DTE CleanVision Energy Efficiency

Energy Efficiency Program for Business

2025 Policies & procedures manual

The DTE Energy Efficiency Program for Business provides rebates for business customers who upgrade their facilities with energy-efficient equipment or build energy-efficient commercial/industrial facilities. This program is available to all business customers who receive electric or natural gas delivery service from DTE Energy. This document conveys the rules, policies and procedures that govern program administration and customer participation. It is a companion document to the program catalog, application and forms.

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1 Program overview

DTE Energy is offering a comprehensive set of rebates under the Energy Efficiency Program for Business program to facilitate the implementation of cost-effective energy efficiency improvements for business customers.

The following sections provide detailed information on qualifying measures and specific program details related to each of the offerings. Applications can be filled out using our online platform: dteenergy.com/business/application

Prescriptive rebates are available for energy efficiency equipment upgrades and replacements, such as lighting, HVAC and gas water heating. Rebates are paid based on the quantity, size and efficiency of the equipment. Rebates are provided for one-for-one replacements, retrofits or new installations of qualified equipment. For example, replacing an outdated version of T8 linear fluorescent lighting with DLC-listed LED lamps or fixtures is a listed prescriptive measure. For more about prescriptive rebates, see Section 8.

Custom rebates are available for less common or more complex energy-saving measures installed in qualified retrofit and equipment replacement projects. Custom measure rebates are paid based on the first-year energy savings of kilowatt hours (kWh) or 1,000 cubic feet of natural gas (Mcf). Projects involving measures not covered by the prescriptive rebate portion of the program may be eligible for a custom rebate. For example, adding a variable frequency drive to a process pump above 50 horsepower is not listed as a prescriptive measure. However, it may be submitted as a custom measure. For more about custom rebates, see Section 9.

Customers may apply for both prescriptive and custom measures within the same application. However, prescriptive rebates must be applied to the prescriptive portions of the project, and custom rebates applied to the custom portions. For example, when installing custom lighting with occupancy sensors, the custom lighting should be applied for as a custom measure, assuming no change in operational hours of the fixtures. The occupancy sensors should be applied for as a prescriptive measure.

New construction and major renovation rebates are intended to encourage decision makers to incorporate greater energy efficiency into their building design and construction practices. New construction and major renovation projects must involve facility improvements that result in measurable or verifiable electrical savings (kWh) and/or natural gas energy savings (Mcf) exceeding the requirements set forth in the program catalog. For additional information about new construction/major renovation rebates, see Section 11.

A reservation application is strongly encouraged for all new construction and major renovation projects. The project should be at a point where design changes are feasible, preferably in the conceptual or schematic design phase. For this program, new construction and major renovation projects may include any one of the following:

- New building projects wherein no structure or site footprint presently exists
- Addition or expansion of an existing building or site footprint
- Major tenant improvements that change the use of the space and/or add new load

In the main program application, new construction systems approach measures are indicated with a small hammer and wrench icon. Those measures can be applied for under either a retrofit or a new construction project. Measures that are not eligible under the new construction and major renovation rebate program may be covered by the prescriptive and/or custom rebate portion of the application. Projects achieving a LEED certification can apply for rebates using the LEED application.

Retro-Commissioning (RCx) collaborates with commercial and industrial businesses to discover and implement cost-effective, building-control optimizations that align with the unique requirements of each building. A dedicated team of energy engineers conducts a comprehensive, no-cost assessment, pinpointing these optimizations and providing rebates for the enhancements made.

Strategic Energy Management (SEM) is a comprehensive approach whereby organizations systematically manage energy used to continuously improve energy performance. Focusing on changing business practices and establishing organizational cultures, SEM aims to reduce energy waste, improve energy efficiency and verify the results. SEM engages executives and facility management who commit to long-term, strategic energy performance improvement. Taking a holistic view of energy performance, SEM helps customers understand their energy use, implement new Building Automation Systems (BAS) and/or control strategies, review and prioritize energy efficiency projects, implement low-cost and no-cost operational improvements and controls capital projects.

2 Program effective dates

The DTE Energy Efficiency Program for Business will offer rebates for the 2025 program year until approved funds are exhausted or until Dec. 1, 2025, whichever comes first. Projects must be completed by the reservation end date, but all projects must be completed by Dec. 1, 2025, to receive payment in this program year. Final applications submitted after Dec. 1, 2025, may be held until the next program year. Any held project will fall under the 2026 Policies and Procedures Manual. Applications submitted after that date may be cancelled if they are no longer eligible or compliant with the 2026 Program and Policies Manual. (Refer to Section 16 for more information.)

3 Customer eligibility

Michigan Public Act 295 (2008), revised by Public Acts 341 and 342 (2017), requires investor-owned utilities, municipalities and rural electric cooperatives to institute energy optimization programs, which will be funded through an "Energy Optimization Surcharge" (on distribution) assessed on all ratepayers' energy bills.

- A customer that has opted to purchase energy supply from a source other than DTE Energy, must contact that provider for DTE account numbers.

Additional customer eligibility parameters for the Energy Efficiency Program for Business are as follows:

- This program is available to qualified business customers of DTE Energy. Customers that are billed on non-residential rates are classified as business customers.
- An exception to this policy is limited to agricultural customers that are on both residential and commercial rate codes. Agricultural customers have access to efficiency measures designed to specifically meet the needs of the farming, dairy and greenhouse communities. These measures are available only to commercial rate and residential rate customers whose primary source of income is from agricultural operations and activities.
- DTE customers with a commercial meter must use the main program application.
- This program is not available to DTE Energy business customers and/or sites that participate in a self-directed option for the current program year.
- Qualifying measures must be installed at facilities served by DTE Energy and must result in a measurable improvement in energy efficiency.
- Equipment must be new and meet the specifications as set forth in the program catalog.
- For each site, there must be at least one meter that is on an eligible rate schedule.
- The customer's account must be in good standing prior to the final application being processed. A final check of their account status will be completed for all applicants. If a customer's account is not in good standing, the customer will be advised that they have 30 days from the date of contact to get their account into good standing; otherwise, their application will be cancelled.

This program is not available to DTE Energy residential customers (see agriculture exception above). Business customers in multifamily buildings consisting of three or more units may be eligible to participate in the multifamily program, which provides energy-saving upgrades for tenant units and common areas.

4 Project requirements

A project is defined as a unique energy efficiency measure or set of measures implemented at a building (site ID) in a single time span. Project requirements for the Energy Efficiency Program for Business include the following:

- Projects applying for a prescriptive or custom rebate must involve a facility improvement that results in a measurable reduction in electrical (kWh) and/or natural gas (Mcf) energy usage, due to an increase in efficiency, for the life of the product.
- Equipment must be new, and the project savings must be sustainable for a period of five (5) years or for the life of the product, whichever is less.
- Projects that are not eligible for a rebate include the following:
  - Fuel switching (e.g., electric to natural gas projects, natural gas to electric projects, purchased steam to natural gas projects)
  - On-site electricity generation
  - Projects that involve peak-shiftin or demand limiting with no kWh savings
  - Power quality improvements
  - Projects involving renewable energy
  - Customers who self-direct (and have opted out of the program)

If the customer ceases to be a delivery service customer of DTE Energy or removes the equipment or systems at any time during the five-year period or the life of the product, the customer may be required to return a prorated amount of rebate funds to DTE Energy.

DTE Energy reserves the right to inspect proposed projects' pre- and post- equipment installations.

4.1 "Logical area" conditions

Contractors who plan to submit projects through the prescriptive or custom offerings for either electric or natural gas projects must adhere to the following requirements and limitations:

- Contractors or customers may not simultaneously apply through any other programs for identical or similar measures that are being installed in the same "logical area."
- A "logical area" is defined as a contiguous area without structural separation, such as an overhead canopy, the same room within a suite of rooms, etc. The final determination of what constitutes a "logical area" will be made by DTE Energy or its representatives.
- Applications in multiple programs for the same customer that apply to two different categories of measures within the same "logical area" are eligible for both program rebates. An example would be installing lighting in a convenience store floor area and installing motor upgrades to refrigeration units.
- Contractors must inform the Energy Efficiency Program for Business Team of their intention to submit applications under multiple programs for the same "logical area."

To apply for rebates under multiple programs for the same "logical area," such as an entire room's lighting fixtures, the following requirements apply:

- If the main retrofit program measures are installed first, the project must be at the "paid" status before another program application can be submitted for the remainder of the project.
- If measures are initially applied for through other rebates offerings, any measures for which duplicates occur must be removed before a program reservation application can be submitted for the remainder of the project.

