
LO-6	Combination Occupancy and Daylight Sensor Controls	≤ 500 Watts Controlled	\$25
LO-7		> 500 Watts Controlled	\$65
LO-8	Stairwell Bi-Level Lighting Controls (Reservation required)		\$30
LO-9	Exterior HID Lighting Bi-level Control w/Override, 150W to 1000W HID		\$50
LO-10	Exterior Multi-Step Dimming Timing Controls		\$0
LO-13	Exterior LED Lighting Bi-level Controls		\$35
LO-14	Garage LED Lighting Bi-level Controls		\$30
LO-15	Garage LED Lighting Bi-level Controls w/Photocell		\$65

Incentive	Unit	# of Units	Total Incentive
\$15.00	Door		
\$15.00	Door		
\$30.00	Door		

New Construction, Major Renovation Incentives



DTE Energy
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New Construction Major Renovation

Systems Approach: HVAC - Electric

- Air Conditioning Controls
- Chillers
- Chilled Water Reset
- Cool Roofs
- Heat Pumps

Ref #	Equipment Type	Size Category	Qualifying Efficiency	Installed Efficiency	Unit Size (tons) (A)	Quantity (B)	Incentive per unit (C)	Incentive (A*B*C)	
HE-1	Unitary and Split Air Conditioning Systems	≤ 65,000 Btu/hr (5.4 tons) – 1 Phase	14.0 SEER				\$10		<input type="checkbox"/>
HE-2		≤ 65,000 Btu/hr (5.4 tons) – 3 Phase	14.0 SEER				\$10		<input type="checkbox"/>
HE-3		> 65,000 Btu/hr (5.4 tons), ≤ 135,000 Btu/hr (11.3 tons)	12.0 EER				\$15		<input type="checkbox"/>
HE-4		> 135,000 Btu/hr (11.3 tons), ≤ 240,000 Btu/hr (20 tons)	12.0 EER				\$15		<input type="checkbox"/>
HE-5		> 240,000 Btu/hr (20 tons), ≤ 760,000 Btu/hr (63.3 tons)	10.3 EER				\$10		<input type="checkbox"/>
HE-6		> 760,000 Btu/hr (63.3 tons)	9.7 EER				\$10		<input type="checkbox"/>
HE-7	Air Source Heat Pumps	≤ 65,000 Btu/hr (5.4 tons) – 1 Phase	15.0 SEER				\$20		<input type="checkbox"/>
HE-8		≤ 65,000 Btu/hr (5.4 tons) – 3 Phase	15.0 SEER				\$10		<input type="checkbox"/>
HE-9		> 65,000 Btu/hr (5.4 tons), ≤ 135,000 Btu/hr (11.3 tons)	11.3 EER				\$20		<input type="checkbox"/>
HE-10		> 135,000 Btu/hr (11.3 tons), ≤ 240,000 Btu/hr (20 tons)	10.9 EER				\$25		<input type="checkbox"/>
HE-11		> 240,000 Btu/hr (20 tons)	10.3 EER				\$30		<input type="checkbox"/>
HE-12	Closed Loop Water Source Heat Pump	≤ 17,000 Btu/hr (1.4 tons)	11.5 EER				\$10		<input type="checkbox"/>
HE-13		> 17,000 Btu/hr (1.4 tons), ≤ 65,000 Btu/hr (5.4 tons)	12.3 EER				\$8		<input type="checkbox"/>
HE-14		> 65,000 Btu/hr (5.4 tons), ≤ 135,000 Btu/hr (11.3 tons)	12.3 EER				\$8		<input type="checkbox"/>
HE-15	Room Air Conditioners	≤ 14,000 Btu/hr (1.17 tons)	11.3 EER		N/A*		\$10		<input type="checkbox"/>
HE-16		> 14,000 Btu/hr (1.17 tons)	11.2 EER		N/A*		\$25		<input type="checkbox"/>
HE-17	Package Terminal Air Conditioner	ALL	9.2 EER				\$5		<input type="checkbox"/>
HE-18	Package Terminal Heat Pump	ALL	9.0 EER				\$10		<input type="checkbox"/>



New Construction Major Renovation

Systems Approach: CA/Process-Electric*

- Compressed Air Engineered Nozzle
- VSD Air Compressor
- Compressed Air Storage Tank
- Industrial 3-phase HF Battery Charger
- Electrically Commutated Plug Fans
- Computer Room Air Conditioning Units
- High Efficiency Welders

**Not a complete list*

New Construction Major Renovation

Systems Approach: Food Service-Electric*

- Anti-Sweat Heater Controls
- ENERGY STAR® Refrigerators and Freezers
- ENERGY STAR® Steam Cookers/Hot Holding Cabinets
- Efficient Refrigerant Condenser
- ECM Motor for Walk-In Cooler and Freezer
- Energy Efficient Ice Machines
- Vertical Night Covers

**Not a complete list*

New Construction Major Renovation

Systems Approach: HVAC-Gas*

- High Efficiency Boilers/Furnaces
- Boiler O₂ Trim Control
- Boiler Linkageless Boiler Control
- Infrared Heaters
- Destratification Fans
- Demand Controlled Ventilation
- Gas Water Heaters



**Not a complete list*

New Construction Major Renovation

Systems Approach: Hot Wat./Laundry-Gas*

- Domestic Hot Water System
- High Efficiency Clothes Washer
- High Efficiency Pool Heater
- Ozone Laundry System
- Water Heaters



**Not a complete list*

New Construction Major Renovation

Systems Approach: Misc./Other-Gas*

- Greenhouse Heat Curtain
- Greenhouse Infrared Film
- Truck Loading Dock Seals
- High Efficiency Process Boilers
- High Efficiency Pool Heater



**Not a complete list*

New Construction Major Renovation

Systems Approach: Food Service-Gas*

- ENERGY STAR® Steam Cookers
- Ovens
- ENERGY STAR® Fryers/Griddles
- Vertical Night Cover
- Refrigeration Condenser Waste Heat Recovery
- ENERGY STAR® Dishwasher
- Pre-Rinse Sprayers



**Not a complete list*

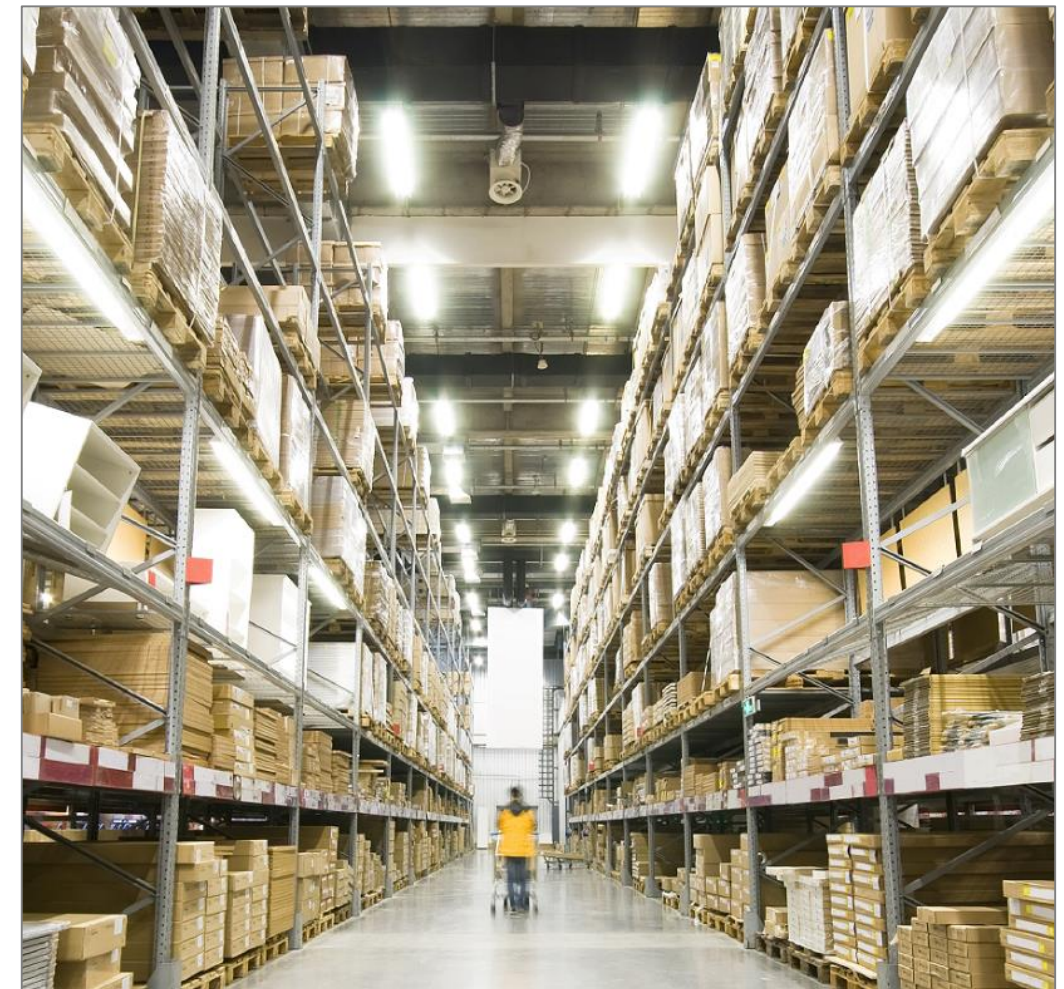
New Construction Major Renovation

Systems Approach: Example

Warehouse

Lighting

- Total project cost.....\$255,418
- Total incentives.....\$136,025
- Project cost after incentives...\$119,393
- Total kWh saved/yr..... 1,700,312
- Simple payback..... **1 year**

