

**STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD**

IN RE:	:	
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MIDAMERICAN ENERGY COMPANY	:	Docket No. EEP-2012-0002
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**MidAmerican Energy Company
Volume II**

February 1, 2013

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**MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018
Executive Summary**

General Description

MidAmerican Energy Company (MidAmerican) submits its 2014-2018 Energy Efficiency Plan (Plan) in accordance with the requirements set forth under Chapter 35 of the Iowa Administrative Code (IAC). MidAmerican’s Plan builds on its 2009-2013 plan and will continue to provide a comprehensive portfolio of energy efficiency programs during the five-year planning period from 2014 to 2018 with some significant changes in the details of MidAmerican’s programs. The Plan includes several new measures to capture untapped market potential and opportunities to increase customer participation and depth of savings by incorporating new market sectors, technologies and delivery strategy improvements. The Plan offers customers in every sector the flexibility to participate at many levels, based on their individual needs and building type.

Most programs will be offered as joint electric and natural gas programs. However, customers will only be eligible for the portions of the programs related to the energy service they purchase from MidAmerican.

MidAmerican expects to implement this Plan no later than January 1, 2014, pending Board approval. Several of the programs described in this Plan are already in place and operational. There are significant changes to several of the assessment based programs that will require time to transition to the new Plan. However, MidAmerican collaborated with current and prospective contractors to minimize the transition period. MidAmerican is anticipating the Board will render a decision on this Plan no later than the end of fourth quarter 2013.

The table below summarizes the programs included in the Plan, as well as program marketing names and target markets (by fuel).

Summary of Iowa Programs

Program	Marketing Name (where applicable)	Fuel	
		Natural Gas	Electric
Residential			
Residential Equipment		✓	✓
Residential Assessment	HomeCheck® Online; HomeCheck®	✓	✓
Residential New Construction	New Homes	✓	✓
Residential Load Management	SummerSaver sm		✓
Residential Behavioral	Home Energy Reports	✓	✓
Residential HVAC Tune Up		✓	✓

Program	Marketing Name (where applicable)	Fuel	
		Natural Gas	Electric
Nonresidential			
Nonresidential Equipment (including custom equipment track)		✓	✓
Commercial Energy Assessment	BusinessCheck®; BusinessCheck® Online	✓	✓
Nonresidential Energy Analysis	<i>Efficiency Partners</i> ®	✓	✓
Commercial New Construction		✓	✓
Nonresidential Load Management	Curtailement		✓
Multiple-Sectors			
Appliance Recycling			✓
Upstream Retail Lighting	<i>Be Bright!</i>		✓
Low-Income		✓	✓
Multifamily Housing		✓	✓
Agriculture		✓	✓
Education		✓	✓
Trees	<i>Trees Please!</i> ; Plant some shade®; Trees for Kids/Trees for Teens	✓	✓
Assessments		✓	✓

The table below summarizes the changes to MidAmerican’s 2009-2013 plan that are included in the proposed Plan.

2014-2018 Plan Changes

Program	Markets Served	Changes/Details
New Programs		
Residential HVAC Tune Up	Residential customers	<ul style="list-style-type: none"> Encouraging customers to properly maintain and improve the performance of existing HVAC systems.
Upstream Retail Lighting	Residential and nonresidential customers	<ul style="list-style-type: none"> Transitioning the existing <i>Be Bright!</i> Campaign to its own program. Point-of-sale discounts received on CFLs, specialty and LED lamps.
Discontinued Programs/Initiatives		
Home Performance with ENERGY STAR®	Residential customers	<ul style="list-style-type: none"> Low customer participation during pilot.

Program	Markets Served	Changes/Details
Discontinued Programs/Initiatives		
Efficiency Bid	1MW and larger industrial customers	<ul style="list-style-type: none"> Many of the customers who originally participated in Efficiency Bid are now participating in the Efficiency Partners track of the Nonresidential Energy Analysis program. No program activity.
Third Party	Residential and nonresidential customers	<ul style="list-style-type: none"> This program is discontinued in the new Plan, but successful aspects of it will be moved to Residential Behavioral and Commercial Assessments programs.
Enhancements and Changes to Existing Programs		
Residential Assessments	Residential single family customers	<ul style="list-style-type: none"> Adding additional direct install measures – Smart Strip and LED lamp. Offering bonus incentives to encourage customers to install multiple recommended measures identified during the assessment. Partnering with Neighborhood Associations to encourage participation. Offering bounty to association for number of participants completing assessments and specific follow-up measures. Adding HVAC tune up coupon.
Residential Prescriptive Rebates	Residential customers	<ul style="list-style-type: none"> Improving the quality of equipment installation by requiring all HVAC equipment to be installed by a SAVE certified contractor in order to receive rebates. 100% of quality installation cost covered by incentive. Significantly increasing incentives for HVAC equipment. Moving the <i>Be Bright!</i> promotion to a stand-alone program. Eliminating some measures with low participation and low cost-effectiveness such as furnaces, and water heaters.
Residential New Construction	Residential builders and homeowners	<ul style="list-style-type: none"> Removing one prescriptive path (BOP) to encourage builders to construct higher energy efficient home. Reducing required measures and incentives in the prescriptive path to adjust for new building codes.
Low-Income EnergyWise Education Component	Income-qualified residential customers	<ul style="list-style-type: none"> Adding window wrap and one additional compact fluorescent lamp to the kit based on feedback from Community Action Program agencies.

Program	Markets Served	Changes/Details
Enhancements and Changes to Existing Programs		
Low-Income Home Energy Reports Component	20,000 randomly selected LIHEAP enrolled combination (electric and natural gas) service customers	<ul style="list-style-type: none"> • Adding Home Energy Report with energy savings tips tailored toward low income customers. Approximately 6 reports per year will be delivered.
Residential Behavioral	170,000 randomly selected combination (electric and natural gas) service customers	<ul style="list-style-type: none"> • Adding Home Energy Report with energy savings tips. Approximately 6 reports per year will be delivered. Currently, 50,000 combination service customers receive reports as part of a pilot in the Third Party program.
Nonresidential Prescriptive Rebates	Nonresidential customers	<ul style="list-style-type: none"> • Adding prescriptive incentives for new measures. • Exploring an upstream incentive mechanism for motors and variable-speed drives. • Significantly increasing incentives for HVAC equipment. • Eliminating some measures with low participation and low cost-effectiveness. • Including a “custom track” for those energy efficiency projects or purchases of efficient equipment that do not fit into MidAmerican’s other specific nonresidential equipment programs. (Previously the Custom Systems program.)
Commercial Assessment	All commercial customers	<p>Offering two types of business assessments to business owners for a wide range of facility types and sizes. The two tracks include:</p> <ul style="list-style-type: none"> • Track I – Assessments for small and large commercial customers tailored to meet the customer’s needs. <ul style="list-style-type: none"> ○ Additional direct install measures for small commercial assessments. • Track II – Building Tune Up/Retrocommissioning (Previously offered in a pilot program and detailed studies, respectively). <ul style="list-style-type: none"> ○ Building Tune Up incentive is 50/50 cost share ○ Retro commissioning incentive is 100% of the cost. • Bonus incentives for installing multiple projects.

Program	Markets Served	Changes/Details
Enhancements and Changes to Existing Programs		
Nonresidential Energy Analysis	All industrial customers	<ul style="list-style-type: none"> • Promoting comprehensive efficiency strategies in large existing industrial facilities only. Commercial customers will now be served through the Commercial Assessment program. • Simplifying the bonus incentive structure in an effort to encourage participation and increase customer satisfaction. Enhanced incentives will continue to be offered for multiple projects. • Offering the option of receiving additional technical assistance with project implementation which may include: <ul style="list-style-type: none"> ○ Providing independent third-party owner's representation. ○ Developing detailed requests for proposals on committed projects. ○ Obtaining and reviewing vendor bids. ○ Performing and/or refining energy analysis as project scope matures. ○ Acquiring and reviewing trend data as required by the program or to help inform an investment decision. ○ Assisting with applications for rebate, measurement and verification of energy impacts, etc.
Commercial New Construction	New commercial construction, additions or major renovations	<ul style="list-style-type: none"> • Offering an ongoing performance track for projects completed through the Commercial New Construction program for customers interested in additional assistance to achieve ongoing performance and increased energy savings.
Appliance Recycling		<ul style="list-style-type: none"> • Adding home energy savings kit as leave behind package for participants.
Multifamily Housing	Buildings with four or more units	<ul style="list-style-type: none"> • Removing the performance track or whole building retrofit track of the program due to lack of participation.

Program	Markets Served	Changes/Details
Enhancements and Changes to Existing Programs		
Education	All residential and nonresidential customers	<ul style="list-style-type: none"> Investigating the addition of grades 7 - 9 to curriculum offerings for <i>eSMARTkids</i>. Making improvements to Trade Ally Central website to provide greater resources for customers to understand our programs and find reliable trade allies to assist them in completing their energy efficient project or purchases of equipment. Expanding strategic relationships with trade allies and organizations in order to move our mutual customers to high efficiency equipment purchases and installation on a regular basis.
Agriculture	Farms and agribusiness customers on residential and nonresidential rate schedules	<ul style="list-style-type: none"> Including a CFL exterior lamps direct install measure.
Trees	All customers	<ul style="list-style-type: none"> Adding a component for contributions to a trees fund for MidAmerican customers who sign up for electronic billing, making the successful pilot offering permanent.

Program List

Residential programs

Residential Equipment – This program provides rebates to encourage customers to purchase high-efficiency space conditioning equipment, water heating equipment and appliances. The program also encourages quality installation of heating and cooling equipment by tying rebates for HVAC equipment to quality installation by a SAVE (System Adjustment & Verified Efficiency) certified contractor.

Residential Assessment – This program provides free energy assessments, energy savings suggestions, direct installation of simple energy-efficiency measures and rebates for more extensive building shell retrofits. There are two assessment options available to customer:

- HomeCheck®, which provides participants with an on-site energy assessment.
- HomeCheck® Online, which allows customers to perform Internet-based assessment of their own homes.

The program will offer enhanced incentives for completion of multiple projects identified during the assessment. Additionally, a HVAC tune up coupon will be given to on-site participants to encourage them to have their HVAC tune up completed by a SAVE-certified contractor.

Residential New Construction – This program promotes the construction of energy efficient new housing, addressing both the building shell and the equipment used inside the home. The program provides builders with financial incentives to offset the higher cost of energy efficient construction. Additionally, the program provides the homeowner with a certificate, which is recognized by the real estate community as evidence that the home is highly energy efficient.

Residential Behavior – This program is designed to encourage energy savings through behavioral modification. The program provides customers with Home Energy Reports that contain personalized information about their energy use and provides smart ways to make their homes more efficient. This program was previously included under the Third-Party program in Docket No. EEP-08-2.

Residential Load Management – This program provides financial incentives to customers that allow MidAmerican to control their central air conditioning on summer peak days.

Residential HVAC Tune Up – This new program promotes the proper maintenance and operation of heating and cooling systems by residential customers in existing homes. The program provides customers with rebates to offset the cost of increasing the efficiency of existing equipment and utilizes participating contractors that have been SAVE-certified. Targeted equipment includes heating and cooling equipment and ductwork.

Nonresidential programs

Nonresidential Equipment – This program provides rebates to encourage customers to purchase specified efficient heating, cooling, water heating, lighting, motor, variable speed drives, commercial kitchen equipment and insulation measures. The Nonresidential Custom program included in the previous plan is now the “custom track” included in this Plan’s Nonresidential Equipment program. The custom track encourages customers to pursue energy efficiency projects or purchase efficient equipment that does not fit into MidAmerican’s other specific nonresidential equipment programs.

Commercial Assessment – This program promotes comprehensive energy efficiency for existing commercial buildings, regardless of size. The program will offer services through two program tracks, tailored to the unique needs of commercial customers; Track I – Assessments and Track II – Building Tune Up/Retrocommissioning. The goal of a building tune up is to find easy to fix items that will enhance building performance and reduce energy consumption. Examples of corrective measures might include scheduling programmable thermostats, adjusting/adding economizers, repairing failed actuators, and adjusting minimum outside air percentages. The goal of traditional retrocommissioning is to optimize existing building systems and reduce energy consumption. Examples of corrective measures might include optimizing economizer and ventilation controls, improving equipment sequencing and scheduling, and optimizing fans and pumps. It is important to note that energy saving opportunities in existing stand-alone data centers and internal server rooms and server closets will be pursued and leveraged through the Commercial Assessments program; while energy saving opportunities for new data centers will be pursued through the Commercial New Construction program.

Nonresidential Energy Analysis – This program provides expert advice and assistance to organizations to improve the energy performance of large existing industrial facilities. Through this program, MidAmerican Energy offers a no-cost scoping level, facility-wide energy assessment as well as assistance with detailed investment-grade studies.