5 Contractor requirements

To create a positive customer experience and to ensure that program funds are being administered correctly and accurately, a contractor must adhere to standards of acceptable behavior and performance. This includes, but is not limited to:

- Complete and accurate program applications
- Accurate representations of the program to customers
- Submission of original customer signatures on final applications
- Submission of valid product invoices that clearly and accurately match the measures submitted for rebates
- Submission of valid supporting documentation
- The appropriate removal of equipment/fixtures that comply with an application's project
- The complete and accurate installation of new (not used) measures represented in an application
- Adherence to other provisions of this manual, such as co-branding (Section 6)
- Not applying for duplicate measures for the same project or other similar duplications

Violation of any one of these standards could result in: a notification to customers of concerns regarding the contractor, the exclusion from any bonus offers (should they be available), a 100% inspection rate, and if applicable, removal from the Participating Contractor program. Should an alleged violation occur, the contractor will be contacted and, if necessary, a meeting will be called within five (5) business days to discuss the issue and determine next possible steps.

5.1 Participating Contractor program

Contractors who meet certain training and program participation standards are given Participating Contractor status. The Participating Contractor program is designed to improve contractor familiarity with the program, increase customer satisfaction and provide the program team with a better understanding of how to interact with and support contractors in the marketplace. To become a Participating Contractor, a contractor must meet the following requirements:

- Attend an annual training session
- Submit a signed designated Participating Contractor participation agreement, along with a signed copy of the company's W-9 (must have a physical business address; a P.O. Box will not be accepted)
- Submit at least one paid application per program year

Once a contractor completes Participating Contractor training and submits at least one paid application, they will enter a 90-day probationary period. Once the 90-day probationary period is met, a contractor will be given Participating Contractor status. The program reserves the right to remove contractors from Participating Contractor status should any issues arise with the company.

Existing 2024 Participating Contractors will be grandfathered into the program. They are eligible for third-party payment in 2025 if they have attended a 2025 program year training and have submitted one paid application in 2024. They will not be required to wait the 90-day probationary period to renew their status.

A contractor who becomes a Participating Contractor has access to certain aspects of the program that are not available to all contractors, such as:

- Access to the Participating Contractor portal (MichiganEE.com)
- Listing in our online energy efficiency directory
- Opportunity to participate in advisory and focus groups
- Presentations at events with multiple customers
- Large-customer visits with program team members
- Supplies of printed marketing materials
- Ability to identify themselves as Participating Contractor in the program
- Third-party payment authorization

5.2 Third-party payment authorization

Customers may assign payment of application rebates and applicable bonuses to third parties under the following two conditions:

5.2.1 Participating Contractors

Customers may assign payment of application rebates directly to a contractor that performs work included in that application, but only if the following eligibility requirements and procedures are met:

- The contractor must be a Participating Contractor that meets all the requirements of that status.
- To receive third-party payment, the customer must complete and sign the Third-Party Payment Form. Found on the Final Application Rebate Agreement, this form is automatically emailed to the customer via the email address assigned to the project on the rebate application.
- A Participating Contractor that violates any of the standards listed above may be removed from third-party payment eligibility following the steps listed above. This removal includes all other contractor affiliations, DBAs and other employment relationships.
- If a contractor has been removed from the Participating Contractor program, any assigned rebate payments will be made payable to the customer.
- If a customer uses more than one designated Participating Contractor on a project and wishes to assign multiple third-party payments to those contractors, they must complete and sign a separate third-party payment authorization form for each Participating Contractor.
- If any one of those contractors has been removed from the Participating Contractor program, their assigned rebate payment(s) will be made payable to the customer.

5.2.2 Landlord/tenant

DTE account holders (customers) may assign payment of application rebates directly to a landlord or tenant, but only if the following eligibility requirements and procedures are met:

- The tenant must be located within the landlord's facility identified in the project application.
- Being "located" is defined as doing business within the location.
- An inspection may be required to confirm eligibility.
- Failure to prove eligibility will result in any rebates being made payable to the DTE account holder (customer).
- To receive third-party payment, the landlord or tenant must provide the customer with a landlord/tenant payment authorization form that must be completed and signed by the customer and submitted with the final application.
- This form is available to qualified landlords and tenants from the Energy Efficiency Program for Business program team.
- The landlord or tenant's W-9 must be attached to the form. Failure to provide the W-9 will result in any rebates being made payable to the DTE account holder.
- A grace period of five (5) working days after submission of the final application may be provided to complete and submit the authorization form. Failure to submit the form by the end of the fifth business day will result in any rebates being made payable to the DTE account holder.

6 Promotion, advertising, co-branding requirements

DTE Energy reserves the right to associate with a contractor's business and include its participation in the rebate program for promotion and advertising. By participating in the Energy Efficiency Program for Business, contractors and customers agree to be contacted by DTE Energy and/or its representatives to participate in the promotion of the program, including but not limited to: advertising, case studies, testimonials and other marketing materials deemed appropriate by DTE Energy.

In addition, the following rules and conditions apply concerning the co-branding of any marketing materials:

- The DTE Energy logo may NOT be used in any materials by any customer, contractor or Participating Contractor.
- Only Participating Contractors may use the following explicit language in their materials: "Participating Contractor."
- Marketing and other collateral materials created by DTE Energy and/or their representatives may NOT be co-branded with any company name, logo, graphic and/or textual representation of a customer, contractor, Participating Contractor business and/or representative of that business.
- Customers, contractors and Participating Contractors must receive express consent of DTE Energy and/or their designated representatives before featuring links to the Energy Efficiency Program for Business website on their own websites or social media platforms.

7 Rebate caps and limits

Rebates are subject to limits to encourage equitable distribution of the funds among as many utility customers as possible.

7.1 Customer limits

Program rebates are limited per customer, per year. Customer rebate limits are across all projects under one tax identification number. The total customer cap (across all facilities saving electricity) for implementing eligible electric measures is $1 million for the 2025 program year. The total customer cap (across all facilities saving natural gas) for installing eligible gas measures is $300,000 for the 2025 program year.

2025 Program year rebate limits per customer

Electricity	Gas
$1,000,000	$300,000

The rebate limits are based on actual payments per customer and apply even if payments for some or all projects are paid to one or more contractors.

7.2 Custom project rebate caps

In addition to the rebate limits listed above, rebates for custom projects are limited to 50% of the sum of all custom measure costs. Internal customer labor costs cannot be included in the total project cost. Used equipment is not eligible. DTE Energy reserves the right to apply this cap to individual custom measures when measure costs are significantly higher than typical costs seen in this program. Custom projects must have a simple project payback period greater than one year.

7.3 New construction project rebate caps

In addition to the rebate limits above, rebates for new construction projects are limited to 100% of the sum of all measure costs. Internal customer labor costs cannot be included in the total project cost. Used equipment is not eligible.

7.4 SEM and RCx limits and caps

The SEM cap is $125,000 per customer site enrolled in SEM. RCx is capped at $50,000 for electric savings and $10,000 for gas savings.

7.5 Special offer limits and caps

The program, at any time, may implement special offers that involve revised rebate limits and/or caps. Such special offers do not apply to any other part of the program beyond the special offer itself and may be removed at any time without notice.

8 Prescriptive rebates

The Energy Efficiency Program for Business offers prescriptive rebates for both electric and natural gas energy-efficient improvements in areas of lighting, HVAC, processes, compressed air, insulation, food service, boiler/furnace tune-ups and other miscellaneous measures. Prescriptive rebates are available for one-for-one replacements or upgrades unless explicitly stated otherwise in the program catalog and application.

For a complete list of prescriptive electric and gas measures and to verify prescriptive rebate amounts or specifications, see the 2025 program catalog and application.

9 Custom rebates

The Energy Efficiency Program for Business offers custom rebates for eligible improvements not included in the prescriptive measure list. Custom measures include measures that result in a reduction in electric and/or natural gas energy due to an improvement in system efficiency (i.e., a net decrease in energy use without a reduction in the level of service).

The decision as to whether an improvement is eligible for a custom rebate is within the sole discretion of DTE Energy. Custom measures are made available specifically for energy efficiency improvements that are not adequately covered by one of the prescriptive offers.