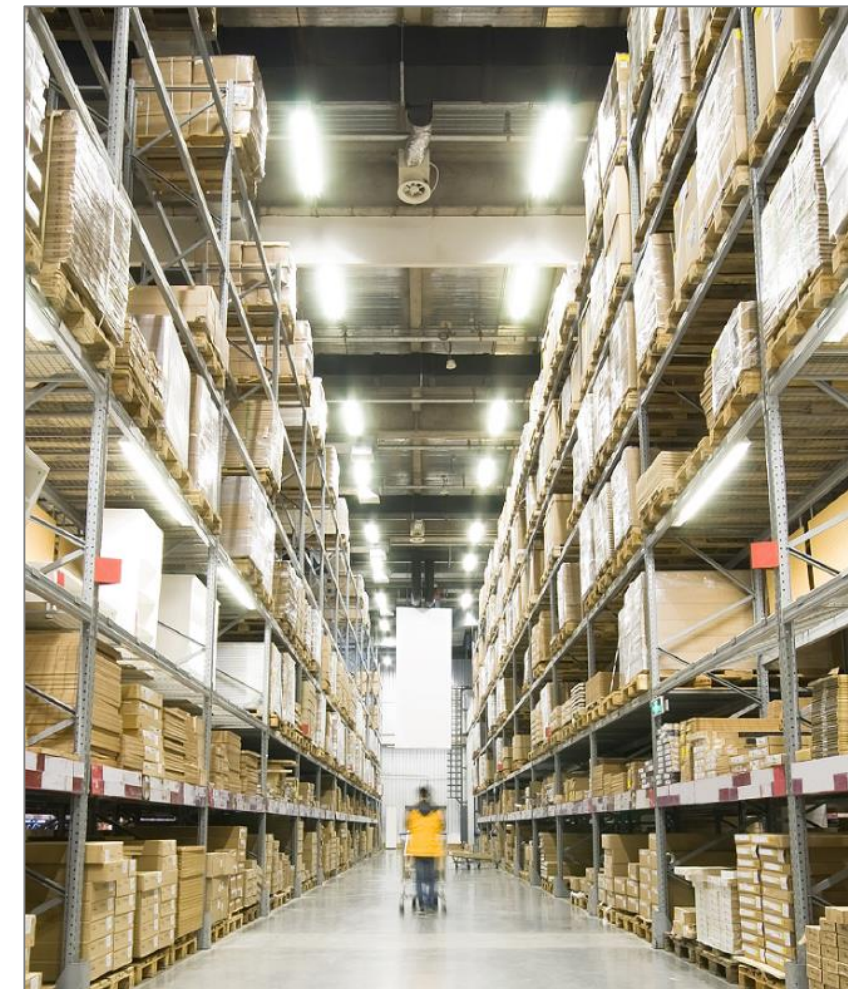


New Construction Major Renovation

Systems Approach: Example Warehouse

New space heating boiler, hot water heating system and process boiler (steam)

- Total project cost..... \$357,000
- Total incentives..... \$60,000
- Project cost after incentives... \$297,000
- Total Mcf saved/yr..... 4,000



New Construction Major Renovation

Systems Approach: Example Hotel

Guestroom energy management system

- Total project cost..... \$8,800
- Total incentives..... \$3,360
- Project cost after incentives... \$5,440
- Total kWh saved/yr..... 1,200



New Construction Major Renovation

LEED Whole Building: How it works

- Incentives are paid on the savings **validated** by GBCI

- Depending on the customers' LEED certification level,

a sliding scale of incentives is offered (*chart*)

- ✓ Applicants must use a Whole Building Simulation energy model utilizing one of the approved software tools*

LEED Level	Incentive	
	Electric	Gas
Certified / Silver	\$0.06/kWh	\$3/Mcf
Gold	\$0.08/kWh	\$4/Mcf
Platinum	\$0.10/kWh	\$5/Mcf

New Construction, Major Renovation Incentives



New Construction Major Renovation

LEED Whole Building: Certification Benefits

- LEED-certified buildings are increasingly more attractive to corporate, public and individual buyers
- Green buildings typically have a 20% higher lease-up rate
- Operating costs decrease by 13.6% for new construction projects and 8.5% for existing buildings*
- Building value increases by 6.8% for existing building projects*

**on average*

LEED Whole Building Approach Worksheet
To complete this worksheet:

1. Check whether your project is using DTE Energy Electric and/or Gas fuel in this project.
2. Enter your proposed and baseline energy usages for the appropriate fuel type. (The interactive PDF application will convert Therms to Mcf).
3. Check your LEED certified level.
4. The interactive PDF application will automatically calculate your electric and/or gas incentive(s) and enter the total below.

LEED Project Information

Project Name: _____
Project Address: _____
Project City: _____ State: _____ ZIP: _____
DTE Energy Fuel Source ☐ Electric ☐ Gas

General Design and Construction Anticipated Schedule

LEED Registration Date: _____
Executable Model Completion Date: _____
LEED Preliminary Design Review Date: _____
Construction Start/Ground breaking Date: _____
LEED Final Construction Review Date: _____
Anticipated Construction Completion Date: _____
LEED Certification Date: _____

Estimated/Actual LEED Certified Savings and Incentives

Baseline	Proposed/Certified	Baseline	Savings
With			
Therms			

Only enter the values for the DTE Energy fuel source for which you are applying.

LEED Certification Level Planned/Actual

Ref#	LEED Certification	Electric Incentive Rate (\$/kWh) (A)	Electric Savings (from above) (B)	Electric Incentive (A x B x C)	Gas Incentive Rate (\$/Mcf) (D)	Gas Savings (Mcf) (from above) (E)	Gas Incentive (D x E x F)	Total Incentive (C + F)
NC-2	<input type="checkbox"/> Certified/Silver	\$0.08			\$3.00			
NC-3	<input type="checkbox"/> Gold	\$0.08			\$4.00			
NC-4	<input type="checkbox"/> Platinum	\$0.10			\$5.00			

* 1 therm = 0.1 Mcf

Total Whole Building Incentives _____

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New Construction, Major Renovation Incentives



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New Construction Major Renovation

LEED Whole Building: Timeline

Submit Reservation Application

Attach LEED Registration documentation and reports from energy model.

30 days

Application Review

Reservation letter issued. **Begin Work** (within 30 days of receipt)

Complete Project (by date on Reservation letter or Nov. 30, 2016.)

Submit Final Application

Submit within 60 days of project completion; no later than Nov. 30, 2016. Attach all required documentation, including awarded LEED certification.

Application Review

4-6 weeks

Payment Approved

Once a Reservation Letter is issued, Final Applications must be submitted by Nov. 30, 2016. Reservations expire after 90 days.

New Construction Major Renovation

LEED Whole Building: Example

University Campus

LEED Gold Certification

- Total project cost..... \$185 million
- Total incentives..... \$83,000
- Total kWh saved/yr..... 410,000
- Total Mcf saved/yr..... 12,500
- LEED Points for EA1..... 10 Points
- Total LEED Points..... 71/100 Points



New Construction Major Renovation

LEED Design Review Assistance

A \$1,500 incentive to customers who pursue the LEED certification split review for NC/MR projects

- Available upon completion of the preliminary LEED design review
- To apply for the incentive, you **must** submit a Reservation Application after your project is registered with the Green Building Certification Institute (GBCI)

LEED Design Review Assistance Worksheet

LEED Project Title:

LEED Registration Date:

LEED Online Project ID:

LEED Preliminary Design Review

LEED Preliminary Design Review Submission Date:

LEED Final Design Review Decisions Date:

Ref #	LEED Certification	Incentive	Application Status	Total Incentive
NC-1	LEED Design Review Assistance	\$1,500.00	<input type="checkbox"/> Reservation Application	
			<input type="checkbox"/> Final Application	