Commercial New Construction – This program promotes the design and construction of high-efficiency commercial buildings, including new building construction as well as major renovations of existing buildings. The program is delivered in partnership with developers, architects, engineering firms and equipment contractors and provides a mix of technical and financial assistance to help influence projects during the planning stage. Energy design assistance and construction incentives are offered to reduce market barriers to incorporating energy efficiency in construction projects. The program will offer services through five program tracks, tailored to the varying needs of different market segments. Newly constructed data centers are served through the Commercial New Construction program and will be placed in the appropriate track. Due to the energy intensity of these building types, they are prime targets for energy efficient design measures. Energy saving design opportunities will be identified for the customer’s unique data center environment.

Nonresidential Load Management – This program provides commercial and industrial customers with financial incentives in return for agreeing to reduce electric demand during peak hours when notified by MidAmerican’s internet-based monitoring and communication system.

Multiple-sector programs

Appliance Recycling – This program offers financial incentives to customers to stop using old, inefficient refrigerators, freezers and room air conditioners and helps them dispose of the old units in an environmentally responsible manner.

Upstream Retail Lighting – This program promotes the purchase of energy-efficient equipment by customers in new and existing buildings. The program coordinates with upstream suppliers and retailers providing customers with in-store rebates to offset the higher purchase cost of efficient lighting. The program will offer standard and specialty ENERGY STAR® CFL and LED lighting products. The program is marketed under the name *Be Bright!* This program was previously included under the Residential Equipment program in Docket No. EEP-08-2.

Low-Income – This program provides free weatherization services, including installation of lighting, water heating and insulation measures and replacement of inefficient furnaces, water heaters, refrigerators and freezers. The program also distributes thousands of free energy efficiency kits to qualifying customers and provides energy efficiency services to multifamily and institutional housing projects. Approximately 20,000 Home Energy Reports containing low-cost and no cost energy efficiency tips will be sent to Low Income Home Energy Assistance Program (LIHEAP) eligible customers through this program.

Multifamily Housing – This program provides a comprehensive set of services and financial incentives to help multifamily property owners, property managers, landlords and renters improve the efficiency of existing buildings.

Agriculture – The program provides comprehensive on-site energy assessments to identify areas of high energy use, recommend energy-savings opportunities, and provide information on available incentives. The program promotes the purchase of high-efficiency equipment by agricultural customers through prescriptive and custom incentives.

Education – This program promotes energy efficiency education through activities organized into four general areas: training, school curricula, awareness and trade ally support.

Trees – This program promotes tree planting through four different program components, Plant some shade®, Trees Please!, Trees for Kids/Teens and Trees for E-bills. Each component provides grants or other financial incentives as well as educational materials targeting a specific customer segment.

Budgets

Anticipated five-year spending for the 2014-2018 Iowa energy efficiency Plan is shown in the table below. MidAmerican proposes a budget of nearly \$512 million in energy efficiency over the five-year period, with \$249 million of that for residential customers and \$263 million for nonresidential customers. MidAmerican’s accounting systems will ensure that costs for providing the programs are recovered from the appropriate customers.

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 12,326,551	\$ 57,741,360	\$ 70,067,911
2015	\$ 12,577,161	\$ 59,639,180	\$ 72,216,341
2016	\$ 12,898,223	\$ 61,608,168	\$ 74,506,391
2017	\$ 13,235,022	\$ 63,921,257	\$ 77,156,279
2018	\$ 13,579,269	\$ 66,033,730	\$ 79,612,999
Total	\$ 64,616,226	\$ 308,943,696	\$ 373,559,922

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 5,783,821	\$ 19,099,837	\$ 24,883,658
2015	\$ 5,916,290	\$ 20,196,947	\$ 26,113,237
2016	\$ 6,075,367	\$ 21,345,210	\$ 27,420,577
2017	\$ 6,235,266	\$ 22,936,984	\$ 29,172,250
2018	\$ 6,400,333	\$ 24,359,164	\$ 30,759,497
Total	\$ 30,411,077	\$ 107,938,141	\$ 138,349,218

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 18,110,372	\$ 76,841,197	\$ 94,951,569
2015	\$ 18,493,451	\$ 79,836,127	\$ 98,329,578
2016	\$ 18,973,590	\$ 82,953,378	\$ 101,926,968
2017	\$ 19,470,288	\$ 86,858,241	\$ 106,328,529
2018	\$ 19,979,602	\$ 90,392,894	\$ 110,372,496
Total	\$ 95,027,303	\$ 416,881,837	\$ 511,909,140

Detailed budgets by spending category and staffing assumptions in full-time equivalents (FTEs) for each program is provided in Appendix B.

Energy Savings

MidAmerican expects to help customers install over 9,321,000 energy-efficiency measures in their homes and businesses over the next five years. By 2018 these measures are expected to reduce MidAmerican’s annual energy requirements by over 22 million therms of natural gas and 1,053 million kilowatt-hours of electricity. Summer peak electric demand for Iowa customers is also expected to be reduced by nearly 504 megawatts.

Anticipated savings levels for the 2014-2018 Iowa energy efficiency Plan are as follows.

Electric Savings	Annual kWh	Peak kW
2014	237,894,063	346,352
2015	211,429,370	39,008
2016	199,251,307	37,642
2017	200,452,393	39,063
2018	204,805,247	41,662
Total	1,053,832,380	503,728

Gas Savings	Annual Therms	Peak Therms
2014	4,857,355	51,606
2015	4,166,612	42,425
2016	4,120,497	41,865
2017	4,374,042	45,655
2018	4,593,137	48,520
Total	22,111,643	230,071

The installed measures will continue to save customer energy and money for many years. MidAmerican has established annual electricity savings targets ranging from .92 to 1.14 percent of its retail sales forecast.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 1,178,081,719	\$ 303,214,263	\$ 1,481,295,982
Program Costs	\$ 474,619,801	\$ 174,118,831	\$ 648,738,633
Net Economic Benefits	\$ 703,461,918	\$ 129,095,431	\$ 832,557,350
Societal Test Ratio	2.48	1.74	2.28

Overall the programs are expected to create net benefits to Iowa's customers of approximately \$832 million. The benefit-cost ratio for the programs is 2.28.

That translates to lower energy supply costs of \$2.28 for every dollar invested in MidAmerican's energy efficiency programs.

Managing Participation and Budgets

In this filing, MidAmerican provides budget estimates for each program and year based on estimates of participation and rebate levels for each measure offered in each program. MidAmerican has based these estimates on the findings of the joint-utility Assessment of Energy and Capacity Savings Potential in Iowa and its experience with offering programs in Iowa, with adjustments for known changes. For any program and any year, participation and spending may vary substantially from the estimates for a variety of reasons beyond MidAmerican's control.

Organization of the Plan

The remainder of Plan provides additional details on the Plan programs and their expected results. After this introduction, the report includes the following:

- Residential program descriptions
- Nonresidential program descriptions
- Multi-sector program descriptions
- Support services required to deliver the programs including MidAmerican's accounting and monitoring and evaluation plans
- Technical details and supplemental material needed to be in compliance with the Plan's filing requirements are organized in Appendix A through C

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential Equipment Program

Description of Program

The Residential Equipment program promotes the purchase of energy-efficient equipment by residential customers in new and existing homes. The program provides customers with rebates to offset the higher purchase cost of efficient equipment. Targeted equipment includes heating, cooling, and appliance measures. The program is marketed under the name Residential Equipment program.

The program is available to all residential customers and landlords for both new and existing buildings in MidAmerican's Iowa service area. Program measures must save energy supplied directly by MidAmerican.

Measure List

The Residential Equipment program provides rebates and incentives for the following measures:

- Central and window air conditioners
- Air source and ground source heat pumps
- Quality installation – central air conditioner, air source heat pumps, ground source heat pumps, boilers, natural gas furnaces
- Furnace fan
- Window air conditioners
- Programmable thermostats
- Appliances – clothes washers, freezers, and refrigerators
- Heat pump water heaters

Financing is available for windows, doors and insulated vinyl siding through the Residential Assessment program.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential Equipment program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 1,047,815	\$ 9,568,656	\$ 10,616,471
2015	\$ 1,074,010	\$ 9,816,056	\$ 10,890,066
2016	\$ 1,100,860	\$ 10,038,820	\$ 11,139,680
2017	\$ 1,128,382	\$ 10,269,760	\$ 11,398,142
2018	\$ 1,156,592	\$ 10,475,935	\$ 11,632,527
Total	\$ 5,507,659	\$ 50,169,228	\$ 55,676,887

MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 449,063	\$ 3,163,639	\$ 3,612,702
2015	\$ 460,290	\$ 3,460,785	\$ 3,921,075
2016	\$ 471,797	\$ 3,752,677	\$ 4,224,474
2017	\$ 483,592	\$ 4,051,532	\$ 4,535,124
2018	\$ 495,682	\$ 4,075,864	\$ 4,571,546
Total	\$ 2,360,424	\$ 18,504,496	\$ 20,864,920

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 1,496,878	\$ 12,732,295	\$ 14,229,173
2015	\$ 1,534,300	\$ 13,276,841	\$ 14,811,141
2016	\$ 1,572,657	\$ 13,791,497	\$ 15,364,154
2017	\$ 1,611,974	\$ 14,321,293	\$ 15,933,267
2018	\$ 1,652,274	\$ 14,551,799	\$ 16,204,073
Total	\$ 7,868,083	\$ 68,673,724	\$ 76,541,807

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential Equipment program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	21,108,970	6,147
2015	21,979,377	6,306
2016	22,803,941	6,461
2017	23,651,019	6,618
2018	24,500,595	6,775
Total	114,043,903	32,306

Gas Savings	Annual Therms	Peak Therms
2014	547,310	5,211
2015	590,392	5,745
2016	631,022	6,273
2017	672,885	6,804
2018	674,814	6,815
Total	3,116,422	30,846

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 168,149,353	\$ 46,143,792	\$ 214,293,145
Program Costs	\$ 108,394,329	\$ 32,958,065	\$ 141,352,394
Net Economic Benefits	\$ 59,755,024	\$ 13,185,727	\$ 72,940,751
Societal Test Ratio	1.55	1.40	1.52

Operations

Description of Operations

The Residential Equipment program provides rebates to customers who purchase qualifying energy efficient equipment or quality installations. The program is delivered in partnership with heating and cooling dealers as well as retail outlets selling qualifying equipment.

Key steps in program participation include:

- **Equipment purchase** – The customer purchases eligible equipment or quality installation.
- **Rebate or financing** – The customer chooses between the rebate or low interest financing. The program implementation contractor assists the customer through the financing process, if financing is selected.
- **Program application** – The customer fills out an application to identify the eligible equipment or quality installation along with the associated costs. The customer mails the completed application to the program contractor.
- **Equipment qualification** – The program contractor determines whether the equipment is eligible for an incentive.
- **Quality installation qualification** – The program contractor determines whether the installation is eligible for an incentive. The participating dealers need to meet training requirements and follow defined installation protocols.
- **Rebate or financing processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – Where appropriate, the program contractor verifies that equipment installation meets program guidelines.

Description of Outside Services

MidAmerican staff provide overall strategic direction for the program, as well as conduct research and development, promotion, trade ally support, evaluation and other administrative functions.

One program contractor supports the program. The contractor handles processing applications, tracking program data, answering questions from dealers and customers, verifying equipment installations and coordinating rebate distribution to customers.

MidAmerican currently contracts with A-TEC Energy Corporation a for management and administrative services and First American Bank for financing. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive three main benefits.

- Customers save money in the short term through rebates and in the long term through lower utility bills.
- Customers receive reliable advice about high quality, energy-efficient equipment from a trustworthy source.
- The process is simple and straightforward. Equipment rebates are accessible to any qualifying customer for any qualifying equipment.

Market Barriers

The table below presents the key market barriers to an effective residential equipment program, and strategies the program uses to address each barrier. Note these program strategies can only partially offset the identified barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Higher first cost of energy-efficient equipment	Offer rebates and discounted financing Educate customers on the long-term energy cost-saving benefits of higher efficiency equipment
Time required to fill out rebate forms	Provide simple rebate forms through a variety of media (mail-in, online) Allow trade allies to fill in rebate forms for customers at the time of equipment purchase
Customers don't bother to look for qualifying measures	Trade ally training to help customers quickly identify appropriate measures and products Provide in-store brochures and collateral Market program and general efficiency awareness to customers Provide efficiency education to customers
Trade allies not up-selling to high-efficiency equipment	Provide trade ally training and outreach to explain the benefits of selling higher efficiency equipment Market program and general efficiency awareness to trade allies
Lack of availability of qualifying equipment	Promote programs to customers so they ask for qualifying equipment and dealers stock it Provide trade ally training
Customers don't understand the long-term value of high-efficiency equipment	Train trade allies to explain life-cycle costs to customers Market program and general efficiency awareness to customers Provide efficiency education to customers
Dealers are unaware of program	Provide outreach and marketing to dealers

Incentives

The program offers the following types of financial incentives to participants.

- **Rebates** – Rebates are offered on a per-measure basis to program participants installing qualifying equipment. For some equipment the rebate will be a fixed amount per measure while, for other equipment, the rebate will increase with increasing equipment efficiency. Other incentives will encourage quality installation practices for specific heating and cooling equipment.
- **Financing** – Subsidized financing is available as an alternative to rebates for selected measures.