Rebates for custom measures are based on first-year electrical and/or natural gas energy savings that result from the energy efficiency measure installation. The applicant must provide sufficient project information, equipment performance data, operating assumptions, measurements and calculations to support the energy savings estimates. Guidelines for calculating custom measure energy savings can be found in Section 16.

Custom measure rebates are limited to 50% of the sum of all custom measure costs. The simple payback period for installing the measures must be equal to or greater than one (1) year for electric measures; and equal to or greater than one (1) year for natural gas measures. Materials costs include materials and external labor only. The materials cost is the cost of implementing a measure less any costs incurred to achieve non-energy related project benefits.

Simple payback period is defined as the project's materials cost divided by the annual energy cost savings. Should leased equipment be installed to receive energy savings as a Custom measure, the actual total purchase price of the equipment will be used to calculate total measure costs.

Simple payback period is calculated as follows:

$$\text{Payback Period} = \frac{\text{Aggregate Measure Costs}}{(\text{Annual kWh Saved} \times \text{Electricity Costs}) + (\text{Annual Mcf Saved} \times \text{Gas Costs})}$$

Only costs associated with the incentivized energy-saving measure should be included in the materials cost. The materials cost is the basis for determining the simple payback period for custom measures and is defined as:

- For retrofit and new technology measures: the cost of new equipment, components or materials added to existing equipment for the purpose of improving its energy efficiency and external labor costs; or

- For non-functional or end-of-life equipment replacement measures: the incremental cost between equipment meeting program efficiency criteria and equipment meeting the minimum efficiency allowable by code or industry standard and external labor costs.

  For example, when replacing an existing injection molding machine that is at the end of its useful life with a new, high-efficiency model, the measure cost is the price differential between the high-efficiency and a standard-efficiency model. However, when adding a variable frequency drive (VFD) to an existing boiler pump, the measure cost is the installed cost (equipment and external labor installation) of the VFD.

10 Lighting specifications

The following guidelines and policies apply to various lighting projects that are and are not eligible for rebates through the Energy Efficiency Program for Business.

10.1 DLC® and ENERGY STAR® certified lighting

For prescriptive and custom measure applications, only LED lighting that is listed by the DesignLights Consortium® (DLC) on its Quality Products List (QPL) or certified by ENERGY STAR is eligible for rebates. To qualify for a rebate, the fixture must be listed on the DLC website: designlights.org and the Product I.D. number must be entered on the application. (Use the space provided in the measure detail area. On custom worksheets, enter the Product I.D. number in the "after retrofit" field for each item.) No additional rebates will be given for products that meet DLC Premium requirements.

Should a DLC-listed fixture become unlisted on the QPL at the time of the final application submission, and the installation adhered to the reservation application requirements, the DLC rebate will be paid.

10.2 Applications and Non-DLC Lighting

Only LED lighting that is listed by the DesignLights Consortium® (DLC) based on Technical Requirements Version 5.1 on its Quality Products List (QPL) is eligible for rebates. However, customers who install non-DLC-listed lighting or lighting previously listed in Technical Requirement Versions that fall into a category not listed by the DLC may receive the rebate upon review by program engineers.

To submit a non-DLC category product for consideration, the applicant must complete the Non-DLC Category Product Approval Form for each product being submitted. Such a submission is only valid for that corresponding application. These reviews will be made on a case-by-case basis. Any products eligible for a rebate through the DTE Commercial Lighting Instant Discount Program are ineligible for this offer. Other conditions appear below.

The requirements for DLC-listed products include the following:

- Luminaires, retrofit kits or linear replacement lamps must meet DLC standard technical requirements for their category and closest general application.
- Color-tuning luminaires, which adjust the luminaire's correlated color temperature (CCT), must meet DLC technical requirements across all CCT set points.
- Technical documentation required:
  - Specification sheet
  - Warranty terms and conditions
  - LM-79 (includes Efficacy, CCT, and CRI)
  - UL/CUL certification
- LED modules must have a minimum efficacy of 100 lumens per watt (lm/W). Efficacy for these products will be reviewed annually. If or when a DLC category becomes available, DTE will require submitted products be listed on the DLC QPL.

10.2.1 Burned-out fixtures

For prescriptive and custom measures, burned-out recessed light fixtures do not qualify for incentives on replacement. For custom lighting measures that have a fluorescent fixture burn-out rate of more than 30%, burned-out fixtures will be removed from the application. For custom lighting measures that have a fluorescent fixture burn-out rate of 30% or less, burned-out lamps will be included in the custom measure.

For custom lighting measures with HID lamps, if the fixtures are energized regardless of whether they are burned out or not, these will be included in the custom measure. For prescriptive measures, all fixtures qualify, regardless of whether they are burned out, except for burned-out recessed light fixtures, which do not qualify for incentives on replacement.

11 New construction and major renovation

The Energy Efficiency Program for Business provides rebates for eligible new construction and major renovation improvements as identified in the 2025 program application and LEED application. Such rebates are offered as part of the systems approach or the LEED whole building approach. A separate rebate is offered for LEED design review assistance.

NOTE: Rebates cannot be combined for systems and LEED approaches.

11.1 Systems-approach rebates

The systems approach is a simpler method of applying for rebates under this part of the Energy Efficiency Program for Business, as it does not require LEED certification, yet encourages designers to optimize the energy efficiency of the individual systems within a building. This approach is most appropriate for less complex projects; those customers whose systems are designed at different times, and for projects in which consideration for energy efficiency occurs later in the design phase.

Available systems-approach measures

Measures offered in the systems approach include: lighting power density (interior and exterior), HVAC – electric, miscellaneous electric, process electric, HVAC – gas and miscellaneous gas. All such qualifying measures are identified with a special icon (hammer and wrench) in the catalog.

11.2 LEED whole building approach rebates

For more complex projects in which the customer pursues Leadership in Energy and Environmental Design (LEED) certification, the LEED whole building approach is available. The intent of this approach is to validate the savings associated with LEED certified buildings. The only portion of LEED certification that is valid for this rebate is building and construction (B+C). The rebates will be paid upon receiving LEED certification and will be based on the level of energy savings reported in the energy model and verified by GBCI (Green Building Council; first year only). The following LEED Certification Levels will be used to determine each rebate rate: certified/silver, gold and platinum.

For all specifications and guidance on this rebate, refer to LEED – EA prerequisite minimum energy performance (usgbc.org). For more information on the energy savings analysis and supporting documentation required and the LEED whole building approach worksheet, see the 2025 Program Catalog.

11.3 LEED design review assistance

To encourage LEED design/certification of energy-efficient buildings, the program offers a LEED design review assistance rebate. For rebate payment, applicants must provide the following items: a signed final application agreement, a completed, final LEED design review assistance application and the LEED design review decisions.

12 Equipment specifications

All final applications must include manufacturers' specification sheets if not provided at the pre-application stage. Lighting applications must include manufacturers' specifications for lamps and fixtures. All prescriptive rebates are for one-for-one replacements except as noted. All specification sheets, forms, illustrations and other supporting documentation must be in English. Foreign language documents will not be accepted.

NOTE 1: Each program application measure is identified by a reference code. The code for each measure should be entered on all specification sheets or should be easily referenceable to the invoice—clearly identifying which piece of equipment is related to which measure being installed. The specification for each qualifying measure can be found in the program catalog. A sample of a specification sheet and an invoice can be found in the catalog.

NOTE 2: All replaced equipment must be recycled and/or disposed of according to federal, state and local regulations. Information about the requirements for the state of Michigan can be found at the Michigan Department of Environment, Great Lakes and Energy website: michigan.gov/egle

12.1 Prescriptive measures

To verify prescriptive measure specifications, including requirements for a reservation application for certain measures, refer to the program catalog and application.

NOTE: For prescriptive measures that require a reservation application, the reservation application must be submitted at least three weeks prior to starting work. This allows adequate time for the program team to review the application, and if necessary, schedule and conduct a pre-inspection. (See Section 16.2 for the definition of a reservation application.) If you have not been contacted to schedule an inspection or have not received a reservation letter within three weeks of the application's submission, contact the program team prior to starting work.

12.2 Custom measures

Custom projects must involve a facility improvement that results in a permanent reduction in electrical (kWh) and/or natural gas (Mcf) energy usage due to an increase in system efficiency. Projects that result in reduced energy consumption without an improvement in system efficiency are not eligible for a custom rebate. However, projects that involve an automated control technology, such as energy management system programming, may be eligible for a rebate.