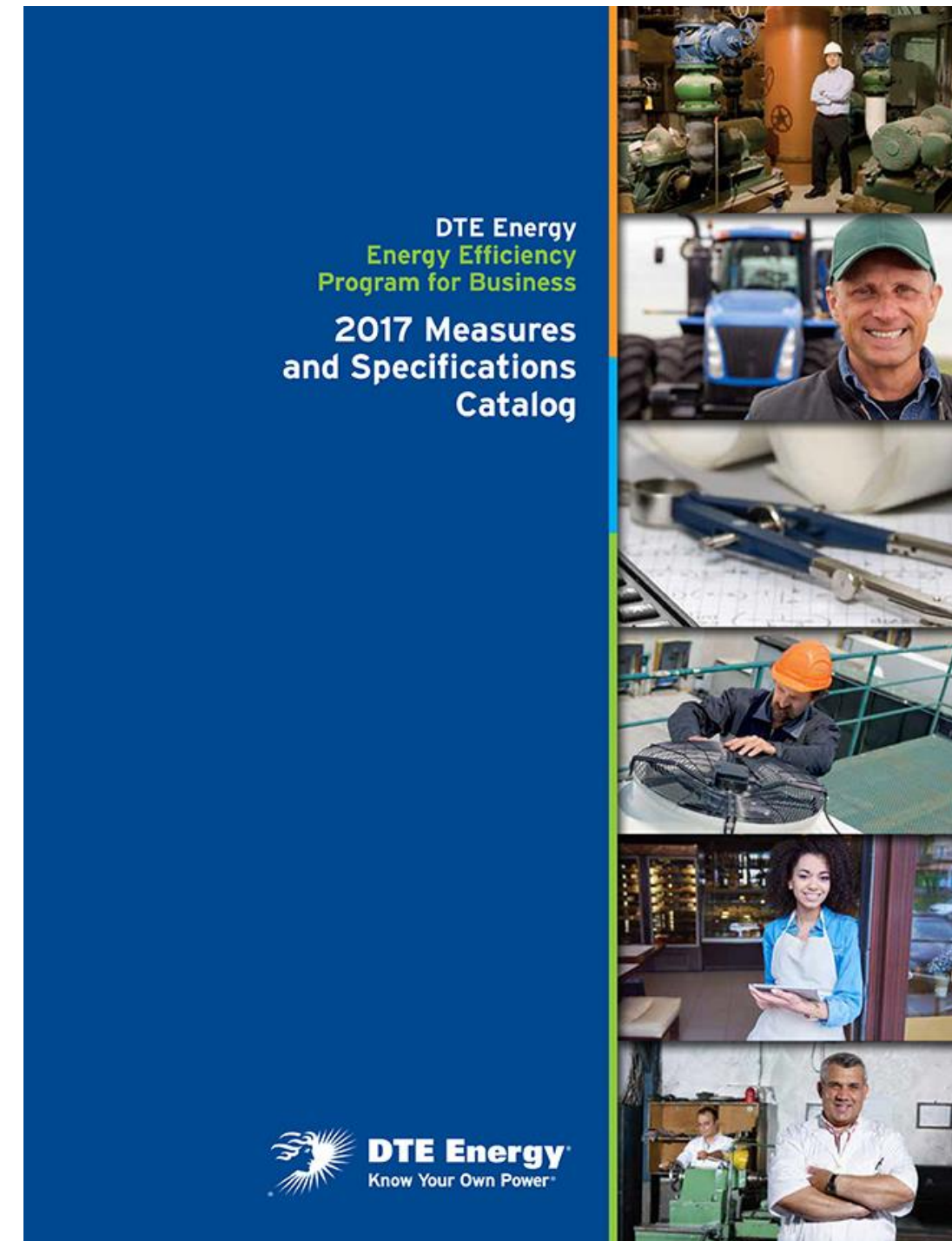


2017 Program Catalog and Applications

Catalog

- Prescriptive specifications
- Custom specifications
- Agriculture specifications

- NEW** New Construction/Major
Renovation specifications
- Systems Approach
 - LEED Whole Building Approach
 - LEED Design Review Assistance



New Construction Program Application



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Application

- Prescriptive/custom measures
- Agriculture measures
 - Residential customers must use the stand-alone Ag Application

NEW New Construction/Major Renovation measures:

- Systems Approach – *integrated into prescriptive worksheets:*
- LEED Whole Building Approach
- LEED Design Review Assistance

ENERGY EFFICIENCY
PROGRAM FOR BUSINESS

DTE Energy
Know Your Own Power®

2017 Program Application

This Application is to be used for projects completed with a Final Application submitted during the 2017 Program Year (Jan. 1, 2017 - Nov. 30, 2017).

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* Some Prescriptive incentives and all Custom incentives require a Reservation Application prior to beginning your project.

If you have questions contact us at 866-796-0512 (press option 3) or email us at saveenergy@dteenergy.com

This Program is not available to DTE Energy business customers in multifamily buildings consisting of five or more units per building. These customers may be eligible to participate in the Multifamily Program for energy saving upgrades to both tenant and common areas.

V:1 : 10/01/16

New Construction Application



DTE Energy
Know Your Own Power®


Application (PDF)

Use it as a:

- **Reservation Application**
- and a*
- **Final Application**

NOTE: Funds must be reserved for all custom projects, LEED Certification Assistance and for certain prescriptive measures.

We **encourage** you to submit a Reservation Application for all **prescriptive** projects.

ENERGY EFFICIENCY PROGRAM FOR BUSINESS		 DTE Energy Know Your Own Power®	
2017 Program Application			
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V:1 : 10/01/16			

Application Contents

Systems Approach

- Integrated into the prescriptive measure section

- Find this icon: 

Lighting Power Density

- Worksheets

LEED Design Review Assistance

- Worksheets

LEED Whole Building Approach

- Worksheets

Other HVAC	
Ref #	Measure Name
HE-39	Variable Frequency Drive – VAV Supply or Return Air Fan
HE-40	Variable Frequency Drive – Secondary Chilled Water Pump
HE-41	Economizer
HE-42	Cool Roof (\$0.02 per Sq. Ft.)
HE-43	High Performance Glazing in Windows (\$0.30 per Sq. Ft.)
HE-44	Window Film (\$0.30 per Sq. Ft.)
HE-45	EC Motors on Small Commercial Furnaces replacing no
HE-46	Efficient Chilled Water Pump

ENERGY EFFICIENCY PROGRAM FOR BUSINESS	
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LEED Whole Building Approach Worksheet

To complete this worksheet:

1. Check whether your project is using DTE Energy Electric and/or Gas fuel in this project.
2. Enter your proposed and baseline energy usages for the appropriate fuel type. (The interactive PDF application will convert Therms to MWh)
3. Check your LEED certified level.
4. The interactive PDF application will automatically calculate your electric and/or gas incentive(s) and enter the total below

LEED Project Information

Project Name: _____

Project Address: _____

Project City: _____ State: _____ ZIP: _____

DTE Energy Fuel Source: ☐ Electric ☐ Gas

General Design and Construction Anticipated Schedule

LEED Registration Date: _____

Executable Model Completion Date: _____

LEED Preliminary Design Review Date: _____

Construction Start/Ground breaking Date: _____

LEED Final Construction Review Date: _____

Anticipated Construction Completion Date: _____

LEED Certification Date: _____

Estimated/Actual LEED Certified Savings and Incentives

	Total with Therms	Proposed/Certified	Baseline	Savings
Electric				
Gas				

Only enter the values for the DTE Energy fuel source for which you are applying.

LEED Certification Level Planned/Actual

Ref#	LEED Certification	Electric Incentive Rate (\$/kWh) (A)	Electric Savings (MWh) (B)	Electric Incentive (\$A x B) (C)	Gas Incentive Rate (\$/MMBtu) (D)	Gas Savings (MMBtu) (E)	Gas Incentive (\$D x E) (F)	Total Incentive (\$C + F) (G)
NC-2	<input type="checkbox"/> Certified Silver	\$0.06			\$0.00			
NC-3	<input type="checkbox"/> Gold	\$0.08			\$0.00			
NC-4	<input type="checkbox"/> Platinum	\$0.10			\$0.00			

* 1 Therm = 0.1 MWh

Total Whole Building Incentives: _____

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New Construction Application



The following items are required to successfully complete your Reservation and Final Applications:

- Application Checklist
- Customer Information Sheet
- All relevant Incentive Worksheets
- Signed Final Application Agreement (upon submission of Final Application)
- Supporting Information, including design documents and product specifications

DTE Energy
Know Your Own Power®

Prescriptive and Custom Incentive Application Checklist
This form MUST be included with any Reservation and/or Final Application.

Submittal Date _____ Application Number (if known) _____

Is this a revised Application? ☐ yes ☐ no

Is this a New Construction or Major Renovation Project? ☐ yes ☐ no

Project Type: ☐ New Construction ☐ Change of Use Renovation ☐ New Load ☐ LEED Design Review

Reservation Application
Fill out this side when reserving incentives

Required Attachments

- ☐ Customer Information 3
- ☐ Customer Tax ID Number 3
- ☐ Contractor Information 4
- ☐ Michigan-Made Affidavit(s)*
- ☐ DLC Product ID (For Applicable Measures)

NOTE: Some Prescriptive Incentives and all Custom Incentives require a Reservation Application prior to beginning your project.

Incentives Worksheets

- ☐ Lighting 8
- ☐ HVAC – Electric 11
- ☐ Miscellaneous Electric 18
- ☐ Process Electric 20
- ☐ Food Service – Electric 21
- ☐ HVAC – Gas 23
- ☐ Hot Water & Laundry 24
- ☐ Insulation 25
- ☐ Process Gas 25
- ☐ Boiler/Furnace Tune-up 26
- ☐ Food Service – Gas 27
- ☐ Custom 30
- ☐ Agriculture 33
- ☐ New Construction 36
- ☐ LEED Design Review Assistance 38
- ☐ LEED Whole Building Approach 39
- ☐ Boiler/Furnace Tune-up Addendum 40

☐ Reservation Application Date _____

Expected Completion Date** _____

** Project funds will only be reserved to the date specified on the Reservation Letter or Nov. 30, 2017, whichever comes first.