MidAmerican performs an annual review of rebate levels and performance criteria and may adjust rebates in the future as market conditions change.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target residential customers using traditional marketing channels and provide education and outreach to customers, trade allies and industry organizations to encourage customer participation and implementation of energy efficient measures and equipment.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjusts materials as needed based on program adjustments and market characteristics.

Customer Targets

The target market for this program includes residential customers and landlords of residential customers in existing and new housing. The program also uses tariff rates (those used by residential customers) to target and qualify customers.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Equipment	Natural Gas Equipment
Customer Class	Residential electric rate	Residential natural gas rate
Customer Status	Customer homeowners	Customer homeowners
Building Type	Single-family; Multi-family; Mobile home	Single-family; Multi-family; Mobile home
Building Vintage	Existing and new construction	Existing and new construction
Geography	MidAmerican Iowa electric service territory	MidAmerican Iowa natural gas service territory

Trade Ally Targets

Any business that sells or installs qualifying equipment within MidAmerican’s service territory may participate in the program. The following types of trade allies are predominant:

- HVAC dealers and contractors
- Plumbing and mechanical contractors
- Appliance dealers
- Retail outlets

Trade allies play a key role in implementing the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the Education program.

Promotion

MidAmerican will promote the program through articles that will periodically appear in a quarterly newsletter that is sent with customer bills. The articles will reference the energy efficiency website, which features a dedicated Web page that includes program information and qualification requirements, an online form, and a program brochure. A reference to the energy efficiency website will appear quarterly on customer bills.

MidAmerican call center associates will recommend the program to likely participants and, when appropriate, transfer customers to the program call center operated by the program contractor.

Program referrals are also expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program

information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential Assessment Program

Description of Program

The Residential Assessment program promotes efficiency strategies for existing residential customers. It provides online energy assessments, more extensive on-site energy assessments, direct installation of low-cost efficiency measures, and recommendations for additional measures. The program is marketed under the registered trademark name HomeCheck®.

The on-site assessment is available to residential and multifamily homes that receive electric or natural gas heating fuel supplied directly from MidAmerican. The on-site assessment is designed to evaluate energy use in homes over 10 years old. The online assessment is available to all customers.

Measure List

The Residential Assessment program provides rebates and incentives for the following measures:

Assessments

- Single-family
- Multifamily – with three or less residential living units

Direct Install Measures

- Pipe insulation
- Faucet aerators
- Kitchen aerators
- Low flow showerheads
- Water heater blankets
- Thermostats
- Compact fluorescent lamps (CFL)
- Light emitting diode (LED)
- Smart strip

Any prescriptive measure included in the Residential Equipment program is potentially eligible for rebate under the Residential Assessment program. Typical measures include:

- Insulation* – wall and attic/foundation/band joist
- Duct insulation*
- Infiltration
- Financing for windows, doors and insulated vinyl siding

* Customers are eligible for an incentive for insulation measures only if a home assessment is completed.

Other

- Enhanced incentives for completion of multiple recommendations identified during the assessment
- Neighborhood outreach
- HVAC tune up coupon to encourage on-site assessment participants to contact a SAVE-certified contractor

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential Assessment program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 324,144	\$ 1,532,750	\$ 1,856,894
2015	\$ 332,248	\$ 1,585,427	\$ 1,917,675
2016	\$ 340,554	\$ 1,644,548	\$ 1,985,102
2017	\$ 349,068	\$ 1,693,393	\$ 2,042,461
2018	\$ 357,795	\$ 1,793,013	\$ 2,150,808
Total	\$ 1,703,809	\$ 8,249,131	\$ 9,952,940

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 601,982	\$ 2,535,983	\$ 3,137,965
2015	\$ 617,032	\$ 2,609,828	\$ 3,226,860
2016	\$ 632,458	\$ 2,699,489	\$ 3,331,947
2017	\$ 648,269	\$ 2,768,255	\$ 3,416,524
2018	\$ 664,476	\$ 2,951,371	\$ 3,615,847
Total	\$ 3,164,217	\$ 13,564,926	\$ 16,729,143

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 926,126	\$ 4,068,734	\$ 4,994,860
2015	\$ 949,280	\$ 4,195,255	\$ 5,144,535
2016	\$ 973,012	\$ 4,344,037	\$ 5,317,049
2017	\$ 997,337	\$ 4,461,648	\$ 5,458,985
2018	\$ 1,022,271	\$ 4,744,384	\$ 5,766,655
Total	\$ 4,868,026	\$ 21,814,057	\$ 26,682,083

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential Assessment program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	2,550,835	810
2015	2,626,209	837
2016	2,695,862	862
2017	2,743,623	879
2018	2,892,143	929
Total	13,508,672	4,317

Gas Savings	Annual Therms	Peak Therms
2014	524,513	6,253
2015	541,587	6,459
2016	557,487	6,651
2017	568,534	6,784
2018	600,509	7,168
Total	2,792,630	33,316

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 18,450,769	\$ 46,860,502	\$ 65,311,271
Program Costs	\$ 10,802,826	\$ 19,824,847	\$ 30,627,673
Net Economic Benefits	\$ 7,647,943	\$ 27,035,656	\$ 34,683,598
Societal Test Ratio	1.71	2.36	2.13

Operations

Description of Operations

The on-site assessment is the primary entry point for participation by MidAmerican residential customers in its energy efficiency programs. This typically leads to completion of follow-up measures or participation in other MidAmerican energy efficiency programs.

Key steps in program participation include:

- **On-site assessment scheduling** – The customer calls the program contractor to schedule an assessment, or is transferred by MidAmerican. The customer also may submit an online form to receive a call to schedule an assessment.
- **On-site assessment completion** – The program contractor evaluates eligibility for additional measures eligible for financial incentives, reviews energy usage and cost patterns

found in historic energy bills, informs customers of ways to operate home energy systems more efficiently, installs simple energy efficiency measures, and provides contact information as well as information regarding how to participate in MidAmerican's incentive programs.

- **Assessment report** – The program contractor provides the homeowner an assessment report during the on-site assessment that includes recommendations for energy efficiency improvements. The information packet also provides website addresses for additional rebate information and applications.
- **Rebate or financing** – The customer chooses between the rebate or low interest financing. The program contractor assists the customer through the financing process.
- **Program application** – When customers install recommended measures, they submit application forms for review and processing.
- **Rebate or financing processing and database maintenance** – The program contractor and MidAmerican staff process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – The program contractor conducts verification on a sample of insulation installations as well as all self-installed projects.

The program also offers an online energy assessment tool that gives customers an opportunity to evaluate their own energy usage and provides recommendations for efficiency improvements. Customers using the online tool also can request an on-site assessment by completing a simple online form.

Description of Outside Services

MidAmerican staff provide overall strategic direction for the program, as well as conduct research and development, promotion, evaluation and other administrative functions.

MidAmerican uses a program contractor to help deliver the program. The contractor handles program enrollment, data tracking, rebate processing, and works directly with customers to conduct the on-site energy assessments.

MidAmerican currently contracts with A-TEC Energy Corporation for program delivery and administrative services and First American Bank for financing. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive the following main benefits:

- A whole-house assessment and trustworthy energy-savings recommendations from trained auditors.
- Immediate savings through the direct installation of low-cost lighting, water heating and other energy-saving measures.
- Significant savings, increased comfort and increased property values through rebates on insulation, lighting and other efficiency projects.
- Lower hassle by relying on program processes for scheduling assessments, identifying efficiency measures, maintaining quality control and providing follow-through on savings recommendations.

Market Barriers

The table below presents the key market barriers to an effective residential assessment program, and strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Lack of customer awareness	Provide customer marketing and outreach to individual customers and communities Provide efficiency education
Limited time, resources and awareness of how to act on recommendations	Provide robust trade ally network and referral program to help identify appropriate contractors Provide follow-up letters to encourage customers to move through installation steps Give information about simple behavioral changes and maintenance tips that provide ongoing savings Provide efficiency education Provide a bonus rebate for implementing multiple measures
Low dealer awareness	Provide outreach and education to dealers
High incremental cost of efficient equipment	Provide no-cost, on-site energy assessments and direct installation measures for immediate savings Provide rebates and financing for more expensive measures
Customers don't trust energy-savings calculations	Provide savings estimates from trusted MidAmerican sources, including online assessment software, trained HomeCheck auditors

Incentives

The program offers the following types of financial incentives to participants.

- **No cost energy assessments** – No cost energy assessments are offered for HomeCheck Online and HomeCheck participants.
- **Full subsidies** – Full subsidies are offered for most low-cost measures directly installed during the assessment. This strategy is intended to fully overcome market barriers concerning cost, perceived quality and time and effort to install.
- **Rebates** – Rebates are offered for insulation and infiltration measures. Rebates are set at either a percent of qualified installation costs, or per linear foot of band joist insulation. Bonus rebates will be available for customers installing multiple follow-up measures.

- **Financing** – Subsidized financing is available as an alternative to rebates to HomeCheck participants for qualified insulation and infiltration measures. Qualified window measures are not eligible for rebates, but are eligible for financing and do not require pre-qualification by a HomeCheck assessment.
- **Promotional bounties** – Promotional bounties will be offered to neighborhood groups who organize and schedule energy assessments in their neighborhood.

MidAmerican performs an annual review of incentive levels and performance criteria and may adjust incentives in the future as market conditions change.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target residential customers using traditional and non-traditional marketing channels, provide education and outreach to customers, trade allies and neighborhood organizations, to encourage customer participation and implementation of energy efficient measures and equipment. MidAmerican's neighborhood outreach efforts will include an opportunity for local community organizations to raise money by coordinating and motivating program participation. The organizations will earn an incentive for each assessment and specific follow-up measures completed during a limited promotion timeframe.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjusts materials as needed based on program adjustments and market characteristics.

Customer Targets

This program is available to all residential customers in existing housing, with eligibility varying by program component. HomeCheck Online is available to all customers. MidAmerican provides HomeCheck on-site assessments to customers (and their landlords) in buildings more than 10 years old and who purchase heating fuel directly from MidAmerican. Additionally, MidAmerican coordinates HomeCheck assessments and financial incentives with other utilities providing heating fuel to MidAmerican customers (e.g., customers purchasing electricity from MidAmerican and natural gas from another utility).

Customers in rental housing must have approval from building owners to participate in the HomeCheck assessment. Multifamily buildings, defined as buildings with four or more housing units, will be served under MidAmerican's Multifamily Housing program, although all customers have access to HomeCheck Online.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	HomeCheck Online	HomeCheck		
		Assessment	Low-Cost Measures	Insulation Rebate
Customer Class	Residential rates	Residential rates	Residential rates	Residential rates
Customer Status	All	Homeowners Landlords	Homeowners Landlords	Homeowners Landlords
Building Type	Single-family Multifamily Mobile home	Single-family Mobile home	Single-family Mobile home	Single-family
Building Vintage	All	> 10 years old	> 10 years old	> 10 years old
Geography	All	Iowa	Iowa	Iowa
Other	N/A	MidAmerican provides heating fuel	MidAmerican provides affected fuel	Pre-qualified during on-site assessment

Trade Ally Targets

The HomeCheck component also maintains a list of preferred insulation and infiltration contractors who meet its quality-control requirements. These trade allies will be recommended to MidAmerican customers for installation of suggested energy efficiency measures (although customers may choose to install measures on their own or through non-network contractors). MidAmerican also will work with trade allies throughout the state to make them aware of the program and its benefits. The following types of trade allies are predominant:

- Insulation contractors
- Window and door dealers
- Vinyl siding dealers

Trade allies play a key role in implementing the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the Education program.

Promotion

MidAmerican will promote the program through articles periodically appearing in a quarterly newsletter that is sent with customer bills. The articles will reference the energy efficiency website, which features a dedicated Web page that includes program information and qualification requirements, an online form to submit contact information to schedule an assessment, and a

program brochure. A reference to the energy efficiency website will appear quarterly on customer bills.

MidAmerican call center associates will recommend the program to likely participants and when appropriate, transfer customers to the program call center operated by the program contractor. Additionally, MidAmerican will target neighboring customers by delivering door hangers at the homes adjacent to a scheduled assessment and generate 'word of mouth' advertising after an assessment.

Program referrals are also expected from insulation trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential New Construction Program

Description of Program

The Residential New Construction program promotes the construction of energy efficient new housing, addressing both the building shell and the equipment used inside the home. The program provides builders with financial incentives to offset the higher cost of energy efficient construction. Additionally, the program provides the homeowner with a certificate, which is recognized by the real estate community as evidence that the home is highly energy efficient.

The program is available to all residential builders in MidAmerican's Iowa service area. Program measures must save energy supplied directly by MidAmerican.