All final rebate amounts will be based on the estimated first-year energy savings documented in the final application and may be greater or less than the rebate amount originally estimated in the reservation application. Once 100% of program funds have been allocated, final rebate amounts cannot be greater than the reserved or applied-for amount. See Section 16 for additional details on approaches to energy modeling for custom rebates.

NOTE: All custom projects must have a reservation application submitted at least three weeks prior to starting work on the project in order to allow time for the program team to review the application and schedule and conduct a pre-inspection. (See Section 16.2 for the definition of a reservation application.) If you have not been contacted to schedule an inspection or have not received a reservation letter within three weeks of application submission, contact the program team prior to starting work.

12.3 New construction measures

New construction and major renovation projects must involve facility improvements that result in measurable or verifiable electrical (kWh) and/or natural gas (Mcf) energy savings exceeding the requirements set forth in ASHRAE Standard 90.1-2013, LEED or local building codes, whichever is more stringent. Specifications for qualifying measures can be found in the program catalog.

13 Retro-Commissioning (RCx)

The Retro-Commissioning offering is an operations study of a customer facility. The offering includes an evaluation of existing building and process systems. Dedicated DTE specialists help you identify areas to optimize functionality and improve comfort–while decreasing energy and maintenance costs over time. The offering is focused on tuning-up your existing equipment and controls for more efficient performance, rather than upgrading or replacing them.

The offering is available to qualified business customers of DTE. Customers must have a controls system with the capability to schedule units on/off, make adjustments, and if possible, adjust operational parameters from an operator interface. The RCx offering provides multiple tracks for savings.

13.1 Common measure recommendations

Customers will receive recommendations based on the pre-qualification screening and data gathering process. Most common recommendations are, but not limited to, the following:

- Optimize scheduling to ensure equipment and lighting are operating only when needed.
- Fix any outside air dampers that are not operating properly.
- Adjust the supply air temperature and fan speed controls.
- Adjust the airflow controls.
- Adjust the economizer control.
- Adjust the supply air static pressure setpoint.
- Align the zone temperature setpoints to match building occupancy patterns.
- Optimize the chiller and boiler operations to match the building load condition.
- Improve the compressed air operations.
- Optimize the steam systems.
- Optimize the process heating and cooling.
- Enhance the industrial refrigeration performance.

13.2 Track offerings

The Retro-Commissioning offering offers the customer four potential pathways in their energy efficiency journey: Standard, Express, Industrial and Custom. These tracks were incorporated to better provide the customer with the appropriate service for their energy efficiency journey.

13.2.1 Standard track

Customers will receive a detailed assessment of a building's systems with an investigative, fully funded, Retro-Commissioning study. This track is for businesses that typically use 5-25 GWh/year with high energy savings potential. The normal duration of the standard track runs approximately 12 to 18 months and includes multiple phases of energy efficiency recommendation implementation. This track is for customers who complete the prequalification screening to receive the study at little to no cost. The customer understands that to receive the fully funded study, the study must be completed by the program implementor.

13.2.2 Industrial track

This offering is available to qualified industrial business customers of DTE. Customers must have a controls system with the capability to schedule units on/off, make adjustments, and if possible, adjust operational parameters from an operator interface. Generally, the timeline ranges 6 to 18 months, based on the complexity of the recommendations, and can be broken into phases.

13.2.3 Express track

The express track represents a targeted assessment to increase the energy efficiency of building and process systems with a quick turnaround. This track is for businesses that typically use 1-25 GWh/year and in need of building controls optimization. Customers will receive an assessment of the buildings systems to determine system optimization opportunities. The objective is to complete the recommendations within 6 to 12 months.

13.2.4 Custom track

If the Standard, Industrial or Express tracks aren't a good fit for the facility, a custom approach will be offered to the customer. Eligible customers will receive the "RCx Custom Measure" services at no cost. The customer understands that in order to receive the fully funded study, the services must be completed by the program administrator. This track tends to vary in timeline based on complexity.

13.3 Rebates

Customers will be eligible to receive a rebate for implementing recommended RCx measures that result in verified annual project savings. Rebates will be paid for verified energy savings at a rate of $0.05/kWh and $0.30/Mcf upon completion of the verification phase. Bonuses are paid at the same rate, however they may be capped at $50,000 for electric savings and $10,000 for gas savings.

13.4 Project verifications/inspections

To confirm eligibility and support identification, implementation of RCx measures and measurement and verification, the customer shall provide the program administrator and service provider with the following:

- All requested customer information including, but not limited to, account information, energy usage data, relevant building systems documentation, contact information for the customer's existing service contractors whose knowledge or activities could support implementation and other relevant information for the completion of services.
- Assistance with the reporting and collection of information pertaining to the operation of the facility and time for facility personnel to interface with the program implementor to assist with data collection from building systems.
- Access to the facility for inspection and measurement activities throughout all phases of the project and for up to six months from the completion of the project verification phase.

13.5 Prequalification & customer implementation commitment

Customer shall complete the pre-qualification screening to determine if the customer is best fit for the offering. A minimum implementation commitment may be required for customers who participate in the standard track. For the other tracks, the commitment is generally flexible based on:

- Savings potential
- Excellent prequalification results
- Willingness to complete implementation
- Repeat customers or multiple phases

Costs related to the customer's personnel assistance may count toward the minimum Customer Implementation Commitment. Upon completion of the RCx measure bundle, the customer shall provide the program administrator with a signed certificate of completion confirming that the RCx measure bundle is implemented and operational. The customer acknowledges that they are responsible for separately arranging and paying for the implementation of RCx measure bundle. To the extent that the program implementor determines (in its sole and reasonable discretion) that the customer failed to fulfill the Customer Implementation Commitment, the customer shall pay DTE Energy the cost the study within 60 days of written notice from the program implementor.

The recommended RCx measure will not be eligible for any other utility rebates, services or credits outside of this program.

Accordingly, the customer shall not apply for any other utility rebates or credits with respect to the recommended RCx measure at any time before or after the required implementation date.

13.6 Recommendation persistence/maintenance

The customer may be required to refund some or all of the rebates if the operational type measures do not remain (or were not) installed for a period of two (2) years.

14 Strategic Energy Management (SEM)

Businesses that use at least 15GWh/year and have a building automation system or equivalent control system may participate. SEM provides a comprehensive approach whereby organizations systematically manage energy used to continuously improve energy performance. Customers must be willing to change business practices and establish organizational cultures to reduce energy waste, improve energy efficiency and verify the results. The business's executive and facility management teams must be engaged and committed to long-term, strategic energy performance improvement. SEM uses regression models to visualize energy savings.

SEM takes a holistic view of energy performance:

- Understand energy use
- Implement Building Automation Systems (BAS) and/or control strategies
- Review and prioritize energy efficiency projects
- Implement low-cost and no-cost operational improvements and controls capital projects
- Coaching and training for 12 to 24 months

14.1 Rebates and incentives

Operational savings incentives and staffing grants include:

- $0.05/kWh (DTE electric provider) for verified energy savings projects
- $0.30/Ccf (DTE natural gas provider) for verified energy savings projects
- Milestone staffing grants for developing ($5,000) and completing an Action Plan ($15,000)
- SEM electric and gas incentive cap is $125,000 per site annually

14.2 Enrollment requirements

Enrollment requires the signatory support of a top-level site representative, along with the signatory commitment of a site contact who will be available throughout the SEM participation period.

- Customer must be willing to share daily or weekly operations and energy data on a timely basis each month with the DTE SEM program team.
- Eligible customers must agree to the following:
  - Top management allocates resources for roles of Energy Champion, Energy Team and Data Owner.
  - Allocate Energy Champion to participate in weekly 30-60-minute Action Plan development and update calls with DTE SEM program staff. That person must be intimately familiar with and be able to influence production operations.
  - Top management participates in the weekly meeting once per quarter and conducts a formalized Management Review of overall progress with the Energy Team every six months.
  - Provide monthly data on production and other facility energy drivers for input to your energy performance model.
  - Host a one-day kick-off event at the customer's site.
  - Conduct a one-day Treasure Hunt at the facility with a plant cross functional team.
  - Approve an Action Plan for operational energy savings developed from the Treasure Hunt.
  - Implement an Action Plan with a goal to save a cumulative value of energy consumption reduction in kWh and therms over the 24-month period equal to at least 4% of annual energy consumption.
  - Commercial customers must have a Building Automation System (BAS).

15 Compressed air and steam efficiency

To qualify for the compressed air efficiency offering, the facility must have an operating compressed air system with a minimum of 75 horsepower (not including backup compressors). The customer agrees to fix at least 50% of the leak volume found during the study within 60 days.