Final Application
Fill out this side when project is completed

Required Attachments

- ☐ Customer Information 3
- ☐ Contractor Information 4
- ☐ W9 Tax Information Form (payee) 4
- ☐ 3rd Party Payment Authorization* 4
- ☐ Signed Final Application Agreement 5
- ☐ Manufacturers' Specifications
- ☐ Itemized Invoices
- ☐ Michigan-Made Affidavit(s)*

Incentives Worksheets

- ☐ Lighting 8
- ☐ HVAC – Electric 11
- ☐ Miscellaneous Electric 18
- ☐ Process Electric 20
- ☐ Food Service – Electric 21
- ☐ HVAC – Gas 23
- ☐ Hot Water & Laundry 24
- ☐ Insulation 25
- ☐ Process Gas 25
- ☐ Boiler/Furnace Tune-up 26
- ☐ Food Service – Gas 27
- ☐ Custom 30
- ☐ Agriculture 33
- ☐ New Construction 36
- ☐ LEED Design Review Assistance 38
- ☐ LEED Whole Building Approach 39
- ☐ Boiler/Furnace Tune-up Addendum 40

* If applicable.

☐ Final Application Date _____

Actual Completion Date*** _____

*** Application must be submitted within 60 days of completion date or by Nov. 30, 2017, whichever comes first.

Please check the appropriate box and fill in the date below for your Reservation or Final Application.

This interactive Application will automatically calculate all incentive totals on each worksheet – which you can then submit electronically to our office. You also can download this Application, print it out and complete it manually. You then can either mail or fax it to our office. **You must complete all applicable pages before sending or submitting this Application to our office.**

Go To Page 44 For Submission Instructions

A01

dteenergy.com/savenow

3

V:1 : 10/01/16

New Construction Application



Electronically submit your **Reservation Application** and/or your **Final Application**

Automatically:

- Your email will be launched
- Our email address will be inserted
- The subject line will be entered
- Your Application will be attached
- Attach other supporting documentation

Hit “send!”

Note: check the **blue boxes** to ensure that your incentives have been entered correctly.

To submit your reservation application*

- Complete the Application (Pages 5-7).**
 - Ensure that you have completed the reservation application checklist (Page 5).
 - Ensure that you have completed the customer information (Page 6).
 - Ensure that you have completed the contractor and, if applicable, Third Party Payment information (Page 7).
- Complete all relevant worksheets for your project.**
BEFORE YOU SUBMIT: If the figure at right does not match the incentives you expected to request, please review your worksheets and the summary page (Page 9).
- Submit your reservation application electronically by clicking here**
or
Fax to: 313.664.1950
or
Print and mail to:
DTE Energy Efficiency Program for Business
P.O. Box 11289
Detroit, MI 48211

Total Incentives Requested
\$1
SUBMIT

* A reservation application may not be required for your project, but is strongly encouraged to set aside funds. Submission of a reservation application does not guarantee that funds will be available.

To submit your FINAL Application

- Complete or confirm all information on Pages 5-7.**
- Complete and have account holder sign final application agreement (Page 9)**
- Complete or confirm all relevant worksheets for your project.**
BEFORE YOU SUBMIT: If the figure at right does not match the incentives you expected to request, please review your worksheets and the summary page (Page 9).
- Submit your final application electronically by clicking here**
or
Fax to: 313.664.1950
or
Print and mail to:
DTE Energy Efficiency Program for Business
P.O. Box 11289
Detroit, MI 48211

Total Incentives Requested
\$1
SUBMIT

Mail, fax or email all manufacturers' specifications and other supporting documents to our office. In your mailing, on your cover sheet or in your subject line, please include the customer name and project number: DTE-(year)(5-digit number). If you don't have a project number, make sure you enter your customer name.