Measure List

The Residential New Construction program provides rebates and incentives for the following measures:

- ENERGY STAR homes – single family
 - ENERGY STAR homes must be third party verified to meet the most current requirements of the ENERGY STAR new homes program showing that the home exceeds industry building standards and is at least 15% more efficient than code.
- ENERGY STAR homes – multifamily
 - ENERGY STAR homes must be third party verified to meet the most current requirements of the ENERGY STAR new homes program showing that the home exceeds industry building standards and is at least 15% more efficient than code.
- Advanced Builder Option Program (ABOP) homes
 - A less restrictive program option for single family homes. Homes must meet minimum thresholds for Home Energy Rating System (HERS) Rating, System Adjustment and Verified Efficiency (SAVE) System score, demonstrate code compliance and other specified design requirements.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential New Construction program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 215,579	\$ 3,726,296	\$ 3,941,875
2015	\$ 220,968	\$ 3,740,969	\$ 3,961,937
2016	\$ 226,492	\$ 3,745,996	\$ 3,972,488
2017	\$ 232,154	\$ 3,754,438	\$ 3,986,592
2018	\$ 237,958	\$ 3,729,994	\$ 3,967,952
Total	\$ 1,133,151	\$ 18,697,693	\$ 19,830,844

MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 300,869	\$ 1,782,804	\$ 2,083,673
2015	\$ 308,391	\$ 1,768,131	\$ 2,076,522
2016	\$ 316,101	\$ 1,763,104	\$ 2,079,205
2017	\$ 324,004	\$ 1,754,662	\$ 2,078,666
2018	\$ 332,104	\$ 1,779,106	\$ 2,111,210
Total	\$ 1,581,469	\$ 8,847,807	\$ 10,429,276

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 516,448	\$ 5,509,100	\$ 6,025,548
2015	\$ 529,359	\$ 5,509,100	\$ 6,038,459
2016	\$ 542,593	\$ 5,509,100	\$ 6,051,693
2017	\$ 556,158	\$ 5,509,100	\$ 6,065,258
2018	\$ 570,062	\$ 5,509,100	\$ 6,079,162
Total	\$ 2,714,620	\$ 27,545,500	\$ 30,260,120

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential New Construction program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	4,800,827	3,259
2015	4,800,827	3,259
2016	4,800,827	3,259
2017	4,800,827	3,259
2018	4,800,827	3,259
Total	24,004,135	16,294

Gas Savings	Annual Therms	Peak Therms
2014	408,748	5,316
2015	408,748	5,316
2016	408,748	5,316
2017	408,748	5,316
2018	408,748	5,316
Total	2,043,740	26,578

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 57,454,340	\$ 24,530,944	\$ 81,985,284
Program Costs	\$ 36,579,347	\$ 18,062,129	\$ 54,641,476
Net Economic Benefits	\$ 20,874,993	\$ 6,468,815	\$ 27,343,809
Societal Test Ratio	1.57	1.36	1.50

Operations

Description of Operations

This program is delivered in partnership with developers and building contractors who promote the program to prospective home buyers and receive rebates to help offset the cost of efficient building practices.

Builders must work within the framework of the Residential Energy Services Network (RESNET) accredited Home Energy Rating System (HERS) to receive qualifying HERS ratings for the Advanced Builder Option Package or the ENERGY STAR® path.

Key steps in program participation include:

- **Pre-registraton** – The builder registers the home with the program implementation contractor at the beginning of the construction process.
- **Meeting specifications** – The builder completes the home to meet program specifications.
- **Obtain HERS certification** – The builder works with a HERS rater to show compliance with program specifications.
- **Program application** – The builder submits application forms including the HERS rating for review and processing.
- **Verification** – The program contractor conducts verification on a sample of homes.
- **MidAmerican certification** – The program implementation contractor ensures the home is reported to ENERGY STAR or the MidAmerican New Homes certificate is sent to the builder for ABOP homes.
- **Rebate and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.

Description of Outside Services

MidAmerican staff provides overall strategic direction for the program, as well as conducts research and development, promotion, trade ally support, evaluation and other administrative functions.

One program contractor supports the program. The contractor handles processing applications, tracking program data, answering questions from dealers and customers, verifying equipment installations and coordinating rebate distribution to builders.

MidAmerican currently contracts with A-TEC Energy Corporation for program delivery and administrative functions. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers and builders participating in the program receive three main benefits:

- Financial benefits in the form of rebates to offset equipment and building costs, lower monthly energy bills and potentially higher housing values.
- Confidence in their new homes from independent certification that they incorporate energy-efficient building practices.
- Greater comfort due to energy-efficient features that keep out excessive heat, cold and noise and maintain consistent interior temperatures.

Market Barriers

The table below presents the key market barriers to a successful residential new construction program and strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Higher first cost of energy-efficient equipment and building measures	Offer rebates to help offset measure incremental costs Educate customers on the long-term energy cost-saving benefits of higher efficiency equipment
Time required to fill out rebate forms	Offer rebates that are generous enough to offset time requirement Use a streamlined, efficient and responsive program process
Lack of customer awareness of high-efficiency alternatives	Provide trade ally training to help customers quickly identify appropriate measures and products Support program with education appropriate to different types of program participants (e.g., builders, homeowners, etc.)
Customers value design features and finishes over high-efficiency equipment	Raise customer awareness through educational materials showing long-term financial, comfort and social benefits of efficient homes Focus on long-term benefits of energy efficiency features Provide rebates to lower incremental cost of efficiency features
Low customer awareness of program	Ongoing trade ally communications and outreach Marketing and outreach to targeted customers and builders
Lack of availability of premium equipment	Promote programs to customers so they ask for better quality/higher efficiency equipment and dealers stock it Provide trade ally training
Low trade ally awareness	Ongoing trade ally support

Incentives

The program offers the following types of financial incentives to participants.

- **Rebates** – Rebates are offered for comprehensive, whole-house energy efficiency upgrades. Incentives are paid on a per-home basis after verification by MidAmerican that the home complies with program requirements. Incentives vary based on whether MidAmerican provides utility service for the heating system, cooling system or both systems. The ABOP incentive is slightly lower than the HERS path because energy savings from ABOP homes are expected to be slightly less than those in ENERGY STAR homes based on previous experience with the two program options.

MidAmerican performs an annual review of incentive levels and eligibility requirements and may adjust these in the future as market conditions change.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target residential builders using traditional marketing channels and provide education and outreach to customers, trade allies and industry organizations to encourage builder participation and implementation of energy efficient measures and equipment.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjust materials as needed based on program adjustments and market characteristics.

Customer Targets

This program targets building contractors, developers and future owners of residential homes. The program has been designed to accommodate different building types, including single-family homes, townhomes, multifamily apartment buildings and manufactured homes, as well as different development approaches including production developers, custom builders and speculative developers. Multifamily buildings must be three stories or less, and have all units in the building enroll in program to be eligible. Mixed-use and centrally metered buildings will be referred to the Commercial New Construction program. The program also uses tariff rates (those used by residential customers) to target and qualify participants.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Comprehensive Homes	Gas Comprehensive Homes
Customer Class	Residential electric rates	Residential natural gas rates
Customer Status	Homeowners and developers	Homeowners and developers
Building Type	Single-family homes (conventional and custom) Townhomes (slab on grade construction) Manufactured homes Low -rise multi-family buildings	Single-family homes (conventional and custom) Townhomes (slab on grade construction) Manufactured homes Low-rise multi-family buildings
Building Vintage	New construction	New construction
Geography	MidAmerican Iowa electric service territory	MidAmerican Iowa natural gas service territory

Trade Ally Targets

Any building contractor that builds qualifying homes within MidAmerican’s service territory may participate in the program. The following types of trade allies are predominant:

- Home builders
- Home energy raters
- Real estate developers

Trade allies play a key role in implementing the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the Education program.

Promotion

The program will be promoted on the energy efficiency website, which features a dedicated Web page that includes program information and qualification requirements and a program brochure. A reference to the energy efficiency website will appear quarterly on customer bills.

MidAmerican call center associates will recommend the program to likely participants and, when appropriate, transfer customers to the program call center operated by the program contractor.

Program referrals are also expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program

information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential Behavioral Program

Description of Program

The Residential Behavioral program is designed to encourage energy savings through behavioral modification. The program provides customers with Home Energy Reports that contain personalized information about their energy use and provide smart ways to make their homes more efficient. Customers are randomly chosen by MidAmerican to participate in the program, but may “opt out” if they do not wish to participate. The Home Energy Reports compare the customer’s energy usage to 100 similarly situated homes in their area. The reports engage customers and cause them to take action to bring their energy-usage in line with similar homes.

The program empowers customers to understand their energy usage better and act on this knowledge, resulting in changed customer behavior. Additionally, participation in this program encourages participation in other programs by using the Home Energy Report as a promotional vehicle. By helping customers become more energy efficient and lower their utility bills, the program will help customers understand that decisions they make regarding energy usage are important and relevant to their total monthly energy usage.

Measure List

The Residential Behavioral program provides rebates and incentives for the following measures:

- Personalized Home Energy Reports delivered by direct mail and provided free of charge. Customers have the option to choose email delivery in addition to or instead of direct mail.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential Behavioral program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 203,350	\$ 1,374,211	\$ 1,577,561
2015	\$ 149,400	\$ 1,407,936	\$ 1,557,336
2016	\$ 149,400	\$ 1,426,004	\$ 1,575,404
2017	\$ 149,400	\$ 1,428,836	\$ 1,578,236
2018	\$ 149,400	\$ 1,424,592	\$ 1,573,992
Total	\$ 800,950	\$ 7,061,578	\$ 7,862,528

MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 41,650	\$ 325,789	\$ 367,439
2015	\$ 30,600	\$ 292,064	\$ 322,664
2016	\$ 30,600	\$ 273,996	\$ 304,596
2017	\$ 30,600	\$ 271,164	\$ 301,764
2018	\$ 30,600	\$ 275,408	\$ 306,008
Total	\$ 164,050	\$ 1,438,422	\$ 1,602,472

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 245,000	\$ 1,700,000	\$ 1,945,000
2015	\$ 180,000	\$ 1,700,000	\$ 1,880,000
2016	\$ 180,000	\$ 1,700,000	\$ 1,880,000
2017	\$ 180,000	\$ 1,700,000	\$ 1,880,000
2018	\$ 180,000	\$ 1,700,000	\$ 1,880,000
Total	\$ 965,000	\$ 8,500,000	\$ 9,465,000

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential Behavioral program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	34,680,000	11,422
2015	45,390,000	14,950
2016	46,920,000	15,454
2017	45,390,000	14,950
2018	44,200,000	14,558

Gas Savings	Annual Therms	Peak Therms
2014	1,037,000	13,486
2015	1,224,000	15,917
2016	1,190,000	15,475
2017	1,156,000	15,033
2018	1,122,000	14,591

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 17,551,336	\$ 3,461,914	\$ 21,013,251
Program Costs	\$ 7,502,203	\$ 1,532,379	\$ 9,034,582
Net Economic Benefits	\$ 10,049,134	\$ 1,929,535	\$ 11,978,669
Societal Test Ratio	2.34	2.26	2.33

Operations

Description of Operations

The program delivers targeted messages via the Home Energy Report to each participating customer. The reports include normative messaging that compares each household’s energy usage to 100 similarly situated homes and the reports include energy efficiency tips that recommend simple steps each customer can take to reduce their energy usage. Messages are constantly updated and refreshed to motivate customers to take action. Customers are ranked in performance against the 100 similarly situated homes and the desire to improve in rank provides additional behavioral motivation to take action and save energy.

MidAmerican and its program contractor engage in the following steps to implement the program.

- **Provide data** – MidAmerican supplies the program contractor with weekly data feeds for all Iowa residential customers to ensure energy usage information shown on the home energy report matches energy usage information shown on the customer bill.
- **Establish groups** – The program contractor utilizes test and control groups to divide the targeted population into two statistically equivalent groups.
- **Validate data** – The program contractor verifies there is no historical difference in usage between test and control groups.
- **Mail paper reports** – The program contractor mails paper reports to the test or participant group only. No action is taken with the control group.
- **Determine energy savings** – The program contractor compares average energy use pre- and post-reports for both groups and reports realized energy savings to MidAmerican.
- **Manage operations** – MidAmerican’s call center manages the day-to-day operations of answering participant’s questions by phone and email. The call center also is able to update individual profiles with the participant on the phone by accessing the Customer Service Representative Web Portal. For example, the call center can update the square footage of the participant’s home and view the customer’s Home Energy Report so they can answer questions while looking at the exact same report the participant has at home.
- **Customer Web Portal** – Participants also may make updates to their profile online using the Customer Web Portal. The Customer Web Portal is available free of charge to customers that receive the Home Energy Report. It also allows customers to explore additional opportunities to save energy and money.

Customers in the test or participant group receive approximately six Home Energy Reports per year. In order to increase realized energy savings, only combination service customers (customers that receive both natural gas and electricity) are eligible for the program at this time. The program

is currently being run as a pilot with 50,000 participants receiving Home Energy Reports. MidAmerican proposes to make the program permanent with a total of 170,000 participants in this energy efficiency plan filing.

Description of Outside Services

MidAmerican staff provides overall strategic direction for the program, gathering of appropriate customer data and MidAmerican call center and website support.

One contractor supports the program. The contractor provides the design and content for the Home Energy Reports and mails the reports to customers. The contractor also provides estimates of customer savings.