To qualify for the steam trap efficiency offering, the customer must be a DTE gas customer and must commit to fixing 50% or more of the failed open traps identified in the survey.

16 How to apply

The process of applying for a rebate under the Energy Efficiency Program for Business is designed as follows:

1. Identify a project and the equipment involved.
2. Review the program catalog and online application for such equipment and related rebates.
3. Submit a reservation application (if required) applying for rebates on the equipment.
4. Submit a final application when installation work is completed.

The program team is available during normal business hours, 8 a.m. to 5 p.m., Monday through Friday, to facilitate the application process. For assistance, call the program team at 855.748.2525.

16.1 Applications

There is one online application platform for rebates offered by the Energy Efficiency Program for Business. This application serves two purposes:

- It can be submitted as a reservation application, which refers to an application that is submitted prior to starting work on the project. The purpose is to assess the proposed project for conformity and reserve rebate funds.
- An updated version of the same document can be submitted as a final application. This refers to an application that is submitted after a project has been completed and reviewed by program staff for payment of rebate funds. The applicant is to submit a copy of the final application with any information not submitted with the reservation application.

The reservation application should not include a DTE Energy account holder's signature and may still require certain supporting documentation, such as quotes, manufacturers' specifications, measurements, and verification (custom) and W-9 tax form(s).

The final application must be complete and submitted with an electronic DTE Energy account holder's signature on the Online Application Agreement and dated after project completion. It must also include all required supporting documentation, such as dated, itemized invoices and/or receipts, cut sheets, commissioning (operation) reports and manufacturers' specifications. All required documents must be attached for review at the time of submission before rebates will be paid. Both the reservation and final application—and all required documentation—can be submitted via the Online Application, found at dteenergy.com/business/application

NOTE: On invoices and specification sheets, applicants should identify all equipment by the measure reference code found on the application.

A further description of documentation requirements can be found in Sections 15, 16 and 17. To request payment for a completed project, submit the final application with all relevant attached documents.

16.2 Reservation application

A reservation application is required for all custom projects and for certain prescriptive measures (see catalog and applications for requirements). A reservation application is strongly encouraged for all prescriptive projects and new construction or major renovation projects.

Annual program funding is limited, and reservation applications are not a guarantee that rebates will be issued. Actual rebates are based on final applications. The Energy Efficiency Program for Business team will review all final applications for eligibility and completeness. A reservation application reserves funds for a specific project, provided that:

- Work commences on the proposed measures within 30 days of project approval.
- Measures are completely installed within 90 days of project approval or by Dec. 1, 2025, whichever comes first.

NOTE: The final application (and all supporting documentation) must be submitted within 60 days of project completion, but no later than Dec. 1, 2025. Final applications received after that date may be cancelled or subject to 2026 program policies and procedures.

It is the responsibility of the applicant to contact the program team if a project is delayed, substantially changed or cancelled. Funds that have been reserved for specific applications are not transferable to other projects, facilities/campuses and/or customers. A completed and electronically submitted reservation application initiates the review process. Funds are only reserved for a given project when the project details have been approved and a reservation letter has been issued.

The reservation application for prescriptive and new construction or major renovation systems approach (non-LEED) measures must include sufficient information (quantities, etc.) to estimate the rebate amount. The reservation application for custom measures must include a project description, equipment performance data, specification sheets, operating schedules, quote for proposed change, load profiles and an estimate of the annual energy savings.

NOTE: Periodically, special rebate offers may be made to help promote specific areas of energy savings. Under such offers, specific timelines, deadlines and other requirements may apply to application submission, work schedule and completion.

16.3 Detailed program steps

Step 1: Eligibility check. Verify that your project is eligible and meets the project requirements as set forth in customer eligibility (section 3), project requirements (section 4) and rebate caps and limits (section 7).

Step 2: Complete and submit a reservation application. Register and submit your application at dteenergy.com/business/application

A reservation application is required for custom projects and some other specific measures (see catalog for requirements) and is strongly recommended for all projects. Contractors may complete the form on behalf of their customers, but all required information, including DTE Energy customer name and contact information (phone and/or email), must be provided.

For prescriptive projects that require a reservation application, a reservation application must be submitted at least three weeks prior to starting work. This allows adequate time for the program team to review the application and, if necessary, schedule and conduct a pre-inspection. If you have not been contacted to schedule an inspection or have not received a reservation letter within three weeks of application submission, contact the program team prior to starting work.

NOTE: All custom projects must have a reservation application submitted at least three weeks prior to starting work. This allows adequate time for the program team to review the application and schedule and, if necessary, conduct a pre-inspection. If you have not been contacted to schedule an inspection or have not received a reservation letter within three weeks of application submission, contact the program team prior to starting work.

Following application review, a reservation letter will be provided for all reserved projects. A reservation letter is not a guarantee that rebates will be provided. Actual rebates are based on final applications that meet all program criteria.

Step 3: Project installation. Install the new equipment or systems within 90 days of the reservation letter date or by Dec. 1, 2025, whichever comes first.

16.4 Final application

The reservation application and the final application can be the same document for the same project. If the project was submitted as a reservation application, update all information previously submitted then submit the document as a final application. If a reservation application was submitted, be sure that the final application reflects the actual type and quantity of equipment installed. A DTE Energy account holder's signature is required on the final application agreement for payment.

Submit the final application, signed by the account holder, only after all equipment has been installed and the project has been completed. Submit the final application along with all required supporting documents, such as manufacturers' specifications, itemized invoices and any additional documentation. (Identify all equipment on invoices and specification sheets by the measure reference code found on the application. See the back of the catalog for examples.) The documents should clearly indicate the equipment model numbers, quantities and energy performance that is indicated in the reservation application. All specification sheets, forms, illustrations and other supporting documentation must be in English. Foreign language documents will not be accepted.

Labor and material costs should be shown separately. If the project equipment is included on several invoices, it will be helpful if the applicant prepares a summary sheet that totals the quantities and shows how the quantities match the quantities in the application.

Final applications must be received within 60 days after project completion, by reservation end date or by Dec. 1, 2025, whichever comes first. Program

funds are limited. Submission of a final application does not guarantee a rebate payment unless funds were set aside previously, based on an approved reservation application, the resulting reservation letter and the criteria of this document being met.

NOTE: Applications received after Dec. 1, 2025, may be cancelled or subject to 2026 policies and procedures.

16.5 Final application review

The program team will review the final application and the final project documentation. A post-inspection may be required for verification purposes. Multiple projects and reservations for projects at the same facility or customer may be subject to an annual cap. A reservation does not guarantee a rebate payment. The actual rebate amount paid will be based on a review of the final application, along with the supporting project documentation of the equipment installed, and will be subject to program specifications, terms and conditions. It is essential that both customers and contractors understand and comply with all equipment specifications and program terms and conditions, which can be found on dteenergy.com/business.

Rebate payments will be sent within four to six weeks from the time that the final application and all documentation are received and any required field inspection is completed.

16.6 Measurement and verification

Some projects will be chosen for measurement and verification, independent from Energy Efficiency Program for Business purposes. If so, the customer will be contacted by a utility representative. Measurement and verification may include obtaining logged data on individual project components.

16.7 Incomplete application process timeline

If an application is found to be incomplete, the following process timeline will be used to contact the applicant and, if possible, resolve the issue(s):

1. Within two (2) business days of receipt of the application, the first notification is emailed to the applicant that the application is incomplete. A list of missing information is provided. A response is required within two (2) business days of the email.
2. Two (2) business days after the two-day email response time has elapsed, a second notification (reminder) is emailed to applicant listing missing required documents. A response from the applicant is required within two (2) business days.
3. A final notification will be sent within two (2) business days after this second response time has elapsed. If no response is received within two (2) business days of this final notification, the project is cancelled.

16.8 Discrepancies

If it is determined that there are significant discrepancies between the reservation application and DTE Energy's on-site analysis, the program team will contact the customer to review these differences. This provides an opportunity for the customer (or contractor) to dispute the inspection results. If the customer (or contractor) disputes the inspection results, DTE Energy's representatives and the customer (or contractor) shall thereupon attempt in good faith to resolve such dispute promptly. If the customer (or contractor) has not contacted the program team within five (5) business days to discuss inspection results, rebate levels will be revised to coincide with DTE Energy's on-site findings and will be determined final.