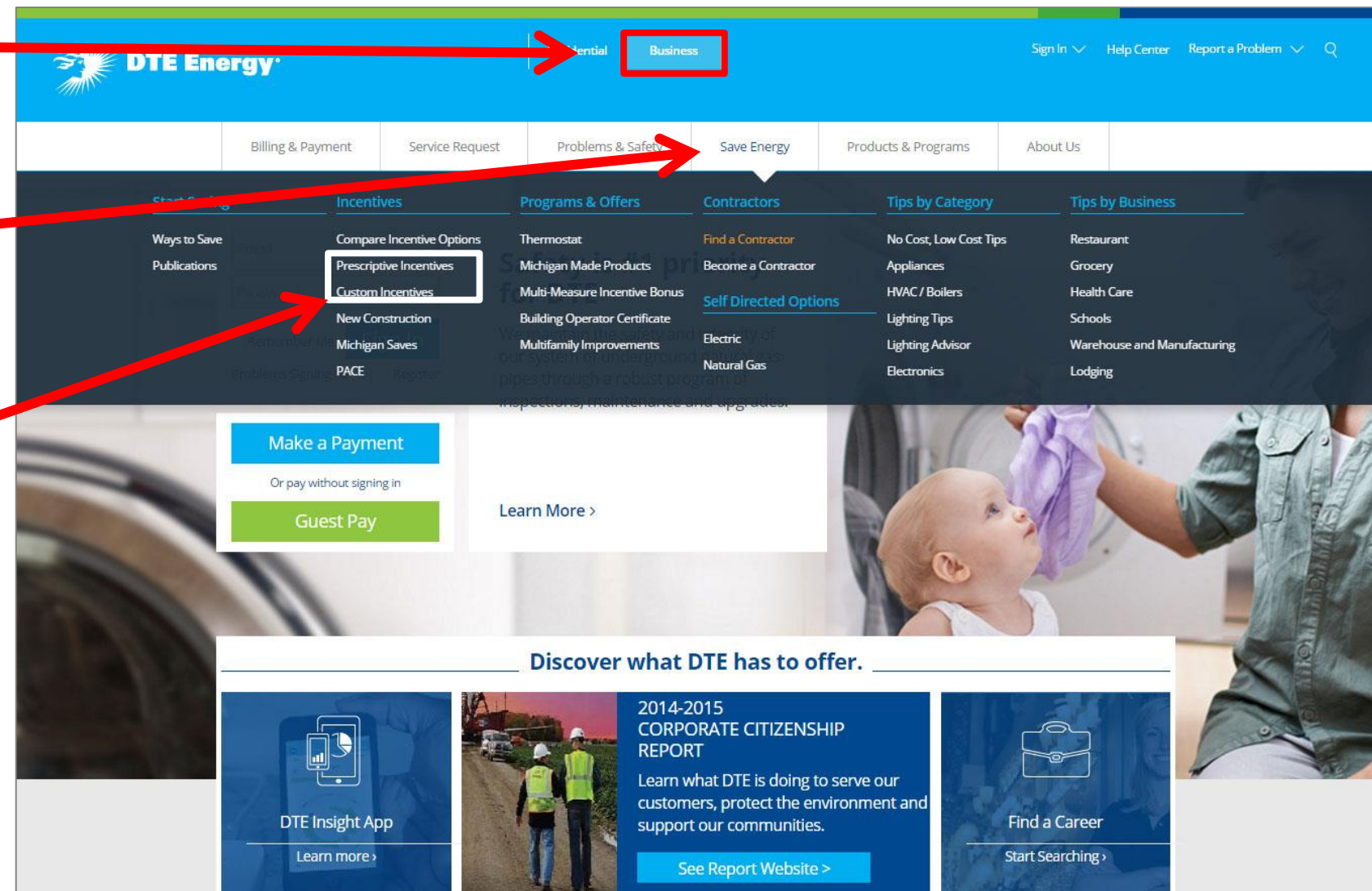
dteenergy.com/savenow 37 V1:11/01/15



Downloading our Catalog & Application

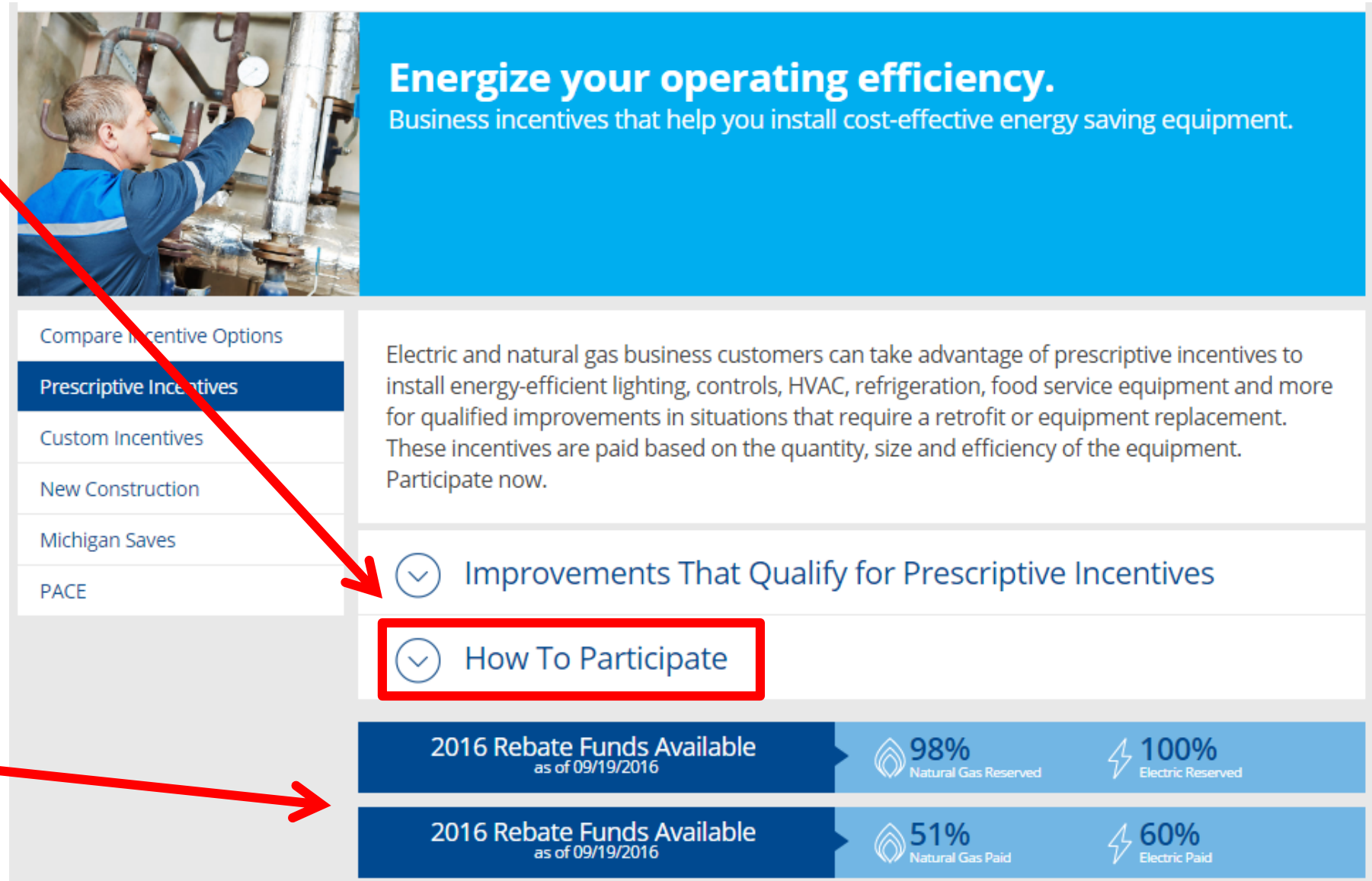
Downloading a Catalog/Application

1. Enter dteenergy.com/savenow into your browser
2. Select **Business** at the top of the page
3. Hover over the **Save Energy** tab
4. Select **Prescriptive or Custom** incentives the dropdown box



Downloading a Catalog/Application

5. Click on **How to Participate**



Energize your operating efficiency.
Business incentives that help you install cost-effective energy saving equipment.

Electric and natural gas business customers can take advantage of prescriptive incentives to install energy-efficient lighting, controls, HVAC, refrigeration, food service equipment and more for qualified improvements in situations that require a retrofit or equipment replacement. These incentives are paid based on the quantity, size and efficiency of the equipment. Participate now.

- Compare Incentive Options
- Prescriptive Incentives**
- Custom Incentives
- New Construction
- Michigan Saves
- PACE

- Improvements That Qualify for Prescriptive Incentives
- How To Participate**

2016 Rebate Funds Available
as of 09/19/2016

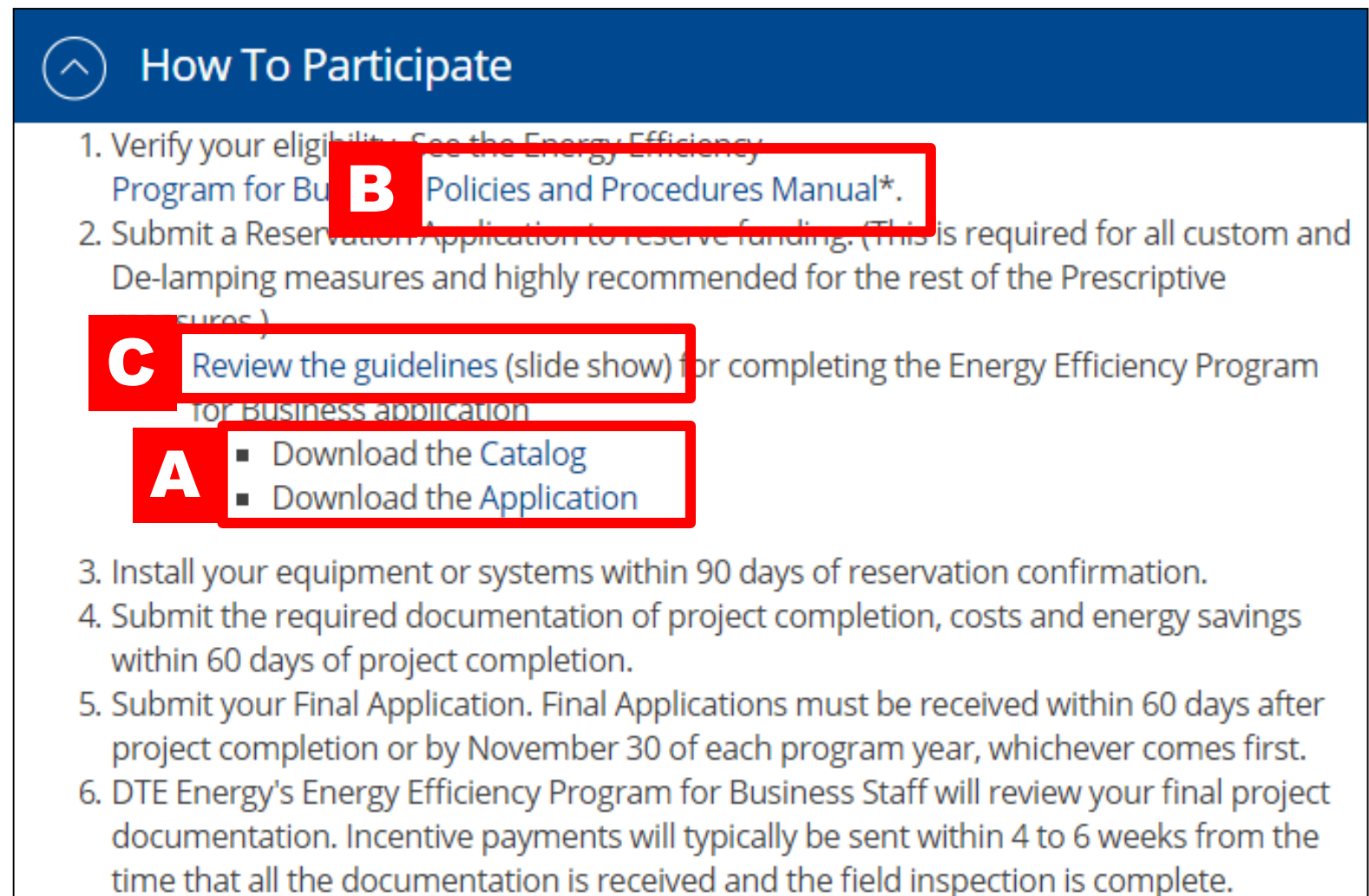
98% Natural Gas Reserved	100% Electric Reserved
51% Natural Gas Paid	60% Electric Paid

Here are the
funding gauges

Downloading a Catalog/Application

6. Download:

- A** – The **Catalog** or the **Application** (PDF)
- B** – The **Policies and Procedures Manual** (PDF)
- C** – How to use the **Application** (“Review the Guidelines” slide show)




How To Participate

1. Verify your eligibility. See the Energy Efficiency Program for Business Policies and Procedures Manual*.
2. Submit a Reservation Application to reserve funding. (This is required for all custom and De-lamping measures and highly recommended for the rest of the Prescriptive measures.)
3. Review the guidelines (slide show) for completing the Energy Efficiency Program for Business application.
4. Download the Catalog
5. Download the Application
6. Install your equipment or systems within 90 days of reservation confirmation.
7. Submit the required documentation of project completion, costs and energy savings within 60 days of project completion.
8. Submit your Final Application. Final Applications must be received within 60 days after project completion or by November 30 of each program year, whichever comes first.
9. DTE Energy's Energy Efficiency Program for Business Staff will review your final project documentation. Incentive payments will typically be sent within 4 to 6 weeks from the time that all the documentation is received and the field inspection is complete.



Special Offers

Michigan-made Bonus Now 10%

- Not all Prescriptive measures are eligible
- Custom projects are **not** eligible
 - Look for the  check box on the Application
 - Manufacturer's affidavit* must accompany application
- Some New Construction measures **are** eligible



DTE Energy
Know Your Own Power®

ENERGY EFFICIENCY PROGRAM FOR BUSINESS

FACT SHEET

2017 Michigan-Made Incentive Bonus

Install products manufactured/assembled in the state and receive a 10% bonus

DTE Energy's **Michigan-Made** bonus is designed to reward customers who use Michigan-made products in their energy-efficiency projects — while also helping boost our state's economy.

What's eligible
Business customers who install **Michigan-Made** products at their locations in 2017, will qualify for a 10% bonus on each eligible prescriptive measure installed. (Custom measures are **not** eligible.)