MidAmerican contracts with Opower, Inc. to implement the program. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers selected to participate in this program may receive the following main benefits,

- Financial benefits in the form of reduced utility bills due to following the recommendations presented in the Home Energy Reports.
- Information regarding energy savings tips and other energy efficiency programs of interest.
- Access to additional energy saving tips and tools through the Customer Web Portal.
- Heightened awareness of the relationship between energy usage decisions made in the home and the amount of energy used and the cost of this energy on monthly utility bills.

Market Barriers

The table below presents the key market barriers to a successful residential behavioral program and the strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Participant mistrust of the Home Energy Report and MidAmerican’s motives for sending them the reports.	Participant education and outreach Train Call Center Representatives to answer frequently asked questions and reassure participants Include “Welcome Insert” with first Home Energy Report to explain the program and provide instructions to the customer on how to access the Customer Web Portal for more energy saving tips and information Revise language in the Home Energy Reports when appropriate to help minimize complaints and misunderstandings
Concern that homes are not being compared to comparable homes	Encourage participants to update their profiles in the Customer Web Portal to ensure their home is accurately and appropriately compared MidAmerican is investigating the opportunity for customers to update their home’s profile by filling out a tear off postage-paid card that is included with the “Welcome Insert”
Concern that reports waste money on postage and natural resources	Educate customers that they may choose email reports and reassure them that the energy saved by the reports makes the expenditures of the program worthwhile

Incentives

The program offers the following types of incentives to participants:

- **Home Energy Reports** – The Home Energy Reports are provided at no charge.
- **Customer Web Portal** – The Customer Web Portal is available free of charge to customers that receive the Home Energy Report.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

Because the Residential Behavioral program is “opt out” as opposed to “opt in”, the 170,000 customers chosen to participate in the program will not require a marketing plan to secure participation. However, a Welcome Insert is sent to each participant with their first Home Energy Report.

The Welcome Insert explains the program and how to access the Customer Web Portal for more information. MidAmerican is investigating the possibility of including a tear-off postage-paid post card with the Welcome Insert which the customer could use to update information about their home without accessing the Customer Web Portal. By providing customers the opportunity to update their home’s profile upfront, customer concerns about the home energy reports may be lessened.

Customer Targets

Customer targets include Iowa residential customers that receive both electric and natural gas service from MidAmerican. Customers that receive only electric service from MidAmerican or only natural gas service from MidAmerican are not eligible to receive Home Energy Reports.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Report	Natural Gas Report
Customer Class	Residential electric rate and also receives natural gas service	Residential natural gas rate and also receives electric service
Customer Status	No restrictions	No restrictions
Building Type	No restrictions	No restrictions
Building Vintage	No restrictions	No restrictions
Geography	MidAmerican Iowa combination service territory	MidAmerican Iowa combination service territory

Trade Ally Targets

Trade allies are not utilized to deliver the Residential Behavioral program. However, MidAmerican is investigating the possibility of including coupons with the Home Energy Reports for energy saving products or measures. Should such a coupon prove viable, participating retailers that honor the coupons would be viewed as trade allies and MidAmerican would work with them to set up procedures.

Promotion

MidAmerican will promote and educate the general public about the program on its website and through appropriate press releases and other media contacts.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential Load Management Program

Description of Program

The Residential Load Management program provides financial incentives to residential customers in exchange for allowing MidAmerican to control their central air conditioning on hot summer days when the company is forecasting the possibility of a system peak demand or when operational conditions require use of the program. The program is promoted under the service mark SummerSaverSM. The program reduces the peak demand for electricity by cycling participants' air conditioners or air-source heat pumps during the course of an event.

Residential electric customers who live in owner-occupied, single-family homes and have central air-conditioning are eligible for the program. Additionally the customers must live in a town serviced by the program and their air-conditioner must be in good working order with demonstrated usage. Certain models of central air conditioners, however, are not compatible with the technology of the program, and cannot participate. Additionally, Customers with geothermal heat pumps are not eligible for the program.

During the years 2009-2013, MidAmerican replaced over 25,000 aged load control receivers (LCRs). This pace of 5,000 replacements per year represents replacement of approximately 40% of MidAmerican's installed fleet of load control receivers in five years. MidAmerican intends to replace LCRs with new units when they reach the end of their useful life of approximately 15 years. For the years 2014-2018, MidAmerican proposes a replacement rate of 1,500 per year, which will keep MidAmerican on schedule for replacing aged LCRs when they have been in-service for approximately 15 years.

Measure List

The Residential Load Management program provides rebates and incentives for the following measures:

- Load Control Receiver installed for central air conditioner or air-source heat pump cycling.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential Load Management program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 1,006,020	\$ 1,938,845	\$ 2,944,865
2015	\$ 1,032,004	\$ 1,947,896	\$ 2,979,900
2016	\$ 1,058,943	\$ 1,956,947	\$ 3,015,890
2017	\$ 1,086,292	\$ 1,965,998	\$ 3,052,290
2018	\$ 1,114,646	\$ 1,975,049	\$ 3,089,695
Total	\$ 5,297,905	\$ 9,784,734	\$ 15,082,639

There are no gas costs associated with this program.

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential Load Management program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	365,020	53,700
2015	358,976	52,811
2016	352,860	51,911
2017	346,672	51,001
2018	341,067	50,177

There are no gas savings associated with this program.

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 44,563,112	\$ -	\$ 44,563,112
Program Costs	\$ 5,049,176	\$ -	\$ 5,049,176
Net Economic Benefits	\$ 39,513,936	\$ -	\$ 39,513,936
Societal Test Ratio	8.83	-	8.83

Operations

Description of Operations

Participants agree to allow MidAmerican to control their cooling equipment during the four summer months (June to September). MidAmerican installs an LCR on participants' houses near their outside disconnect switches and air-conditioning compressors. An outside disconnect switch for the central air conditioner is required for program participation. If the customer's home does not already have one, MidAmerican installs one for no charge to facilitate program participation.

LCRs operate by overriding customers' thermostats, shutting down the outdoor compressor, but allowing the indoor furnace fan to continue circulating previously cooled indoor air. MidAmerican activates the LCRs through a pager network and through Frequency Modulation (FM) subcarrier signals. MidAmerican currently leases FM subcarrier signal from six regional FM radio stations. As MidAmerican continues to replace aged load control receivers, the need for FM subcarrier signal diminishes as all newly manufactured LCRs operate on pager signal. Therefore, MidAmerican anticipates terminating some FM subcarrier signal lease agreements during the years 2014-2018. To date, one FM radio station (Council Bluffs region) has been removed from service due to FM signal LCR replacements.

MidAmerican's cycling periods run from 2 to 7 p.m., with randomized programming to minimize impacts on local distribution systems. Actual start time can vary between 2 and 2:30 p.m., with corresponding end times between 7 and 7:30 p.m. Cycling events may be called by MidAmerican or the Midwest Independent Transmission Operator (MISO).

Key steps in the program include:

- **Solicit participants** – Soliciting new program participants through direct mailings to targeted customers.
- **Enroll participants** – Enrolling new participants.
- **Install LCRs** – Coordinating installation of LCRs.
- **Manage events** – Managing cycling events during the summer season.
- **Maintain LCRs** – Servicing and maintaining installed LCRs.
- **Process incentives** – Processing incentive bill credits through the billing system.
- **Manage participant leaving program** – Processing customers leaving the program, including removing LCRs (if necessary) and paying partial credits via check.
- **Recruit movers** – Contact current participants that move into new homes and also customers moving into homes of previous participants.

Description of Outside Services

The program is delivered by energy-efficiency staff and an administrative program contractor. Energy-efficiency staff sets incentive levels, develops marketing materials and coordinates communication among the internal and external staff involved in the program.

MidAmerican's program contractor manages customer enrollment and mailings; answers customer questions using a dedicated toll-free phone line, tracks program data, operates program software and hardware systems, and helps coordinate incentives with MidAmerican's billing and accounts

payable departments. The program contractor also maintains a network of electrical contractors responsible for installing and removing LCRs on customers' homes.

MidAmerican contracts with A-TEC Energy Corporation for administrative services. MidAmerican procures statewide 900 MHz statewide simulcast paging service from Electronic Engineering, Inc. MidAmerican leases regional FM subcarrier signal from Carroll Broadcasting Company, Inc. (Carroll), Clear Channel Communication, Inc. (Des Moines, Sioux City and Quad Cities), Coloff Media, LLC (Charles City) and Cumulus Broadcasting LLC (Waterloo). Cannon Technologies Inc., a division of Eaton Corporation, PLC provides LCRs and software systems and software system support.

Value Proposition

Customers participating in this program receive the following main benefits:

- Financial benefits in the form of annual incentive payments that reward them for participation.
- Enabling technologies, which are provided and installed by MidAmerican at no cost.
- Information in a variety of forms, including program brochures, website program information and enrollment materials.

Market Barriers

The table below presents the key market barriers to an effective residential load management program and the strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Lack of customer awareness	Consumer education and outreach Program promotion/advertising Promotion through other residential programs Dealer and service provider outreach sales training
Negative opinion of program expressed by heating/cooling contractors to customers	Ongoing dealer communications, outreach and education including promotion of HVAC Dealer Information Sheet
Concern that participation will result in homes being too hot during cycling events	Customer education and outreach
Program enrollment approaching saturation level	Focus greater program efforts on maintenance and replacement of oldest LCRs

Incentives

The program offers the following types of financial incentives to participants.

- **Bill credits** – Rebates are offered as a credit on customers' October or November utility bills at the completion of the cooling season. MidAmerican pays first-year participants a \$40 end-of-season bill credit and recurring participants a \$30 bill credit. Participants leaving the program prior to Sept. 30 receive checks for pro-rated incentives.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican solicits new participants in this program through annual mailings to targeted customers.

Additionally, trade allies providing HVAC maintenance services and those selling HVAC equipment also can influence customers' decisions to participate in the program.

Customer Targets

Any Iowa residential electric customer located in a town or area currently serviced by the program that lives in an owner-occupied, single-family home and has central air-conditioning or an air-source heat pump with demonstrated usage in good working condition is eligible for the program. Certain models of central air conditioners are not compatible with the LCR technology and therefore cannot participate. Also, customers with geothermal heat pumps are not eligible for the program.

MidAmerican targets the following customers:

- Residential customers with significant summer electricity usage.
- Customers moving into homes previously enrolled in the program.
- Customers previously enrolled in the program moving to new homes in MidAmerican's service territory.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Customers
Customer Class	Residential rates
Customer Status	Homeowners
Building Type	Single-family; Owner-occupied
Building Vintage	All
Geography	Iowa towns and areas serviced by the program
Size	All
Other	Must have central air conditioning or air-source heat pump

Trade Ally Targets

MidAmerican’s program contractor maintains a network of heating and cooling and electrical subcontractors responsible for installing, maintaining and removing LCRs. Trade allies providing air conditioner maintenance and selling air conditioning equipment also can influence customers’ decisions to participate in the program. However, the program relies primarily on MidAmerican staff, program contractors and subcontractors for program delivery.

To support trade allies and keep them informed of program operations and changes, MidAmerican maintains an active trade ally program. An HVAC dealer information sheet is prepared annually to educate HVAC dealers on the operation of the program. This sheet is provided at MidAmerican’s annual trade ally meetings and also is included with each email notification of a cycling event which is sent to all HVAC dealers in MidAmerican’s database.

Promotion

This program relies primarily on direct mailings to recruit and retain program participants. Mailings explain the program features and benefits and provide customers with simple actions to take to enroll in the program. MidAmerican sends a targeted mailing to eligible customers with summer electric usage high enough to indicate the presence of central air conditioning. A reminder post card is sent to customers a couple of months after they have received a solicitation brochure, reminding them it is not too late to sign up for the upcoming season. Additionally, MidAmerican promotes the program through brochures, articles in customer newsletters, a dedicated Web page on the Company’s website and through MidAmerican’s general awareness advertising.

Once the program has recruited its initial participants, additional mailings are sent to maintain and increase participation levels.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Residential HVAC Tune Up Program

Description of Program

The new Residential HVAC Tune Up program promotes the proper maintenance and operation of heating and cooling systems by residential customers in existing homes. There are two paths to participation:

- The equipment tune up measure is available to customers during their regularly scheduled maintenance visit by participating contractors.
- The ductwork improvement measure is available to customers during an equipment tune up or when installing a new piece of equipment with a participating contractor.

The program provides customers with rebates to offset the cost of increasing the efficiency of existing equipment and ductwork. Targeted equipment includes heating and cooling equipment and ductwork. The program is marketed under the name Residential HVAC Tune Up program.

The program is available to all residential customers and landlords for existing buildings in MidAmerican's Iowa service area. Program measures must save energy supplied directly by MidAmerican.