If there is any misrepresentation of information—intentional or otherwise—that results in unjustified and/or unsubstantiated rebates being awarded to the customer, DTE Energy and/or its agent will initiate action to recoup such funds from the customer; steps that may include additional legal action commensurate with the seriousness of the event. A statement to this effect is part of the final application agreement found on all program applications.

16.9 Reservation extension process

If the customer receives approval to move forward with a project but requires more than 90 days to complete the project, the customer may provide proof the project is progressing towards completion and request an extension of the reservation. The program team may, but is not required to, grant an extension after reviewing project details. Length of extensions granted will depend on project type. The granting or denial of an extension is within the sole discretion of DTE Energy.

Up to two (2) 30-day extension requests may be granted. When the second extension expires, the customer must immediately provide the final application along with all required final documentation to claim reserved funds. DTE Energy may not grant subsequent reservation extensions, and rebate payments will be subject to funding availability.

NOTE: No reservation extensions will be granted that will take a project past Dec. 1, 2025.

16.10 Funds fully allocated status

If the 2025 program year becomes oversubscribed, 100% of program funds have been fully allocated, which means that an amount greater than all the budgeted funds are reserved. In either the electric and/or gas portion of the program, any new applications submitted will be held for possible future available funding in the order in which they were received. If reserved projects are cancelled, not completed or completed for less than their reserved amount, those funds become available and projects being held will be approved for funding in the order received.

As a project is approved for released funding, program administrators will send an email notifying the customer that the project has been approved for funding prior to sending to the engineer for processing. If a project is still being held for possible funding at the end of the program year and all funds have been paid, the project may be cancelled.

NOTE: When funds become fully allocated, projects will only be paid out at the amount for which they were reserved. We will not approve any increases, including instances in which non-DLC lighting became DLC listed between the time of the reservation application and the final application.

17 Payment process

The Energy Efficiency Program for Business rebates will be paid directly to a DTE Energy account holder or to a Participating Contractor identified by the account holder. If the account holder is to be paid, the exact name and tax ID number as shown on their W9 form must be indicated on the customer information page of the application. If the payment recipient is a Participating Contractor, the optional third-party payment authorization section of the online application is to be completed in its entirety.

18 Documentation

For prescriptive and custom measures, the required final project documentation includes detailed, itemized invoices listing specific equipment model numbers and quantities purchased. Copies of invoices must be itemized with the costs for equipment, labor, supplies and other costs (identify invoices by the appropriate reference code of that measure as listed on the application). Location or business name on the invoice must be consistent with the application information. Rebates can only be submitted for eligible expenses incurred during the term of the program. (See the back of the catalog for an example.)

Applicants may be asked to provide more detailed information on the equipment location to aid in the pre- and post-inspection process.

Manufacturers' product literature, product brochures, cut sheets or other certified performance data for the specific model numbers and sizes of the equipment installed (that documents the performance factors used as a basis for the rebate) must be submitted with the final application. (Identify specification sheets by the appropriate reference code of the measure on the application.) If the documented capacity or performance differs from the performance in the reservation application, the rebate will be adjusted accordingly. Failure to provide the documentation will delay the payment process and may result in no rebate payment.

For custom measures, final documentation may include scope of work, energy use history plans or specifications for the equipment or systems that are modified, paid itemized invoices, equipment specification sheets or other information indicating performance over the full range of operation, documentation of operating schedule and loading profiles, commissioning reports or other documentation required by the program team.

Power or other operating measurements or monitoring may be required for verification of estimated energy savings prior to approval of rebate payments. See sections 19 and 20 for guidelines on calculating and documenting energy savings. All final applications must be complete with all required documentation and have an original signature of the DTE account holder. Final applications must be received within 60 days after project completion by reservation end date or by Dec. 1, 2025, whichever comes first.

19 Calculating and documenting customer energy savings

These guidelines provide suggestions for submitting project documentation to demonstrate that a project qualifies as an Energy Efficiency Program for Business custom measure(s), and that the savings estimates and rebates applied for are actually realized. This section provides information to assist in calculating and measuring energy savings associated with a project.

These analysis methods and documentation details are recommendations, not requirements. Following these guidelines will help speed our review of a project and help it meet the program requirements.

The rebates for custom projects are based on the calculated first-year kilowatt-hour (kWh) or 1,000 cubic feet of natural gas (Mcf) savings. To be accepted as a basis for the rebate, the savings calculations must be developed using acceptable engineering calculation techniques supported by site specific operating and equipment performance data. The final rebate payment may be different from the reserved amount if the post-retrofit system operation or performance is not in agreement with the assumptions and models used to set the reserve amount. Before submitting an application for a custom project, confirm that the measures are not included as prescriptive measures listed in the program catalog and application.

For certain projects, in addition to energy savings calculations, the program may require measurement and verification in order to qualify for a rebate. We encourage custom rebate applicants to review the International Performance Measurement and Verification Protocol (IPMVP) available at evo-world.org. Any operational data available to support the energy usage claims for a project and validate savings calculations can be submitted with the application. If a customer or contractor needs assistance in identifying appropriate measurement and verification procedures, contact the program team.

19.1 General guidelines

To estimate first-year energy (kWh or Mcf) savings for retrofit projects, calculate the difference between the pre-retrofit (or base case) system energy (kWh or Mcf) use and the anticipated post-retrofit (or efficient case) system energy (kWh or Mcf). The applicants must define and describe the base case and efficient case system as well as operating conditions. Here are the general requirements common to all custom projects:

- Provide the name and contact information of the person(s) conducting the savings calculations so that the program team can discuss any questions.
- Provide a concise project description. Describe both the existing (pre-retrofit or “base case”) system and the proposed (post-retrofit or “efficient-case”) system. Be as precise, yet concise, as possible in the descriptions. Include specific quantities and equipment descriptions.
- Identify equipment using the terminology or numbering system used by the customer (e.g. “Replace compressor #3 with a new variable speed compressor” or “install a VFD on VAV AHU #3, 5, 7, 8, 9.”).
- Provide copies of sketches, drawings, equipment lists or inventories that help to clarify the scope of the project.

- Describe both the facility operating hours and the equipment operating schedule for each day of the week. Where equipment operation varies with days of the week or seasons, you must enter a description of the operation for all days of the week and all seasons.
- Indicate on the application whether the "after retrofit" electric equipment will be in operation during the hours of 3-6 p.m., Monday-Thursday in the month of July.
- Describe equipment load conditions for the hours the equipment typically operates.
- Provide the quantity, make, model number and rated capacity of both the existing and the new equipment that is being installed. Also provide other nameplate information, such as operating voltage and rated full load amps where appropriate. The scope of work from the proposal to the customer is often helpful to describe the new equipment.
- Describe the location(s) where the equipment is installed.
- Provide copies of the manufacturer's specification sheets and/or performance rating sheets and the website address where further technical information about the equipment performance might be found. (Identify the specification sheets with the reference code from the related custom measure on the application.)
- Use accepted engineering algorithms and procedures from recognized technical organizations such as ASHRAE, SMACNA, ANSI, etc.
- Annotate all assumptions or constants used in engineering calculations.
- Use rated, performance factors tested under accepted procedures specified by recognized rating agencies, such as ARI, AGA, ANSI, ASTM, etc. Provide an explanation when equipment performance rating conditions vary from standard conditions.

Acceptable calculation methods

Whole building metering

For projects in which the savings are a significant fraction (10% or more) of the total monthly (or annual) kWh or Mcf usage, a "bills before minus bills after" approach may be used. This approach assumes that conditions are identical before and after the project, such as building occupancy levels, production rates or operating hours. Usually, a regression must be included in this approach to adjust for uncontrolled variables, such as weather.

If an executable whole system or building model is used, be sure to provide sufficient documentation or annotation so that the differences between the base case and high-efficiency case can be understood and verified by the reviewers. Executable whole building metering models must be calibrated to actual energy use (electric or natural gas bills) and be normalized for weather and other known variances.

Equipment or process sub-metering

When measures are installed that affect large individual systems or sets of equipment (for example an air-compressor, chiller, process blower or injection molding machine), sub-metering may be the best way to document the savings. This may require the installation of temporary portable monitoring equipment that measures and records the equipment power at short intervals over several days or weeks. When sub-metering is used, a method must be developed to extrapolate the savings for the measurement period to a full year of operation. Component sub-metering may often include observation of other variables like outside air temperature, operating hours or production quantities during the measurement period to allow for this extrapolation.