Many Prescriptive measures are eligible for this offer if they meet the following conditions:

- The purchased product(s) must have been at least 50% manufactured and/or assembled in Michigan (exclusive of packaging and installation).
- **IMPORTANT NOTE:** The installation of a product is **not** considered "assembly."
- An affidavit is provided by the manufacturer of each product installed, attesting to the product/measure meeting the **Michigan-Made** criteria. (Affidavits are available from participating manufacturers.)
- You must attach the affidavit to the application. (If the application is filed electronically, the affidavit(s) should be attached to the email submission.)
- You must attach the manufacturer's specification sheet, showing the product and where it is manufactured/assembled. (If the application is filed electronically, the specification sheet(s) should be attached to the email submission.)

How to apply
To receive a **Michigan-Made** bonus in addition to base incentives:



- Download and complete the latest version of the 2017 Program Application from our website: dteenergy.com/savenow.
- Find a list of **Michigan-Made** manufacturers on our website.
- Check the **Michigan-Made** box  for each incentive that meets the requirements.
- The interactive PDF application will calculate the **Michigan-Made** bonus automatically.
- Complete your project and submit your final application by Nov. 30, 2017. (Applications submitted after Nov. 30, 2017, may be cancelled.)

PURE MICHIGAN
Business Connect

web: dteenergy.com/savenow
fax: 313.664.1950

and may, at any time, certain other conditions apply; contact our office for details

V1: 10/1/2016

Controls					
	Equipment Type	Incentive	Unit	# of Units	Total Incentive
	FE-16 Beverage Vending Machine Controllers	\$50.00	Controller		
	FE-17 Anti-Sweat Heater Controls	\$50.00	Door		
	FE-18 Floating Head Pressure Controls	\$20.00	Ton		



Multi-measure Bonus Bonus is capped

- **20% bonus** on multiple categories submitted on the same Application*
 - Capped at **\$2,500** for electric-only measures
 - Capped at **\$2,500** for gas-only measures
 - Capped at up to **\$5,000** for electric-gas combo measures

**No single category can be more than 75% of the incentives*

ENERGY EFFICIENCY PROGRAM FOR BUSINESS



FACT SHEET 2017 Multi-Measure Incentive Bonus

Install more than one measure category, receive a 20% bonus
Receive up to \$2,500 for electric measures; \$2,500 for gas measures per Application

DTE Energy's **Multi-Measure** bonus is designed to promote the installation of energy-efficient measures from more than one category per application, thereby further reducing energy consumption and saving business customers even more money.

In 2017, customers can receive up to a \$2,500 incentive bonus for Applications with gas-only measures, \$2,500 for electric-only measures and up to \$5,000 for gas-electric measures that qualify.

How it works
Under this program, if no single category of measures is more than 75% of the total value of the application, the customer receives a **20% bonus** on the entire application up to the cap.

What qualifies for the bonus
To be considered for the **Multi-Measure** bonus, projects must involve measures from at least two of the following categories that appear in the **Energy Efficiency Program for Business** application.

ELECTRIC	GAS
<input type="checkbox"/> Lighting	<input type="checkbox"/> Hot Water & Laundry
<input type="checkbox"/> HVAC	<input type="checkbox"/> HVAC
<input type="checkbox"/> Food Service/refrigeration	<input type="checkbox"/> Food Service
<input type="checkbox"/> Process Electric	<input type="checkbox"/> Process Gas
<input type="checkbox"/> Miscellaneous	<input type="checkbox"/> Boiler/furnace tune up
	<input type="checkbox"/> Insulation

NOTE: Custom projects are also eligible, based on these same categories.

How to apply
To receive a **Multi-Measure** bonus in addition to base incentives:

- Download and complete the latest version of the 2017 Program Application
- The PDF application will automatically calculate the bonus
- Complete your project and submit your Final Application by Nov. 30, 2017.

Project Examples

A customer enters measures under one category (such as prescriptive lighting) that would receive a \$15,000 DTE Energy incentive.

1. The customer adds another measure to the Application from a second electric category (custom HVAC) for a \$10,000 incentive.
3. The total of the application is \$25,000 — and the largest category (lighting) represents 60% of the total.
4. The customer receives a 20% bonus based on \$25,000 in total incentives, or an additional \$5,000 — but it is capped at \$2,500.

Total incentives **before** bonus: **\$25,000**
Total incentives **after** bonus: **\$27,500**

1. The customer adds another measure to the Application from a **gas** category (prescriptive HVAC) for a \$10,000 incentive.
3. The total of the application is \$25,000 — and the largest category (lighting) represents 60% of the total.
4. The customer receives a 20% bonus based on \$25,000 in total incentives, or an additional \$5,000 — which equals the cap.

Total incentives **before** bonus: **\$25,000**
Total incentives **after** bonus: **\$30,000**

Contact Us

phone: **866.796.0512** (press option 3) web: **dteenergy.com/savenow**
e-mail: **saveenergy@dteenergy.com** fax: **313.664.1950**

*Funds will be awarded on a first-come, first-served basis; program based on availability of funding and may end at any time; certain other conditions apply; contact our office for details

V1: 10/1/2016



Michigan Saves

As low as 0% financing

- **Terms of financing:** based on how much the qualifying incentives are equal to or greater than the cost of the buy down of the interest rate
- Possible rates:
 - 0% financing on up to \$50,000 for up to 24 months
 - 1.99% financing on up to \$150,000 for up to 60 months for municipalities and K-12 schools
 - 2.99% financing on up to \$150,000 for up to 60 months

The interest rate buy down amount cannot be greater than the total of the incentives awarded on the Application

Other conditions apply

ENERGY EFFICIENCY PROGRAM FOR BUSINESS

**DTE Energy**
Know Your Own Power®

FACT SHEET **2017 Michigan Saves Offer**

Get special financing when you apply DTE Energy incentives to your loan

DTE Energy – in partnership with Michigan Saves – is offering special financing to commercial electric and natural gas customers for prescriptive and custom projects. Qualifying projects may be eligible for:

- **0% financing** on up to \$50,000 for up to 24 months
- **1.99% financing** on up to \$150,000 for up to 60 months for municipalities and K–12 schools.
- **2.99% financing** on up to \$150,000 for up to 60 months

The actual interest rate buy down amount cannot be greater than the total amount of the incentives awarded on the Application. Other conditions apply.

How to apply

1. Download the latest version of the DTE Energy Efficiency Program for Business Application and submit it as your reservation application.
2. Find an authorized **Michigan Saves** contractor to help you apply for **Michigan Saves** financing. To find a list of authorized contractors, visit michigansaves.org.
3. A preliminary reservation letter will be issued by the DTE Energy Efficiency Program for Business detailing the incentives that are expected to be awarded to the customer. This letter must be attached to your application to **Michigan Saves** for financing. *The actual interest rate will be determined by the value of awarded incentives. (The incentives will not be paid to the customer; but will be assigned to **Michigan Saves** to “buy down” the interest rate.)*
4. Once **Michigan Saves** approves financing, a confirmation email will be sent to the customer, contractor and DTE. Once DTE receives your **Michigan Saves** financing confirmation, an updated reservation letter will then be distributed. Please do not begin your project until you have received a reservation letter. You then have 90 days — or until Nov. 30, 2017, whichever is first — to complete the project.
5. A final application must be submitted to DTE within 60 days of completion of the project.

Important note
If the project listed on your application to **Michigan Saves** involves applying for incentives from another utility in addition to applying for incentives from DTE Energy, you must indicate that on your application.



What is Michigan Saves?

Michigan Saves is a non-profit organization dedicated to making energy improvements easier for all Michigan energy consumers by offering affordable financing and other incentives available through grants and partnerships with private sector lenders.

Why Michigan Saves?

Easy: Time is money in a small business. That's why we have someone to walk you through the process so you spend less energy on a hassle-free credit approval and more energy on your business.

Affordable: We understand the margins on your business are never as big as they need to be. That's why we work hard to make sure the return on your energy investment begins to pay off as fast as possible. **In some cases, with Michigan Saves financing, projects can be cash flow positive from day one.**

Smart: Replacing old, expensive equipment is an investment in your business that will lower operating costs and utility bills.

To get started, find a Michigan Saves-authorized contractor at michigansaves.org

Contact Us

phone: 866.796.0512 (press option 3) web: dteenergy.com/savenow
email: saveenergy@dteenergy.com fax: 313.664.1950

*Funds will be awarded on a first-come, first-served basis; program based on availability of funding and may end at any time; certain other conditions apply; contact our office for details