Measure List

The Residential HVAC Tune Up program provides rebates and incentives for the following measures:

- Heating and cooling tune ups
- Ductwork improvements

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Residential HVAC Tune Up program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 210,000	\$ 351,117	\$ 561,117
2015	\$ 227,500	\$ 468,551	\$ 696,051
2016	\$ 245,000	\$ 702,878	\$ 947,878
2017	\$ 265,000	\$ 823,004	\$ 1,088,004
2018	\$ 285,000	\$ 938,761	\$ 1,223,761
Total	\$ 1,232,500	\$ 3,284,311	\$ 4,516,811

MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 210,000	\$ 302,133	\$ 512,133
2015	\$ 227,500	\$ 402,449	\$ 629,949
2016	\$ 245,000	\$ 603,622	\$ 848,622
2017	\$ 265,000	\$ 703,996	\$ 968,996
2018	\$ 285,000	\$ 805,989	\$ 1,090,989
Total	\$ 1,232,500	\$ 2,818,189	\$ 4,050,689

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 420,000	\$ 653,250	\$ 1,073,250
2015	\$ 455,000	\$ 871,000	\$ 1,326,000
2016	\$ 490,000	\$ 1,306,500	\$ 1,796,500
2017	\$ 530,000	\$ 1,527,000	\$ 2,057,000
2018	\$ 570,000	\$ 1,744,750	\$ 2,314,750
Total	\$ 2,465,000	\$ 6,102,500	\$ 8,567,500

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Residential HVAC Tune Up program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	485,921	454
2015	647,894	605
2016	971,841	908
2017	1,144,293	1,062
2018	1,306,267	1,213
Total	4,556,217	4,243

Gas Savings	Annual Therms	Peak Therms
2014	58,832	765
2015	78,442	1,020
2016	117,663	1,530
2017	137,274	1,785
2018	156,884	2,040
Total	549,094	7,141

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 6,549,232	\$ 3,014,469	\$ 9,563,701
Program Costs	\$ 4,991,391	\$ 4,305,383	\$ 9,296,774
Net Economic Benefits	\$ 1,557,841	\$ (1,290,914)	\$ 266,927
Societal Test Ratio	1.31	0.70	1.03

Operations

Description of Operations

The program is delivered in partnership with heating and cooling dealers. One program contractor supports the program.

Key steps in program participation include:

- **Scheduled regular maintenance or equipment replacement** – The customer contacts a participating HVAC dealer for an equipment tune up or to perform a quality installation of a new piece of equipment through the Residential Equipment program.
- **Maintenance upgrade qualification** – The HVAC contractor determines whether the existing equipment is eligible for an incentive when performing an equipment tune up. The participating contractors need to meet training requirements and follow defined tune up protocols.
- **Ductwork upgrade qualification** – The HVAC contractor determines whether the existing ductwork is eligible for an incentive when performing an equipment tune up or during quality installation of new equipment. The participating contractors need to meet training requirements and follow defined ductwork upgrade protocols.
- **Program application** – The HVAC contractor completes an application to identify the type of tune up completed and the completed upgrades along with the associated costs. The customer mails the completed application to the program contractor.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – Where appropriate, the program contractor verifies that equipment upgrades meets program guidelines.

Description of Outside Services

MidAmerican staff provides overall strategic direction for the program, and conducts research and development, promotion, trade ally support, evaluation and other administrative functions.

One contractor handles processing applications, tracking program data, answering questions from dealers and customers, verifying system improvements and coordinating rebate distribution to customers.

MidAmerican currently contracts with A-TEC Energy Corporation for management and administrative services for System Adjustment and Verified Efficiency (SAVE) and will continue to use A-TEC to launch this new program. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive three main benefits.

- Customers save money in the short term through rebates and in the long term through lower utility bills, all the while improving the overall comfort of their homes.
- Customers receive reliable advice about possible system upgrades from a trustworthy source and improve the comfort of their home.
- The process is simple and straightforward. Tune up rebates are accessible to any qualifying customer for qualifying system performance improvement.

Market Barriers

The table below presents the key market barriers to a successful residential HVAC tune up program and strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Time required to fill out rebate forms	Provide simple rebate forms through software used by contractors Allow trade allies to fill in rebate forms for customers at the time of equipment or ductwork upgrade
Customers don't understand the long-term value of heating and cooling system upgrades	Train trade allies to explain life-cycle costs to customers Market program and general efficiency awareness to customers Provide efficiency education to customers
Trade allies not up-selling system upgrades	Provide trade ally training and outreach to explain the benefits of selling duct system upgrades when installing new equipment Market program and general efficiency awareness to trade allies
Dealers are unaware of program	Provide outreach and marketing to dealers

Incentives

The program offers the following types of financial incentives to participants.

- **Rebates** – Rebates are offered on a per-tune up or ductwork improvement basis to customers improving the performance of installed equipment. For equipment upgrades, the rebate will be a fixed amount while, for ductwork, the rebate will be a percentage of costs up to a cap.
- **Financing** – Subsidized financing is available as an alternative to rebates for selected measures.

MidAmerican performs an annual review of rebate levels and performance criteria and may adjust rebates in the future as market conditions change.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target residential customers using traditional marketing channels and provide education and outreach to customers, trade allies and industry organizations to encourage customer and contractor participation.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjust materials as needed based on program adjustments and market characteristics.

Customer Targets

The target market for this program includes residential customers in existing housing. The program also uses tariff rates (those used by residential customers) to target and qualify customers.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Equipment	Natural Gas Equipment
Customer Class	Residential electric rate	Residential natural gas rate
Customer Status	Customer homeowners	Customer homeowners
Building Type	Single-family; Multi-family; Mobile home	Single-family; Multi-family; Mobile home
Building Vintage	Existing and new construction	Existing and new construction
Geography	MidAmerican Iowa electric service territory	MidAmerican Iowa natural gas service territory

Trade Ally Targets

Any contractor that meets System Adjustment and Verified Efficiency (SAVE) training requirements within MidAmerican's service territory may participate in the program. The following types of trade allies are predominant:

- SAVE certified HVAC dealers and contractors
- Home Energy Raters

Trade allies play a key role in implementing the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the Education program.

Promotion

MidAmerican will promote the program through inserts with customer bills. The inserts will reference the energy efficiency website, which features a dedicated Web page that includes program information, qualification requirements and a program brochure. A reference to the energy efficiency website will appear quarterly on customer bills. MidAmerican will promote the program through its Residential Assessment program by providing a coupon for a tune up from a qualified HVAC contractor.

MidAmerican call center associates will recommend the program to likely participants and, when appropriate, transfer customers to the program call center operated by the program contractor.

Program referrals are primarily expected from trade allies during the course of their existing HVAC maintenance programs. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Nonresidential Equipment Program

Description of Program

The Nonresidential Equipment program promotes the purchase of energy-efficient equipment by nonresidential customers. The program offers financial incentives to customers installing energy-efficient equipment, either for first-time or retrofit installations. The program also includes a “custom track” to allow customers to implement new technologies and alternate strategies not currently eligible for prescriptive rebates.

The program is available to all nonresidential customers for both new and existing buildings. Program measures must save energy supplied directly by MidAmerican.

Transportation gas customers with daily metering are ineligible for incentives for gas measures; however, customers with monthly metering under the Monthly Metered Transportation Service gas tariff are eligible for energy efficiency incentives.

Measure List

The Nonresidential Equipment program provides rebates and incentives for the following measures:

- Efficient motors
- Variable speed drives
- Heating and cooling equipment including:
 - Central and packaged terminal air conditioners
 - Air-source and ground-source heat pumps
 - Chillers
 - Natural gas furnaces
 - Efficient furnace fans
 - Natural gas boilers
 - Gas and electric water heaters
 - Programmable thermostats
 - Desuperheaters
- Commercial kitchen equipment including:
 - Ice makers
 - Freezers
 - Refrigerators
 - Gas convection and conveyor ovens
 - Steam cookers
 - Gas broilers
 - Refrigerated vending machine controllers
 - Electronically commutated motors for refrigerated display cases and walk-in coolers
- Lighting equipment including:
 - T-8 fluorescent lighting system retrofits

- Reduced wattage T-8 lamps
- T-5 & T-8 high bay fixtures
- Occupancy sensors
- Compact fluorescent lamps
- Pulse-start metal halide fixtures
- Reduced wattage metal halide replacement lamps
- LED lamps
- LED fixtures
- LED traffic signal lamps
- LED exit signs
- Lighting timers
- Building shell measures including:
 - Attic/roof/ceiling insulation
 - Wall insulation
 - Infiltration measures (weather stripping, caulking, foam backer rods, etc.)
 - Efficient doors and windows

Any cost-effective energy efficiency measure not listed as a prescriptive measure above is potentially eligible for an incentive in the custom track of this program.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Nonresidential Equipment program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 721,301	\$ 6,356,547	\$ 7,077,848
2015	\$ 739,334	\$ 6,454,576	\$ 7,193,910
2016	\$ 757,817	\$ 6,526,093	\$ 7,283,910
2017	\$ 776,762	\$ 6,597,235	\$ 7,373,997
2018	\$ 796,181	\$ 6,663,581	\$ 7,459,762
Total	\$ 3,791,395	\$ 32,598,032	\$ 36,389,427

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 127,288	\$ 1,992,263	\$ 2,119,551
2015	\$ 130,470	\$ 2,030,182	\$ 2,160,652
2016	\$ 133,732	\$ 2,070,038	\$ 2,203,770
2017	\$ 137,075	\$ 2,109,992	\$ 2,247,067
2018	\$ 140,502	\$ 2,153,213	\$ 2,293,715
Total	\$ 669,067	\$ 10,355,688	\$ 11,024,755

MidAmerican Energy Company
Iowa Energy Efficiency Plan 2014-2018

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 848,589	\$ 8,348,809	\$ 9,197,398
2015	\$ 869,804	\$ 8,484,758	\$ 9,354,562
2016	\$ 891,549	\$ 8,596,131	\$ 9,487,680
2017	\$ 913,837	\$ 8,707,227	\$ 9,621,064
2018	\$ 936,683	\$ 8,816,794	\$ 9,753,477
Total	\$ 4,460,462	\$ 42,953,719	\$ 47,414,181

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Nonresidential Equipment program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	59,673,372	9,231
2015	60,168,385	9,298
2016	57,457,882	8,885
2017	57,617,897	8,907
2018	57,745,832	8,920
Total	292,663,368	45,241

Gas Savings	Annual Therms	Peak Therms
2014	824,801	11,496
2015	839,622	11,635
2016	854,281	11,772
2017	869,101	11,912
2018	883,444	12,044
Total	4,271,250	58,860

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 261,373,098	\$ 54,156,842	\$ 315,529,941
Program Costs	\$ 62,668,446	\$ 17,972,152	\$ 80,640,599
Net Economic Benefits	\$ 198,704,652	\$ 36,184,690	\$ 234,889,342
Societal Test Ratio	4.17	3.01	3.91

Operations

Description of Operations

The program is delivered in partnership with motor and variable speed drive distributors, heating and cooling distributors and contractors, commercial kitchen equipment distributors and lighting distributors and contractors.

Key steps in program participation include:

- **Program application** – The customer identifies a project and fills out an application to define equipment for project evaluation. Trade allies and/or a key account manager may assist a customer with this step.
- **Project identification** – The application is reviewed to determine if the project is prescriptive in nature or will require a custom review.
- **Project qualification** – The program contractor determines if the project meets the minimum efficiency requirement of the measure.
- **Technical assistance** – When necessary, the program contractor helps a customer identify the technical information necessary to determine project eligibility.
- **Project evaluation** – For custom projects, the program contractor determines project incremental cost and potential energy and capacity savings data.
- **Cost effectiveness analysis and rebate calculation** – For custom projects, MidAmerican evaluates cost-effectiveness and determines if the project meets program guidelines and qualifies for financial incentives. The custom incentive will be 25 percent of the incremental cost or an amount that buys down the project to 25 percent of its useful life, whichever is greater, not to exceed a one year simple payback. Prescriptive projects receive the prescribed incentive and are capped at 70 percent of the installed cost (material and reasonable labor).
- **Approval/denial notification** – For custom projects, MidAmerican either sends out a project approval letter and self-verification form or a denial letter.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – For custom projects, the customer submits a self-verification form. Where appropriate, the program contractor field verifies that a project installation meets program guidelines. The program contractor field verifies a percentage of all prescriptive projects.

Description of Outside Services

MidAmerican uses two program contractors to support the program. One program contractor is responsible for handling customer calls, reviewing project applications, tracking results and processing customer rebates. Additionally, this program contractor reviews the initial application and determines if the project is covered by the applicable prescriptive equipment program or if the project requires a custom review.

If the project requires a custom review, the second program contractor works directly with customers to help identify the technical information necessary for project evaluation, performs

technical analyses of applications to confirm scope, cost and potential energy savings, performs field verification on completed projects and calculates revised expected annual energy savings from installed projects, if appropriate.

MidAmerican staff provides overall strategic direction for the program, calculates cost-effectiveness, payback periods and rebates, conducts research and development and provide promotion, evaluation, and other administrative functions. MidAmerican currently contracts with A-TEC Energy Corporation and The Energy Group for administrative and evaluation services. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive these benefits.

- Customers save money in the short term through rebates and in the long term through lower energy bills.
- Customers receive reliable advice about high quality energy-efficient equipment from a trustworthy source.
- The process is simple and straightforward. Equipment rebates are accessible to any qualifying customer for any qualifying equipment. Projects not listed in the lists of prescriptive equipment can be given a custom review which acts as a catch-all for new technology equipment and for large or unique measures.