Engineering calculations

For measures with impacts over small and simple systems, sub-metering may not be feasible. For these measures, an engineering calculation method is best to document savings. For most equipment and efficiency measures, there are well-established engineering procedures and several publicly available performance models available to calculate pre- and post-energy use.

Whole building modeling

For measures that have building-wide impact or impact a number of systems, the following executable engineering models are acceptable: Trane TRACE, Carrier HAP, eQUEST, DOE2 and Energy Plus. When using any model, the applicant must provide a report showing both the pre- and post-upgrade input and output data in addition to an executable model of the building simulation. Models that do not reflect the actual systems and their operation (i.e. defaults instead of building-specific equipment) are not acceptable.

Initial savings estimates that are submitted based on manufacturers' proprietary performance models may be acceptable for initial estimates of savings, but additional information and actual onsite operating data or measurements verifying the model assumptions will usually be required to confirm the final savings. Applicants planning to use whole building models to estimate savings as a basis for the rebate should contact the program team early in the project development process.

19.2 Custom lighting measures

The following is a recommendation of what should be provided when submitting a custom lighting measure, including a detailed lighting inventory:

- Location (area, aisle #, etc.)
- Existing and new fixture description
- Existing and new fixture wattage
- Existing and new fixture quantity
- Existing and new controls

- Annual operating hours
- Interior or exterior fixtures
- Electrical plan sheet that shows the existing and proposed lighting layout or a reflected ceiling plan, along with the lighting fixture schedule, when available

The use of standard default fixture wattages is acceptable. Default fixture wattages for common fixture/lamp types are available upon request.

Other guidelines

When preparing project information, consider the following:

- Equipment operating hours may or may not always be the operating hours of the facility. Where equipment operation varies with days of the week or seasons, you must enter a description of the operation for all days of the week and all seasons.
- Emergency lighting and many hallway and stairway fixtures are typically on 24 hours a day, 7 days a week, and therefore, are in use 8,760 hours per year.
- Installing a lower wattage lamp of the same type is not considered an eligible measure unless it can be established that the replacement fixture is 10% more efficacious (the lumens per Watt must be greater) than the fixture that it replaces.

NOTE: The program team will check for inconsistencies between the quantities of fixtures used in the savings calculation, shown in the invoice documentation and observed in the post-inspection.

19.3 Custom HVAC measures

Note that many of the most common HVAC measures are included in the list of prescriptive measures. These measures, including HVAC chiller or packaged AC unit replacement and variable frequency drives (VFDs or VSDs) for HVAC motors, should be applied for under the prescriptive portion of the application. Common custom measures that may be applied for under the custom HVAC category might include:

- Water-side economizer (e.g. plate and frame heat exchanger, closed-loop tower, or “glycooler”)
- Exhaust heat recovery equipment (heat exchangers)
- Conversions from constant volume to variable volume for water or air distribution
- Adding variable-speed control to centrifugal equipment (other than HVAC fans or pumps) that is throttled by less efficient means

Most (but not all) HVAC system measures are weather-dependent. As such, the acceptable methods of estimating energy savings are building or system models that integrate local weather conditions with system loads and performance or “temperature bin” models. This section includes several acceptable methods for providing the savings analysis for HVAC measures.

In all cases, it is important to document the pre- and post-retrofit conditions thoroughly. For most projects, the analysis will need to be calibrated and adjusted to reflect the weather variances, occupancy variations and/or internal load changes.

The following techniques may be employed for calculating project savings:

- For measures that have building-wide impact or impact several systems, the following executable engineering models are acceptable: Trane Trace, Carrier HAP, eQUEST, DOE2 and Energy Plus.
- ASHRAE-based simplified calculation methodologies, including the “bin methods,” are usually useful to estimate the savings of many weather-dependent strategies, such as economizer systems (water and air), heat recovery, ventilation control or even VAV conversions.
- Simple spreadsheet analysis may be used for certain stand-alone retrofits such as carbon monoxide sensors for parking garages.

These methods can be calculated in a spreadsheet format so that the underlying assumptions can be easily followed. In many retrofit projects, the existing building energy use and energy use patterns can provide the basis for calibration for these methods.

For certain projects, a monitoring/metering approach may be the best means to document savings. The applicant should remember that it is simpler to verify the post-case, but the base-case condition also requires documentation for program verification. Be sure to consider pre-project measurements when planning a future project. The following are some suggested parameters to be measured pre- and post-retrofit:

- Power (kW), energy (kWh), natural gas use (Mcf)
- Air flows, temperatures and water flows
- Outdoor temperatures and humidity (may be available from other sources)
- Building activity (occupancy, hours, etc.)

19.4 Custom building envelope measures

Common custom measures that may be applied for under this category include:

- Door or window opening treatments that reduce infiltration
- Shading (windows or building)

Accurately estimating energy savings resulting from envelope improvement is often difficult because impacts involve a high degree of system and

interactive effects. The best way to estimate the impacts of envelope treatments is to use a whole building model as described in the previous section. Modeling provides the opportunity to describe the pre- and post-retrofit insulation and surface characteristics and do an excellent job of including all interactive effects.

However, setting up a whole building model to estimate the savings for envelope improvements is often not practical. There are a number of other simplified degree-day or weather-based "bin analysis" methods that are sufficient to estimate the impacts of these measures. These methods are described in detail in the ASHRAE Handbooks. ASHRAE combined with local weather data files will provide most of the information and calculation procedures necessary to estimate savings resulting from building envelope measures.

Some of the more common methodologies have been put into a spreadsheet format and are available commercially online. The Department of Energy and some states have supported the development of analytical tools that are useful in isolating the savings for various envelope improvements, such as the Cool Roof Rating Council (coolroofs.org) tool. It is useful in estimating the impacts of roof insulation and treatments. The performance characteristics and properties of various coatings and materials are also provided.

19.5 Custom process and refrigeration measures

Some typical measures that may fall in this category are:

- "Tower-free cooling" for process cooling (e.g. plate and frame heat exchanger, closed-loop cooling tower, or "glycooler")
- Constant volume to variable volume water or air distribution
- Upgrade of a refrigeration compressor
- Some air compressor improvements
- Injection molding replacement

There are several methods that can be used to document energy savings for process measures. Nearly all process measures will require some degree of monitoring, measurement or hourly log observations to establish the load profile for the equipment, the energy use, and the savings, which are then extrapolated to a full-year period. In all cases, it is important to consider any seasonal, weekly or monthly variations in operation.

Short-term pre- and post-retrofit measurements extrapolated by production. Energy use for process systems can sometimes be correlated to production output. One method to document annual savings is to compare the pre- and post-retrofit systems over a representative production period (which may include multiple weeks) and then extrapolate the results to a full year.

The method is as follows:

- Determine the pre-retrofit system kWh per unit of production per shift, production run or equipment cycles, as appropriate.
- Determine the post-retrofit kWh per unit of production per shift, production run or equipment cycles, as appropriate.
- Adjust the baseline using the post-retrofit production levels.
- Extrapolate to a full year by multiplying the difference by the annual production.

Short-term measurements extrapolated by shifts or operating time. In some cases, the energy use does not relate to production, but to equipment operating time. In this case, the savings are similar to the above except the time in days or number of shifts is the factor used to extrapolate the savings to the full year.

Short-term monitoring extrapolated to a full year. A short term pre- and post-monitoring of a week or two can be carried out and the results extrapolated to a full year based on time. The difference is then multiplied by the ratio of annual hours to the monitored hours.

Post-retrofit energy monitoring and calculated base case energy, extrapolated to a full year. This method is useful when the performance or efficiency of the base case equipment is known, but the load profile was not monitored prior to the project. This method often applies to compressed air systems or large refrigeration systems. In this case, the post-retrofit system power and output (Cfm or tons) is measured for a period of a week or more. The base-case power for the same period is then calculated by multiplying the output by the base-case equipment performance. The savings are then calculated to a full year by extrapolating based on the projected loading pattern.

19.6 Unacceptable documentation

This section lists methods that are not acceptable for calculating the energy savings for custom measures:

- Vendor-specific or proprietary analysis software unless the methods used are available for review and the input parameters are specific to the site.
- Simple percent of total kWh or Mcf savings or percent of end use energy savings.
- Factors or percentages of savings achieved at other sites as documentation for custom savings unless there is an extensive body of statistically valid results.
- Using rules of thumb for calculating savings.
- Marketing materials from the manufacturer or distributor, their company's case studies, or savings claims based on non-standardized methods. For example, a manufacturer or distributor product savings claim that has not been verified by a certified third party will not be accepted.
- Operating hours may or may not be the operating hours of the facility. Where equipment operation varies with days of the week or seasons, you must enter a description of the operation for all days of the week and all seasons.