VI. 10/1/2016



About our **Designated Trade Allies**

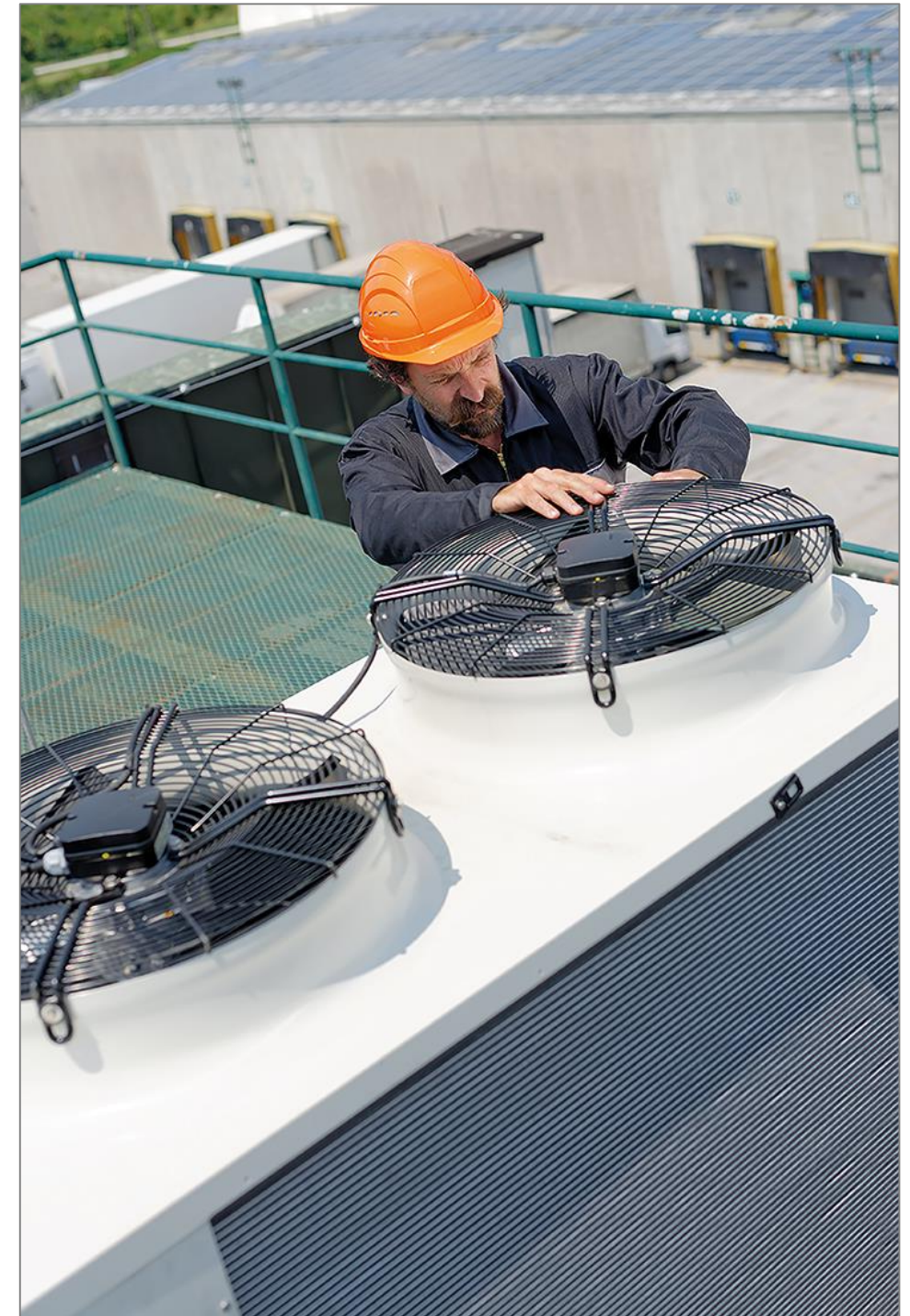
Designated Trade Ally

A specially trained contractor who knows:

- How to access our Program
- How to use the Application to maximize the Program's benefits for customers

Designated Trade Allies are:

- Contractors, suppliers, designers and consultants




How to find a Designated Trade Ally

1. Type dteenergy.com into your browser

A – Select **Business** at the top of the page

B – Hover over the **Save Energy** tab

C – Click on **Find a Contractor** in the dropdown



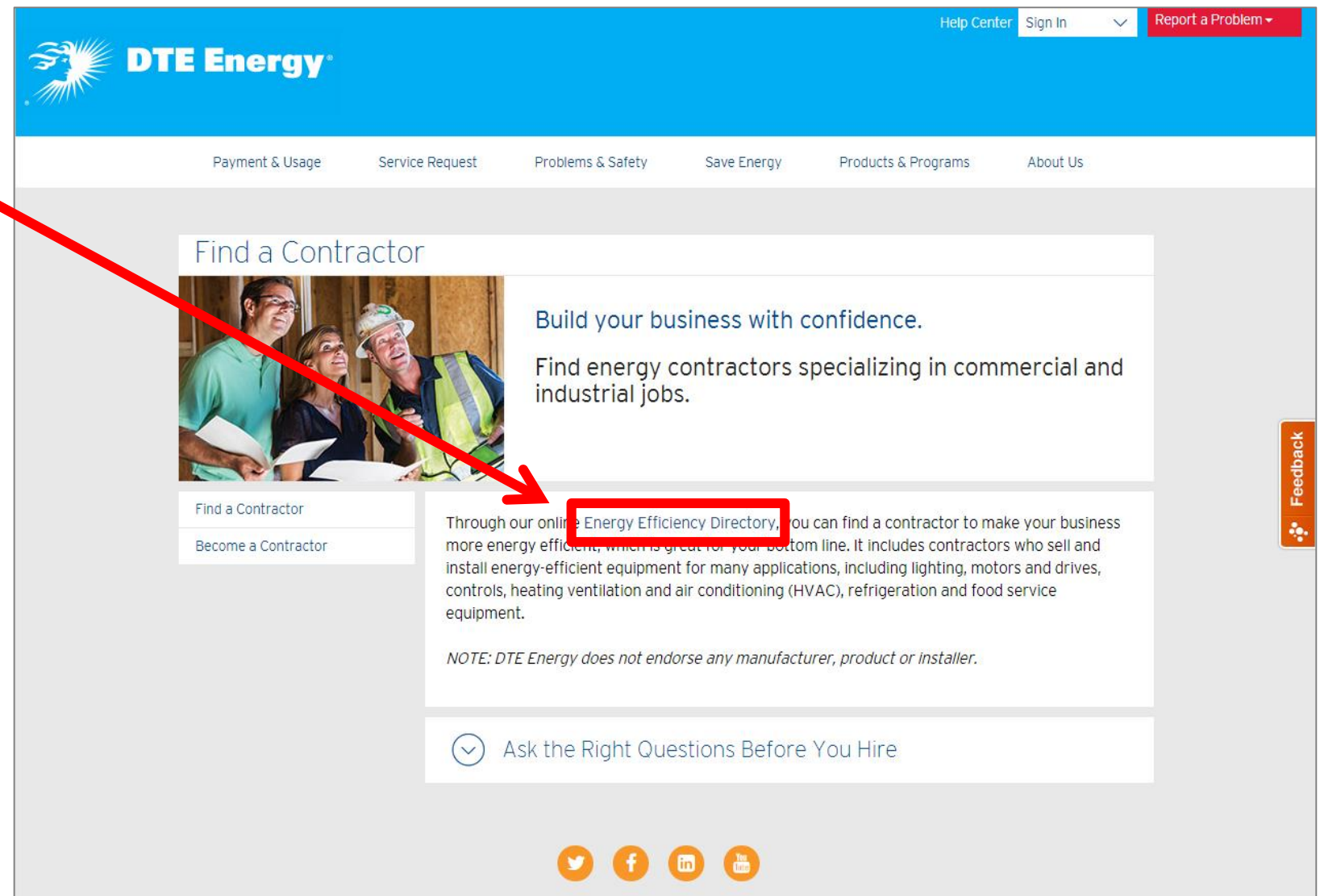
The screenshot shows the DTE Energy website interface with three steps highlighted by red boxes and letters:

- A**: A red box highlights the "Business" tab in the top navigation bar, next to the "Residential" tab.
- B**: A red box highlights the "Save Energy" tab in the main navigation bar, which is currently selected.
- C**: A red box highlights the "Find a Contractor" link in the "Contractors" dropdown menu.

The website layout includes a top blue header with the DTE Energy logo and navigation links (Sign In, Help Center, Report a Problem). Below this is a white navigation bar with tabs: Billing & Payment, Service Request, Problems & Safety, Save Energy (selected), Products & Programs, and About Us. The "Save Energy" dropdown menu is open, showing categories like Start Saving, Incentives, Programs & Offers, Contractors (with "Find a Contractor" highlighted), Tips by Category, and Tips by Business.

