

## Custom Technical Sheet

### Energy Solutions for Business Program

Baltimore Gas and Electric Company (BGE) offers incentives through its Smart Energy Savers Program® to help commercial, industrial, government, institutional and nonprofit electric service customers offset the upfront costs for energy-efficient improvements. The Custom Technical Sheet covers energy-efficient equipment not eligible under the lighting, HVAC, sign lighting or high efficiency equipment applications. Custom projects may involve retrofits of existing inefficient equipment, new construction, major renovation and remodeling, new equipment purchases and end-of-life equipment replacements. Measures can include energy management systems, specialty LED lighting, industrial systems and comprehensive whole building systems.

### Instructions

#### Eligible Participants

Incentives are available to non-residential, commercial, industrial, government, institutional and nonprofit electric service customers within the BGE service territory that fall under rate schedules G, GS, GL, P or T.

#### Eligible Equipment

All equipment must be new and meet all designated requirements. Used equipment or equipment not meeting program and/or technical requirements is not eligible for incentives. Existing equipment must be removed and may not be reinstalled within the BGE service territory.

#### Submitting an Application

All Custom applications, regardless of the total requested incentive amount, require a [program preapproval letter](#). No amount of existing equipment being replaced may be removed or altered, and no amount of proposed equipment applied for may be purchased and/or installed prior to the issuance of a program preapproval letter. To receive a program preapproval letter, an application must first be submitted for review through [BGE's Application Center](#) and include the detailed cost breakdown or itemized estimates as well as the manufacturer data (cut) sheets for all baseline and proposed equipment, and customer-signed [Terms and Conditions](#).

#### Approval Requirements

Once an application has been submitted, the project will be assigned a project ID. A [program preapproval letter](#) will be issued once the application has been preapproved. Only at this time may any existing equipment being replaced be removed or altered and may the proposed equipment being applied for be purchased and/or installed. Once the installation of all proposed equipment is complete and the BGE customer is satisfied with the equipment and installation, the BGE customer must sign the program preapproval letter. The BGE customer-signed preapproval letter must be uploaded to the [BGE Application Center](#) along with the final detailed invoice(s) and the signed minimum requirements document if applicable. Preapproval commitments are valid for up to six months for prescriptive retrofit projects and up to 12 months for new construction and custom projects from the date of the preapproval letter that is issued to the customer of record.

#### Program Details

Details of the program, including incentive levels and technical requirements, are subject to change without prior notice. You may go to [BGESmartEnergy.com](#) to get the most current program information, or you may call 410.290.1202.

Total incentives are limited to \$1,000,000 per federal tax ID per calendar year. Incentives above this level may be granted on a case-by-case basis subject to program budget limitations. BGE reserves the right to deny any application that may result in BGE exceeding its program budget.

### Participation Instructions

#### Step 1

Verify that your project meets the eligibility requirements specified on the Custom Technical Sheet. Visit the program website at [BGESmartEnergy.com/business/energy-solutions-business](#) or contact us at 410.290.1202 with any questions about eligibility.

#### Step 2

The party listed as completing and submitting the application must be the party who completes and submits the application. The Installation Contractor must be disclosed on the online application prior to project completion.

#### Step 3

Visit [the Application Center](#) to submit an online application. Refer to the Application Checklist to verify that all required information and documentation are included for submission to BGE.

All elements of a completed application must be uploaded to [the Application Center](#). All applications will be reviewed for eligibility and completeness. Completed applications will be reviewed in the order received. Applicants who submit incomplete applications will be notified of deficiencies. BGE may require a pre-installation inspection and will notify customers if an inspection of the facility is necessary.

#### Step 4

The application will be processed, and BGE will notify the applicant in writing when the review is complete and funds have been reserved. Upon receipt of the program preapproval letter, participants may purchase and install their energy-efficient equipment.

Notify BGE immediately if there are any changes to the scope of work, as this may require additional preapproval.

#### Step 5

Upon project completion, please review your preapproved application and note any changes to the project that occurred during installation. The BGE end-use customer must sign and return the [preapproval letter](#) and provide invoices with customer signature indicating awareness and satisfaction for all energy efficiency measures. BGE may require a post-installation inspection to verify compliance with program rules and verify the accuracy of project documentation and equipment operation.

BGE will authorize payment upon the application's review and approval. The incentive check will be mailed six to eight weeks after the project's completion and final project approval.