If documentation is not provided, technical reviewers will use conservative estimates. Spot measurements as documentation of power or energy use are typically not acceptable for variable load equipment. Amperage can often be used as a proxy for true power (kW) measurements EXCEPT for systems where the power factor may vary significantly, as in variable speed drive situations (where the voltage may vary as well as the amperage). Contact the Program Team to verify monitoring needs where VSDs are installed.

20 Calculating and documenting new construction energy savings

These guidelines provide suggestions for submitting project documentation to demonstrate that your project qualifies for rebates offered through the Energy Efficiency Program for Business new construction and major renovation program, and that the savings estimates and rebate applied for are actually realized. This section provides information to assist you in calculating and measuring energy savings associated with your project.

20.1 Systems approach

The catalog provides specifications and methods of calculations for certain prescriptive measures found in the program application. Lighting power density savings must be at least 10% greater than the maximum-allowed baseline. The applicant must complete and submit a lighting compliance document (COMcheck) or Lighting Power Density worksheet, available at dteenergy.com/business.

20.2 LEED whole building approach

Rebates offered under the LEED whole building approach will be paid upon receiving LEED certification at the saving values validated by USGBC. The only leg of LEED certification that is valid for this rebate is building and construction (B+C), and the main prerequisite and credit considered are EAp2 and EAc1.

Rebates are paid to DTE Energy customers based on the level of energy savings reported in the energy model submitted to and verified by USGBC (first year only). LEED certification levels will be used to determine the rebate rate: certified/silver, gold or platinum.

Applicants must utilize one of the approved software tools to provide a whole building simulation energy model. The proposed model must reflect the designed system, and is verified to match the mechanical, architectural, and electrical drawings and schedules. Ultimately, rebates will be paid upon receiving LEED certification at the savings value that is validated by USGBC during the certification process. Projects are not allowed to take credit for savings above baseline for systems utilizing renewable energy.

Electrical energy savings = 1 kWh per LEED validated = 1 kWh savings

Natural gas fuel savings = 1 Mcf per LEED validated = 1 Mcf savings

21 Satisfaction

The program team will take every possible step to ensure a high level of satisfaction with all aspects of the program. However, if any problems or concerns should arise, we encourage customers and contractors to call 855.748.2525. If a customer or contractor has questions that the program team cannot answer, the team can provide the appropriate contact information or other resources to help answer questions.

22 Tax implications

Paid rebates are reported to the IRS on Form 1099. Rebate payments may have tax implications for businesses and/or contractors who receive them. The recipient is responsible for any and all tax payments that may result from a rebate payment. Participating businesses and contractors are encouraged to consult their accountant or tax experts to determine implications.

23 Disclaimer

Neither DTE Energy nor any of its affiliates guarantees the energy savings or makes any warranties associated with the measures eligible for rebates under this program. DTE Energy has no obligations regarding, and does not endorse or guarantee, any claims, promises, work or equipment made, performed or furnished by any contractors or equipment vendors that sell or install any energy efficiency measures.

Payment of rebates is for the installation of energy-saving equipment only and does not guarantee or imply that the equipment installation complies with any state or local code. DTE Energy has no obligation to pay any rebate described herein unless the minimum requirements of the program have been met and funds allocated for such rebates are available for distribution.

24 Glossary

Applicant: The entity, either the customer or the customer's representative, submitting the application.

Btu: British thermal unit; a measure of energy

Btu/h or Btuh: British thermal units per hour; a measure of power

Burn out rate: the frequency at which light bulbs or lamps fail and need to be replaced

Ccf: 100 cubic feet; a unit to measure natural gas usage.

CEE: Consortium of Energy Efficiency©; the consortium of energy efficiency (EE) program administrators develop initiatives to promote the manufacture and use of EE products

CFM: Cubic feet per minute; a measure of volumetric flow

COP: Coefficient of performance; measure of efficiency for HVAC equipment measured in Btu/h out / Btu/h in

CRI: Color rendering index; the measure of the ability of a lamp to accurately render colors

Customer: The utility customer-of-record responsible for paying the utility bill(s) for the principal account (the account with the largest kWh or Mcf consumption) that is affected by the project. The primary criterion for determining the customer is the account name and tax ID number.

Custom Project: A project comprised of efficiency improvement measures that are not included in the prescriptive measures found in the catalog or application.

DLC: Design Lights Consortium® (www.designlights.org)

DTE Account Holder: See customer.

EER: Energy efficiency ratio; measure of rating point efficiency for small HVAC equipment measured in Btu/h out / Watts in

Facility: A single meter or multiple meters on a single property for which a single customer is responsible for paying the DTE Energy electric and/ or natural gas bill.

Final Application: This term refers to a program application that is submitted, after a project has been completed, for the payment of funds. The applicant is to submit a copy of the application with any information not submitted with the reservation application. The final application must include a DTE account holder's signature and all appropriate supporting documentation, including dated, itemized invoices and manufacturer's specifications.

GBCI: Green Building Council Institute

HVAC: Heating, ventilation, and air conditioning

Rebate: The amount to be paid to the customer or contractor once the final application has been approved.

IPLV: Integrated part load value; measure of efficiency for larger HVAC equipment during a cooling season

LED: Light emitting diode; type of lamp

LEED: Leadership in energy and environmental design

Lighting fixture: Apparatus attached to a building to hold lamps and ballasts. The fixture is defined by the number of lamps it holds, regardless of the number of ballasts used.

LPD: Lighting power density; watts per square footage of area being illuminated

LPW: Lumens per watt; lamp efficiency or efficacy

MBtu/h or MBH: 1,000 Btu/h

MMBtu/h or MMBH: 1,000,000 Btu/h

Measure Cost: The measure cost (MC) is the cost of implementing a measure less any costs that would have been incurred to achieve all of the project benefits, except those resulting in the rebated energy savings. MC is:

- For retrofit and new technology measures: the cost of new equipment, components or materials added to existing equipment for the purpose of improving its energy efficiency; or
- For non-functional or end-of-life equipment replacement measures: the cost differential between equipment meeting program efficiency criteria and equipment meeting the minimum efficiency allowable by code or industry standard.

For example, when replacing an existing injection molding machine that is at the end of its useful life with a new, high efficiency model, the price differential between the high efficiency model and a standard efficiency model is the MC.

However, when adding a variable frequency drive to an existing boiler pump or when changing high pressure sodium light fixtures to fluorescent fixtures, the MC is the installed cost (equipment and installation) of the VFD or light fixtures.

Mcf: 1,000 cubic feet; a unit to measure natural gas usage.

Mixed project: A project comprised of efficiency improvement measures, some of which are prescriptive measures and some of which are custom measures.

MLPW: Mean lumens per Watt

PF: Power factor; ratio of (electrical) working power to total power measured in kW/kVA

Prescriptive Project: A project comprised solely of prescriptive measures.

Program Year: The duration of the program: Jan. 1, 2025, to Nov. 30, 2025.

PTAC: Package terminal air conditioner

Reservation: The process of submitting a reservation application form for approval of project plans. A reservation is required for all custom projects and strongly encouraged for prescriptive projects.

Reservation Application: This term refers to a program application that is submitted prior to project completion for the purpose of assessing the proposed uncompleted project for conformance and reserving rebate funds. The reservation application does not include a DTE account holder's signature and may be lacking some supporting documentation, including dated, itemized invoices. A reservation application is required for all custom projects and strongly encouraged for prescriptive projects.

Reservation End Date: Date on which a customer's reservation is cancelled unless an extension has been granted. If a reservation spans more than one program year, eligible rebates are paid according to the rebate schedule in place at the time the completed final application is submitted along with all required supporting documentation.

THD: Total harmonic distortion; a measure of the relative distortion of the fundamental current/ voltage caused by lighting ballasts and other non-linear loads.

TMY: Typical meteorological year

VFD: Variable frequency drive; a system for controlling the rotational speed of an alternating current (AC) electric motor by controlling the frequency of the electrical power supplied to the motor.

VSD: Variable speed drive; an electronic device that controls the rotational speed of a piece of motor-driven equipment (e.g., a blower, compressor, fan, or pump). For this program, VSD is synonymous with VFD.

25 Contact information

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