How to find a Designated Trade Ally

2. Click on **Energy Efficiency Directory** link

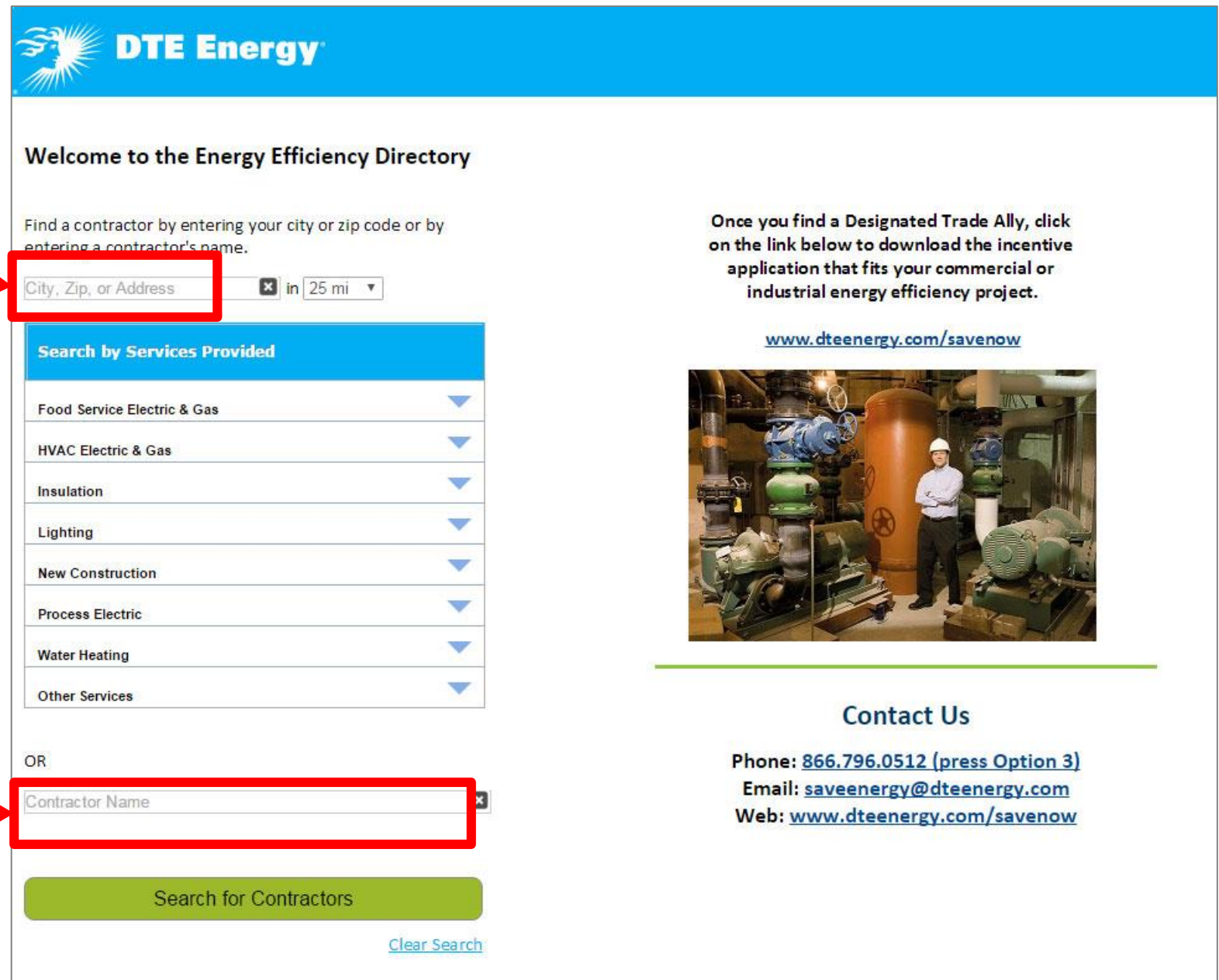


How to find a Designated Trade Ally

3. You can then search by **Location** (city or ZIP) and **Program Type**

Or

4. You can search by **Contractor Name**



DTE Energy

Welcome to the Energy Efficiency Directory

Find a contractor by entering your city or zip code or by entering a contractor's name.

City, Zip, or Address in 25 mi

Search by Services Provided

- Food Service Electric & Gas
- HVAC Electric & Gas
- Insulation
- Lighting
- New Construction
- Process Electric
- Water Heating
- Other Services


OR

Contractor Name

[Clear Search](#)

Once you find a Designated Trade Ally, click on the link below to download the incentive application that fits your commercial or industrial energy efficiency project.

www.dteenergy.com/savenow

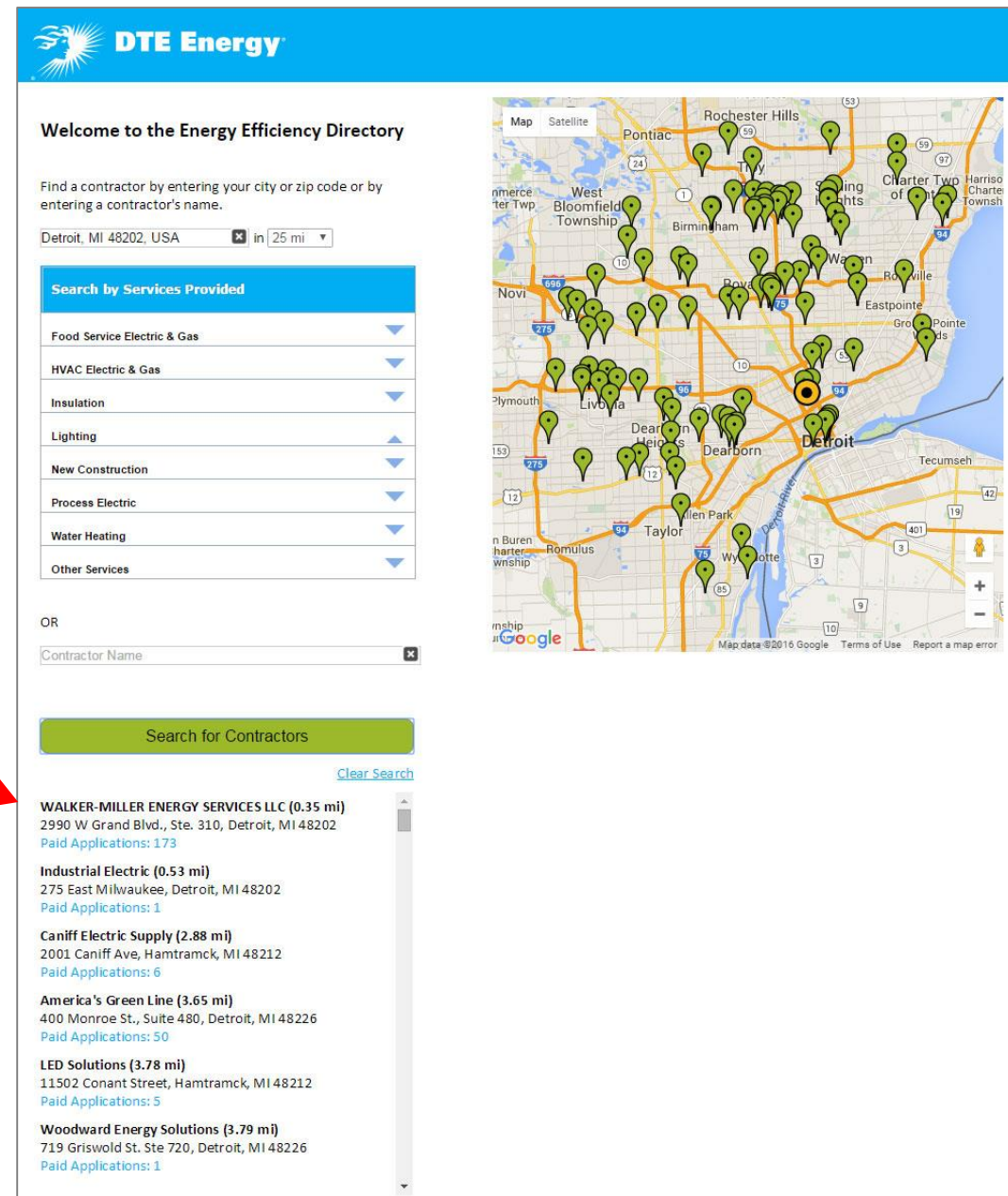


Contact Us

Phone: [866.796.0512](tel:866.796.0512) (press Option 3)
Email: saveenergy@dteenergy.com
Web: www.dteenergy.com/savenow

How to find a Designated Trade Ally

5. Once you narrow your search, you can view a list of contractors in your area



The screenshot shows the DTE Energy Energy Efficiency Directory search results for Detroit, MI. A red arrow points from the text 'Once you narrow your search, you can view a list of contractors in your area' to the search results list.

Welcome to the Energy Efficiency Directory

Find a contractor by entering your city or zip code or by entering a contractor's name.

Detroit, MI 48202, USA in 25 mi

Search by Services Provided

- Food Service Electric & Gas
- HVAC Electric & Gas
- Insulation
- Lighting
- New Construction
- Process Electric
- Water Heating
- Other Services

OR

Contractor Name

Search for Contractors

[Clear Search](#)

WALKER-MILLER ENERGY SERVICES LLC (0.35 mi)
2990 W Grand Blvd., Ste. 310, Detroit, MI 48202
[Paid Applications: 173](#)

Industrial Electric (0.53 mi)
275 East Milwaukee, Detroit, MI 48202
[Paid Applications: 1](#)

Caniff Electric Supply (2.88 mi)
2001 Caniff Ave, Hamtramck, MI 48212
[Paid Applications: 6](#)

America's Green Line (3.65 mi)
400 Monroe St., Suite 480, Detroit, MI 48226
[Paid Applications: 50](#)

LED Solutions (3.78 mi)
11502 Conant Street, Hamtramck, MI 48212
[Paid Applications: 5](#)

Woodward Energy Solutions (3.79 mi)
719 Griswold St. Ste 720, Detroit, MI 48226
[Paid Applications: 1](#)

Review

- Program Overview
- Program Incentives
- New Construction and Major Renovation
 - Choosing an Approach
 - Systems Approach
 - LEED Whole Building Approach
 - LEED Design Review Assistance
- Program Catalog & Applications
- Downloading the Catalog & Application
- Special Offers
- About our Designated Trade Allies



Questions?



How to Contact Us

Email: **saveenergy@dteenergy.com**

Phone: **866.796.0512** (press option 3)

Fax: **313.664.1950**

Website: **dteenergy.com/savenow**

TA Website: **dtetradeally.com**



www.linkedin.com/in/dteenergysaveenergy