### Questions

If you have questions about the program, call 410.290.1202, email [Business@BGESmartEnergy.com](mailto:Business@BGESmartEnergy.com) or visit [BGESmartEnergy.com](#)

## I. APPLICATION CHECKLIST

Please include the following items when you apply through [the Application Center](#):

- Supporting documentation to include manufacturer's specification (cut) sheets for all baseline and proposed equipment.
- Detailed cost breakdown or itemized estimates.
- [Terms and Conditions](#) signed by the BGE end-use customer.

BGE WILL PROCESS APPLICATIONS FOR PAYMENT IN THE ORDER RECEIVED AND ISSUE INCENTIVE PAYMENT WITHIN SIX TO EIGHT WEEKS AFTER PROJECT COMPLETION AND APPROVAL. APPLICANTS WILL BE NOTIFIED IF POST-INSTALLATION INSPECTIONS ARE REQUIRED PRIOR TO FINAL PAYMENT. **PLEASE NOTE THAT FAILURE TO PROVIDE ANY OF THE ABOVE ITEMS MAY DELAY THE PROCESSING OF YOUR APPLICATION.**

## II. IMPORTANT INFORMATION FOR CUSTOM APPLICATIONS

1. All applications for incentives under the Custom application require thorough and complete documentation of the proposed cost and projected electric usage and savings.
2. Before beginning the application process, the customer or their contractor should check with a BGE Energy Solutions program representative to determine the eligibility of the proposed project and to establish requirements for detailed savings projections and cost estimates. This information must be submitted to BGE for review and evaluation of potential incentives. Please contact us at 410.290.1202 or email us at [Business@BGESmartEnergy.com](mailto:Business@BGESmartEnergy.com).
3. If a project consists of multiple Custom measures, the project summary, cost estimates and energy impact must be completed for each proposed energy conservation measure. These are intended to provide a summary of each individual measure with supporting documentation uploaded as appropriate.
4. Based on the information contained in the submitted Custom application and other information submitted during the application review process, BGE may develop a Minimum Requirements Document (MRD) specifying project-specific incentive offer conditions such as milestones, equipment efficiency and operational requirements along with any additional required documentation. The customer will be required to sign and return the MRD to BGE along with the signed preapproval letter upon project completion.
5. After successful review and project approval, BGE will notify the customer in writing of the project approval, the incentive value and the Terms and Conditions that are required to receive final incentive payment.

## III. CUSTOM SPECIFICATIONS

The Custom application must be used for all energy efficiency measures that are not covered by the prescriptive applications. Custom applications require supporting documentation on equipment performance and calculations documenting the energy and demand savings that are expected to result from each measure. This information typically includes performance data for the existing or base case equipment and the energy efficiency equipment proposed as well as the operating load profiles that the equipment operates under. There are several methods that can be used to determine the baseline for a given project. Please refer to the Custom Project Baseline Matrix on page 3.

Supporting documentation for each energy efficiency measure submitted with a custom application includes:

**Project Overview:** Provide a brief overview of the proposed project. Include a basic description of the facility and its function, location of affected equipment and typical facility operation hours.

**Existing System or Base Case Description:** For retrofit projects, describe the existing system or equipment that will be modified under this application and state how the current system is operating. For new construction or end-of-life replacement projects, applications should provide information for the base-efficiency system or equipment. This should include:

- Detailed description of the affected equipment including system capacity, age, load profiles, capacity, production rate and hours of operation.
- Number of existing units.
- Manufacturer data sheets with equipment performance ratings (BHP, CFM, PSI, kW, efficiency rating, U-value, etc.). Provide nameplate data if manufacturer data sheets are unavailable.
- Part-load performance data (where applicable).
- Description of controls and sequence of operations.

**Proposed System Description:** Describe the measures that are proposed in detail. Include:

- Detailed description of high-efficiency system or equipment and operating conditions.
- Manufacturer data sheets for the materials or performance ratings for equipment being installed (BHP, CFM, PSI, kW, efficiency rating, U-value, etc.).
- Description of controls and sequence of operations.
- One line diagrams (where applicable).

**Cost Estimates:** For retrofit projects, provide a detailed cost breakdown associated with the project, including written proposals from vendors and contractors or itemized estimates of components from up-to-date estimating manuals. For new construction or end-of-life replacement projects, include cost data for base and high-efficiency systems or equipment.

IV. CUSTOM SPECIFICATIONS (CONTINUED)

Required to include the following when filling out the application:

Estimated Costs				
	Estimated Material Cost	Estimated Labor Cost	Estimated Equipment Cost	Estimated Total Cost
Baseline Costs				
Proposed Costs				

**Energy Impacts:** Include a measure-by-measure summary of the calculated energy and demand savings associated with the project. Clearly indicate all assumptions and variables used in the analysis. This includes all engineering formulas and documentation of all the factors, values and assumptions used in the formulas (Microsoft Excel® spreadsheet preferred).

In cases where energy modeling is used to determine savings, approved modeling software must be used. Please submit a complete energy model including input and output data and show calculations used to determine baseline and proposed estimated electricity usage.

Required to include the following when filling out the application:

Estimated Energy Consumption						
	Annualized kWh Usage				Peak Demand (kW)	
Time Period	Summer Peak Period	Summer Off-Peak Period	Non-Summer Peak Period	Non-Summer Off-Peak Period	Summer Peak Demand	PJM Average Summer Demand
Definition	June – September 7a.m. – 11p.m., M–F, Non-Holiday	June – September All Other Hours	October – May 7a.m. – 11p.m., M–F, Non-Holiday	October – May All Other Hours	June – September, 2 – 6p.m., M–F, Non-Holiday	June – August 2 – 6p.m., M–F, Non-Holiday
Baseline (kWh)						
Proposed (kWh)						
Reduction (kWh)						

V. CUSTOM MATRIX FOR BASELINE DETERMINATION

	Retrofit	End of Useful Life	New Construction	Major Renovation
Status of existing equipment?	Existing equipment has useful life remaining; replacement of equipment is not necessary for the continued operation of the facility or process.	Existing equipment is at the end of its useful life.	N/A	Equipment has been removed.
Motivation to go to high-efficiency equipment?	More efficient equipment will produce energy savings that exceed the inherent residual value of the existing equipment.	A time-dependent situation: They must install something; the incentives motivate them to go beyond the “minimum requirements” of code.	A time-dependent situation: They must install something; the incentives motivate them to go beyond the “minimum requirements” of code.	A time-dependent situation: They must install something; the incentives motivate them to go beyond the “minimum requirements” of code.
What if more efficient equipment is not installed?	Building can continue to function as is.	Lost opportunity for reducing operation costs.	Lost opportunity for reducing operation costs.	Lost opportunity for reducing operation costs.
What are the key references for the baseline?	The performance of the existing equipment as currently operated (vs. the performance of the same style of equipment, but with a high-efficiency designation).	The performance of the minimal equipment required by code (vs. high-efficiency versions of that equipment).	The performance of the minimal equipment required by code (vs. high-efficiency versions of that equipment).	The performance of the minimal equipment required by code (vs. high-efficiency versions of that equipment). <b>Note: The type or age of equipment removed from the building is NOT a consideration.</b>

VI. CUSTOM MATRIX FOR BASELINE DETERMINATION (CONTINUED)				
	Retrofit	End of Useful Life	New Construction	Major Renovation
Incentive levels for cost-effective measures? (Note: Actual incentive percentages and amounts may vary from project to project.)	Up to 50% of the costs for the more efficient equipment, capped at \$0.28/kWh saved annually.	Up to 75% of the incremental costs for the more efficient equipment, capped at \$0.28/kWh saved annually.	Up to 75% of the incremental costs for the more efficient equipment, capped at \$0.28/kWh saved annually.	Up to 75% of the incremental costs for the more efficient equipment, capped at \$0.28/kWh saved annually.

VII. CUSTOM MATRIX FOR BASELINE DETERMINATION				
<b>How does “Comprehensive Custom” offering apply?</b> (Note: In order for a project to have a Comprehensive Custom designation, it must achieve 80% of the achievable kWh savings.)	<b>Comprehensive Systems Track</b> For custom measures, the incentives would increase to up to 75% of the total cost or a buy down to a one-year payback, whichever is less. (Note: For interactive retrofit equipment such as lighting, the incentive for prescriptive measures would be increased by 10%.)	<b>Comprehensive Systems Track</b> This approach encourages a comprehensive system-wide view for end-of-life system replacements. Enhanced incentives for interactive measures that focus on right-sizing the system. For custom measures, the incentives would increase to up to 75% of the total (labor + materials) cost or a buy down to a one-year payback, whichever is less.	<b>Comprehensive Design Track</b> Targets opportunities during the design phase of a new facility or major renovation. Provides the customer with the opportunity to capture the maximum energy savings potential for the project by examining the building as an integrated system. Enhanced incentives would be available for up to 90% of the incremental cost or a buy down to a one-year payback, whichever is less.	<b>Comprehensive Design Track</b> Targets opportunities during the design phase of a major renovation. Provides the customer with the opportunity to capture the maximum energy savings potential for the project by examining the building as an integrated system. Enhanced incentives would be available for up to 90% of the incremental cost or a buy down to a one-year payback, whichever is less.

EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to [BGESmartEnergy.com](http://BGESmartEnergy.com).