Market Barriers

The table below presents the key market barriers to a successful nonresidential equipment program and strategies the program uses to address each barrier. Note these program strategies can only partially offset these barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
Higher first cost of energy-efficient equipment	Offer rebates Educate customers on the long-term energy cost-saving benefits of higher efficiency equipment
Time required to fill out rebate forms	Provide simple rebate forms through a variety of media (mail-in, online) Allow trade allies to fill in rebate forms for the customers at the time of equipment purchase Offer point-of-sale rebates for lighting measures at participating retailers and electrical distributors

Market Barriers	Program Strategies
Customers do not bother to look for qualifying measures	Trade ally training to help customers quickly identify appropriate measures and products Provide in-store brochures and collateral Market program and general efficiency awareness to customers Provide efficiency education to customers
Trade allies not up-selling to high-efficiency equipment	Provide trade ally training and outreach to explain the benefits of selling higher efficiency equipment Market program and general efficiency awareness to trade allies
Lack of availability of qualifying equipment	Promote programs to customers so they ask for qualifying equipment and dealers stock it Provide trade ally training Upstream retail lighting buy-down assures participating retailers and lighting distributors stock the qualified equipment
Customers do not understand the long-term value of high-efficiency equipment	Train trade allies to explain life-cycle costs to customers Market program and general efficiency awareness to customers Provide energy efficiency education to customers
Dealers are unaware of the program	Provide outreach and marketing to dealers

Incentives

The program offers the following types of financial incentives to participants.

- Rebates** – Rebates are offered on a per-measure basis to program participants installing qualifying equipment. For some equipment the rebate will be a fixed amount per measure while, for other equipment, the rebate will increase with increasing equipment efficiency. For measures not listed on qualifying equipment lists, a review of measure cost, useful life and energy saving details will take place to determine the rebate. Custom rebates are set at 25 percent of the incremental cost or an amount that buys down the project to 25 percent of its useful life, whichever is greater. Incentives will be capped at a one year simple payback. Prescriptive projects receive the prescribed incentive and are capped at 70 percent of the installed cost (material and reasonable labor).

MidAmerican performs an annual review of rebate levels and performance criteria and may adjust rebates in the future as market conditions change.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target nonresidential customers using traditional and non-traditional marketing channels, provide education and outreach to customers, trade allies and industry organizations, to encourage customer participation and implementation of energy efficient measures and equipment.

Key account managers will promote the program to mid-size and large commercial and industrial customers during routine contacts. Additionally, key account managers generally provide printed program brochures to their assigned accounts during the first quarter which allows the key account managers to review the program and answer any questions customers may have regarding the program.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjust materials as needed based on program adjustments and market characteristics.

Customer Targets

The target market for this program includes commercial and industrial customers of all sizes for both new and existing facilities. Program measures must save energy supplied directly from MidAmerican Energy. Transportation gas customers with daily metering are ineligible for gas measures; however, customers with monthly metering under the Monthly Metered Transportation Service gas tariff are eligible for energy efficiency incentives.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential electric rates	Nonresidential natural gas rates Gas transportation customers with daily metering are ineligible
Customer Status	Building or business owners; property managers of customers	Building or business owners; property managers of customers
Building Type	All	All
Building Vintage	Existing and new construction	Existing and new construction
Geography	MidAmerican's Iowa electric service territory	MidAmerican's Iowa natural gas service territory

Trade Ally Targets

Any business that sells or installs qualifying equipment within MidAmerican's service territory may participate in the program. The following types of trade allies are predominant:

- HVAC equipment distributors, dealers and service providers
- Plumbing and mechanical contractors
- Lighting distributors and dealers
- Electrical contractors
- Motor and variable speed drive distributors and dealers
- Boiler and water heater distributors and dealers
- Commercial kitchen equipment suppliers
- Engineering firms
- Architects

Trade allies play a key role in implementing the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the specific Education program.

Promotion

MidAmerican will engage in a multifaceted promotional strategy, including:

- Outreach and educational opportunities for trade allies, nonresidential industry associations and support organizations.
- Attendance, material distribution, and presentations at industry events.
- Participation in nonresidential industry associations and industry support organizations,
- Targeted advertisements in industry trade publications.
- Periodic articles in MidAmerican's monthly electronic newsletter as well as its quarterly newsletter that is sent with customer bills.
- A dedicated Web page that includes program information and qualification requirements and a program brochure.
- A reference to the energy efficiency website will appear periodically on customer bills and in the electronic newsletter.
- A direct marketing campaign by targeting specific nonresidential segments with industry-specific information through direct mail, phone calls or emails to encourage participation.

Program referrals are also expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Commercial Assessment Program

Description of Program

The Commercial Assessment program promotes comprehensive energy efficiency for existing commercial buildings, regardless of size. The program will offer services through two program tracks, tailored to the unique needs of commercial customers by size and intention. The two tracks include:

Track I – Assessments

- **Small Commercial Assessment** – targets smaller commercial buildings that generally use <500,000 kWh per year and are typically <25,000 square feet. Identified customer segments will receive an energy assessment, information regarding how their segment uses energy, installed low-cost energy efficiency measures, and recommendations for capital investment projects.
- **Large Commercial Assessment** – targets commercial buildings that generally use >500,000 kWh/year and generally require major system renovations or retrofits. Customers will receive an energy assessment and recommendations for capital investment projects.

Track II – Building Tune Up/Retrocommissioning

- **Building Tune Up** – offers a “find and fix” tune up method for small commercial buildings that are generally <100,000 square feet, have rooftop units, and are free of major problems requiring costly repairs or replacements. This service targets smaller buildings that can achieve superior results from simple retrocommissioning strategies and operator training without having to incur the expense and capital investments to replace or abandon systems. The goal of a building tune up is to find easy to fix items that will enhance building performance and reduce energy consumption. Examples of corrective measures might include scheduling programmable thermostats, adjusting/adding economizers, repairing failed actuators, and adjusting minimum outside air percentages.
- **Traditional Retrocommissioning** – offers traditional retrocommissioning strategies for large buildings that are generally >100,000 square feet, have central systems, an energy management system with direct digital control, and are free of major problems requiring costly repairs or replacements. This service targets larger, more complex commercial buildings that can achieve superior results from intensive retrocommissioning strategies and operator training without having to incur the expense and capital investments to replace or abandon systems. The goal of traditional retrocommissioning is to optimize existing building systems and reduce energy consumption. Examples of corrective measures might include optimizing economizer and ventilation controls, improving equipment sequencing and scheduling, and optimizing fans and pumps.

Data Centers – It is important to note that energy saving opportunities in existing stand-alone data centers and internal server rooms and server closets will be pursued and leveraged through the Commercial Assessment program. Localized data centers, server rooms, and server closets, in particular, can be difficult to reach through a separate program because the market is disaggregated. When a customer participates in Building Tune Up/Retrocommissioning, a facility's data center will be addressed. Many of the energy saving opportunities can be addressed by managing data center air flow and adjusting and improving the HVAC system. When applicable, a data center efficiency study will be recommended to explore and validate additional data center energy savings opportunities for the customer's unique data center environment.

The Commercial Assessment program is available to all commercial buildings that receive electricity and/or natural gas supplied directly from MidAmerican.

Transportation gas customers with daily metering are ineligible for gas measures. However, customers with monthly metering under the Monthly Metered Transportation Service gas tariff are eligible for energy efficiency incentives.

Measure List

The Commercial Assessment program provides rebates and incentives for the following measures:

Direct Install Measures

Small commercial assessments include free low-cost measures that may be installed at the time of the assessment. At the time of the plan filing, the following measures are available for direct installation:

- Low-flow showerheads
- Faucet aerators
- Water pipe insulation
- Low-flow kitchen sprayers
- LED exit light kits
- Programmable thermostats
- Compact fluorescent bulbs
- Vending machine controls

Follow-Up Measures

Any prescriptive or cost effective custom energy efficiency measure is potentially eligible for rebate under the Commercial Assessment program. Typical measures include:

- T-8 and T-5 fluorescent lighting systems
- Daylighting and other lighting controls
- Efficient HVAC equipment and HVAC controls
- Building shell improvements
- Premium efficiency motors
- Variable-speed drives
- Efficient kitchen equipment

MidAmerican performs an annual review of qualifying measures and may adjust measures and eligibility requirements in the future as market conditions and equipment standards change.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the commercial assessment program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 280,422	\$ 3,635,086	\$ 3,915,508
2015	\$ 328,850	\$ 4,351,697	\$ 4,680,547
2016	\$ 470,917	\$ 6,351,150	\$ 6,822,067
2017	\$ 605,784	\$ 8,334,932	\$ 8,940,716
2018	\$ 719,206	\$ 9,938,936	\$ 10,658,142
Total	\$ 2,405,179	\$ 32,611,800	\$ 35,016,979

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 249,023	\$ 2,048,371	\$ 2,297,394
2015	\$ 261,454	\$ 2,611,820	\$ 2,873,274
2016	\$ 276,951	\$ 3,183,513	\$ 3,460,464
2017	\$ 300,360	\$ 4,492,123	\$ 4,792,483
2018	\$ 318,901	\$ 5,480,092	\$ 5,798,993
Total	\$ 1,406,689	\$ 17,815,918	\$ 19,222,607

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 529,445	\$ 5,683,457	\$ 6,212,902
2015	\$ 590,304	\$ 6,963,517	\$ 7,553,821
2016	\$ 747,868	\$ 9,534,663	\$ 10,282,531
2017	\$ 906,144	\$ 12,827,054	\$ 13,733,198
2018	\$ 1,038,107	\$ 15,419,028	\$ 16,457,135
Total	\$ 3,811,868	\$ 50,427,718	\$ 54,239,586

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Commercial Assessment program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	7,616,443	1,533
2015	8,966,443	2,396
2016	10,636,483	4,577
2017	14,107,604	7,012
2018	17,037,604	9,023
Total	58,364,576	24,541

Gas Savings	Annual Therms	Peak Therms
2014	350,706	3,132
2015	416,706	4,212
2016	483,706	5,313
2017	636,706	7,814
2018	751,206	9,662
Total	2,639,030	30,133

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 62,838,828	\$ 29,328,631	\$ 92,167,458
Program Costs	\$ 41,213,710	\$ 20,774,763	\$ 61,988,473
Net Economic Benefits	\$ 21,625,118	\$ 8,553,868	\$ 30,178,985
Societal Test Ratio	1.52	1.41	1.49

Operations

Description of Operations

The program uses distinct processes for each of the tracks, which are detailed below.

Track I - Assessments

Small Commercial Assessments – The small commercial assessment is designed for smaller commercial buildings that have standard equipment. Assessments for identified customer segments will be tailored to meet the needs of that segment. Key steps include:

- **On-site assessment scheduling** – The customer calls the program contractor to schedule an assessment, or is transferred by MidAmerican. The customer also may submit an online form to receive a call to schedule an assessment.
- **Screening** – To ensure placement in the appropriate track, a thorough screening will help identify the commercial building’s characteristics as well as any customer plans to complete capital investment projects. For Track I, the customer segment also is identified, e.g. convenience store, office/retail, etc.
- **On-site assessment completion** – Based on the customer segment, the program contractor completes a building assessment, installs low-cost energy efficiency measures, informs customers of ways to operate building energy systems more efficiently, and identifies potential follow-up projects and determines eligibility for financial incentives.

- **Assessment report** – The program contractor provides the customer with an assessment report that includes recommendations for energy efficiency projects appropriate for their segment. Recommendations focus on the highest amount of potential energy savings for a customer segment at the lowest cost to the customer. During program design, appropriate timelines for report delivery will be established to ensure adequate analysis and timeliness to the customer.
- **Rebate application** – When a customer completes a prescriptive or custom project as a result of their assessment, they submit an application form for review and processing.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican staff process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – The program contractor conducts verification on a sample of measure installations.

Large Commercial Assessments – The large commercial assessment is designed for large commercial buildings interested in implementing a higher number of capital investment projects than other tracks. Key steps include:

- **On-site assessment scheduling** – The customer calls the program contractor to schedule an assessment, or is transferred by MidAmerican. The customer also may submit an online form to receive a call to schedule an assessment.
- **Screening** – To ensure placement in the appropriate track, a thorough screening will help identify the commercial building's characteristics as well as any customer plans to complete capital investment projects.
- **On-site assessment completion** – The program contractor completes a building assessment that focuses on the identification of energy saving opportunities with the greatest potential, informs customers of ways to operate building energy systems more efficiently, and identifies potential follow-up projects including cost analysis and eligibility for financial incentives. Recommendations also may be made for potential capital-intensive improvements that require more thorough data collection and engineering analysis.
- **Assessment report** – The program contractor provides the business owner an assessment report that includes recommendations for energy efficiency capital investment projects. During program design, appropriate timelines for report delivery will be established to ensure adequate analysis and timeliness to the customer.
- **Implementation support** – The program contractor may provide varying levels of implementation support depending on the customer need, project complexity and size of a project. This support may include answering assessment-report-related questions, assisting with the development of detailed requests for proposals, reviewing vendor bids, reviewing proposals on systems that require additional detailed study, assisting with applications for rebate, etc.
- **Detailed study option** – The customer is provided an option for detailed studies of capital intensive modifications, such as data center studies. A detailed study may be included as a recommendation in the assessment report. This type of analysis:
 - Focuses on specific capital-intensive improvements identified in the assessment.
 - Includes detailed field data gathering and more rigorous engineering analysis.
 - Provides detailed project cost and savings calculations sufficient for investment grade decisions.
- **Rebate application** – When a customer completes a prescriptive or custom project as a result of their assessment, they submit an application form for review and processing.

- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – The program contractor conducts verification on a sample of measure installations.

Track II – Building Tune Up/Retrocommissioning

Building Tune Up – Building tune up focuses on achieving energy efficient buildings through simplified “find and fix” retrocommissioning strategies. “Find and fix” is designed for small buildings (generally <100,000 square feet with roof top units). Key steps include:

- **On-site assessment scheduling** – The customer calls the program contractor to schedule an assessment, or is transferred by MidAmerican. The customer also may submit an online form to receive a call to schedule an assessment.
- **Screening** – To ensure placement in the appropriate track, a thorough screening will help identify the commercial building’s characteristics as well as any customer plans to complete capital investment projects.
- **Site investigation and completion of measures** – The program contractor performs a simplified “find and fix” building tune up process to identify and implement a variety of tune up measures aimed at improving the operational efficiencies of existing mechanical systems. The process involves three key aspects:
 - Find opportunities – The program contractor reviews the building’s controls and mechanical systems to identify the programs standard measures. An experienced energy engineer identifies opportunities, quantifies the impacts, and reports the findings to the facility representative.
 - Choose opportunities – The customer’s staff representative, who is knowledgeable in the building operation, makes decisions regarding implementation of the identified measures and authorizes investment in a finite amount of additional labor and materials.
 - Fix opportunities – The customer selects a contractor capable of supporting the identification of tune up measures, manipulating system controls and set-points, and executing the implementation of identified measures.
- **Verification** – The program contractor conducts measurement and verification on a sample of projects to ensure the effectiveness and persistence of measures installed.
- **Rebate application** – Although the program is not designed to focus on follow-up measures, they may be recommended during the assessment. If a customer completes a prescriptive or custom project as a result of their assessment, they submit an application form for review and processing.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes. The program contractor conducts verification on a sample of measure installations.

Traditional Retrocommissioning – Retrocommissioning is designed for large buildings (generally >100,000 square feet with central systems). Key steps include:

- **On-site assessment scheduling** – The customer calls the program contractor to schedule an assessment, or is transferred by MidAmerican. The customer also may submit an online form to receive a call to schedule an assessment.
- **Screening** – To ensure placement in the appropriate track, a thorough screening will help identify the commercial building’s characteristics as well as any customer plans to complete capital investment projects.
- **On-site assessment completion** – The commissioning agent completes an assessment of the facility’s HVAC systems and quantifies the impacts of all findings.
- **Assessment report** – Retrocommissioning strategies will be outlined for investigation and implementation. Capital upgrades may be identified and outlined in the report. During program design, appropriate timelines for report delivery will be established to ensure adequate analysis and timeliness to the customer.
- **Detailed study option** – The customer is provided an option for detailed studies of capital intensive modifications. A detailed study may be included as a recommendation in the assessment report. This type of analysis:
 - Focuses on specific capital-intensive improvements identified in assessment.
 - Includes detailed field data gathering and more rigorous engineering analysis.
 - Provides detailed project cost and savings calculations sufficient for investment grade decisions.
- **Retrocommissioning completion** – The commissioning agent performs comprehensive retrocommissioning to ensure the accuracy and success of the program for large buildings.
- **Verification** – The commissioning agent or program contractor conducts site-specific measurement and verification to quantify and verify the savings achieved.
- **Rebate application** – Follow-up measures may be recommended during the assessment. If a customer completes a prescriptive or custom project as a result of their assessment, they submit an application form for review and processing.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes. The program contractor conducts verification on a sample of measure installations.

Description of Outside Services

MidAmerican staff provides overall strategic direction for the program, conducts research and development, and provides promotion, trade ally support, evaluation, and other administrative functions.

The program is delivered through the assistance of a program contractor(s) that provides energy assessments, technical assistance, energy analysis, reporting, project management and verification services. The contractor(s) also helps MidAmerican strengthen relations with key trade allies. A fulfillment contractor assists with data tracking and rebate processing.

MidAmerican currently contracts with Franklin Energy LLC and Nexant, Inc. to complete the functions of current assessment programs. MidAmerican also currently contracts with A-TEC Energy Corporation for administrative and evaluation services. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive three main benefits.

Financial benefits including:

- A free whole-building energy assessment from trained auditors with direct installation (Track I only) and/or completion of energy-saving measures (Tracks I and II) when applicable.
- Rebates that reduce the payback of implemented energy efficiency measures.
- Increased property values due to lower monthly operating costs, investment in advanced efficiency technologies and improved building operation and comfort.

Decision support including:

- Assessments tailored to the unique needs of the commercial customer.
- Comprehensive information on the costs and benefits of energy efficiency strategies.
- Assistance with obtaining qualified trade allies to ensure successful project implementation.

Confidence in investment decisions due to:

- Company representative involvement in the process.
- Professional, independent estimation and verification of measure savings.

Market Barriers

The table below presents the key market barriers to an effective commercial assessment program, and strategies the program uses to address each barrier. Note these program strategies can only partially offset the barriers.

Market Barriers and Strategies

Market Barriers	Program Strategies
High cost of efficient retrofit measures and limited capital for building assessments and upgrades	Provide free on-site energy assessments Provide rebates to help offset the cost of efficient equipment
Lack of customer program and energy efficiency awareness	Provide direct customer outreach Conduct outreach to appropriate trade allies Complete general education and provide information about simple operational changes and initiatives that provide on-going savings Provide free, third-party expert analysis and recommendations
Limited time, resources and awareness on how to act on recommendations	Provide free independent assessment and recommendations Provide a trade ally network and referral program to help identify appropriate contractors Have direct contact with business decision-makers Provide a streamlined participation process and simple rebate forms Communicate with customers to help them move through installation steps Provide simple maintenance tips for ongoing savings
Customers don't trust energy-savings calculations	Provide free independent assessment and recommendations Develop and share case studies of actual projects with energy savings where appropriate
Energy small part of overall operating costs	Utilize targeted marketing materials and education efforts
Lack of trade ally awareness	Conduct ongoing trade ally support and education

Incentives

MidAmerican offers the following financial incentives to participants:

Track I – Assessments

- **No cost energy assessments** – No cost energy assessments are offered to assist participants in identifying how they use energy and what actions can be taken to reduce energy use.
- **Low-cost energy efficiency measures** – MidAmerican’s program contractor installs low-cost energy efficiency measures during the assessment, at no cost to the customer.
- **Equipment incentives** – Prescriptive rebates, as outlined in the Nonresidential Equipment program, will apply to projects in the Commercial Assessment program. Custom rebates are set at 25 percent of incremental cost or an amount that buys down the project to 25 percent of its useful life, whichever is greater. Incentives will be capped at a one year simple payback.
- **Enhanced incentives** – Enhanced incentives will be offered to encourage multiple projects.

Track II – Building Tune Up/Retrocommissioning

- **Building Tune Up measures** – MidAmerican will offer a 50/50 cost share between MidAmerican and customer on assessment and measure implementation costs. Incentives cannot exceed an established cap.
- **Retrocommissioning study** – MidAmerican will fund 100 percent of the retrocommissioning study. Incentives cannot exceed an established cap.

Detailed incentive levels for each measure offered in this program are provided in Appendix A.

Marketing Plan

General Marketing Plan

MidAmerican will target existing commercial buildings using traditional and non-traditional marketing channels, provide education and outreach to customers, trade allies and building community organizations, to encourage customer participation and implementation of energy efficient measures and equipment.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjust materials as needed based on program adjustments and market characteristics.

Customer Targets

The program targets existing commercial buildings of any size. Industrial (manufacturing) customers are to be served under the Nonresidential Energy Analysis program.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential electric rates	Nonresidential natural gas rates Gas transportation customers with daily metering are ineligible
Customer Status	Customer building or business owners Landlords of customers	Customer building or business owners Landlords of customers
Building Type	Commercial buildings (i.e., non-manufacturing)	Commercial buildings (i.e., non-manufacturing)
Building Vintage	Existing buildings	Existing buildings
Geography	MidAmerican Iowa electric service territory	MidAmerican Iowa natural gas service territory
Building Size	All	All

Trade Ally Targets

The program relies primarily on the following trade allies for program delivery:

- Lighting dealers and installers
- Insulation contractors
- HVAC contractors
- Mechanical, electrical and equipment contractors
- Detailed study providers (e.g., data center optimization)

Trade allies play a key role in supporting the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program. Further information regarding trade allies can be found in the Education program.

Promotion

MidAmerican will engage in a multifaceted promotional strategy that will include:

- Direct outreach to commercial building owners.
- Ongoing trade ally education about program procedures and benefits, qualifying measures, and equipment and rebate structures.
- Promotional and educational activities, such as workshops and presentations for customers as well as other stakeholders in the community.
- Attendance and program promotion at conferences and trade shows.
- Advertisements and case studies in appropriate professional and trade journals and publications.
- Periodic articles in MidAmerican's monthly electronic newsletter as well as its quarterly newsletter that is sent with customer bills.
- A dedicated Web page that includes program information and qualification requirements and a program brochure.
- A reference to the energy efficiency website will appear periodically on customer bills and in the electronic newsletter.

Program referrals also are expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications. To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.

MidAmerican Energy Company Iowa Energy Efficiency Plan 2014-2018 Nonresidential Energy Analysis Program

Description of Program

The Nonresidential Energy Analysis program promotes comprehensive efficiency strategies in existing industrial facilities through a no-cost scoping level, facility-wide energy assessment as well as assistance with detailed investment-grade studies. Program participants work in partnership with MidAmerican through their key account managers and trade allies to identify and implement comprehensive energy efficiency measures.

The Nonresidential Energy Analysis program is available to all industrial (manufacturing) facilities that receive electricity and/or natural gas supplied directly from MidAmerican.

Transportation gas customers with daily metering are ineligible for gas incentives. However, customers with monthly metering under the Monthly Metered Transportation Service gas tariff are eligible for energy efficiency incentives.

Measure List

Any prescriptive or cost effective custom energy efficiency measure is potentially eligible for the Nonresidential Energy Analysis program. Typical measures include:

- T-8 and T-5 fluorescent lighting systems
- Daylighting and other lighting controls
- Efficient HVAC equipment and HVAC controls
- Building shell improvements
- Premium efficiency motors
- Variable-speed drives
- Optimized process heating systems, process heat pumps and other heat recovery systems
- Optimized refrigeration systems
- Optimized compressed air systems
- Process controls, energy management systems and specialty process equipment specific to individual customers

MidAmerican performs an annual review of qualifying measures and may adjust measures and eligibility requirements in the future as market conditions and equipment standards change.

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

Budgets

Anticipated five-year spending for the Nonresidential Energy Analysis program is as follows:

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 753,741	\$ 7,753,094	\$ 8,506,835
2015	\$ 731,196	\$ 7,535,804	\$ 8,267,000
2016	\$ 613,965	\$ 5,991,620	\$ 6,605,585
2017	\$ 510,118	\$ 4,926,453	\$ 5,436,571
2018	\$ 427,261	\$ 4,094,940	\$ 4,522,201
Total	\$ 3,036,281	\$ 30,301,911	\$ 33,338,192

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 85,171	\$ 1,709,224	\$ 1,794,395
2015	\$ 80,441	\$ 1,584,390	\$ 1,664,831
2016	\$ 74,531	\$ 1,329,112	\$ 1,403,643
2017	\$ 55,386	\$ 873,533	\$ 928,919
2018	\$ 42,446	\$ 631,110	\$ 673,556
Total	\$ 337,975	\$ 6,127,370	\$ 6,465,345

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2014	\$ 838,912	\$ 9,462,319	\$ 10,301,231
2015	\$ 811,637	\$ 9,120,194	\$ 9,931,831
2016	\$ 688,496	\$ 7,320,733	\$ 8,009,229
2017	\$ 565,504	\$ 5,799,986	\$ 6,365,490
2018	\$ 469,707	\$ 4,726,050	\$ 5,195,757
Total	\$ 3,374,256	\$ 36,429,281	\$ 39,803,537

Detailed budgets by spending category and staffing assumptions in FTEs for this program are provided in Appendix B.

Energy Savings

Anticipated savings levels for the Nonresidential Energy Analysis program are as follows:

Electric Savings	Annual kWh	Peak kW
2014	23,090,199	3,036
2015	22,759,398	2,973
2016	19,063,775	2,473
2017	17,653,076	2,279
2018	15,867,278	2,037
Total	98,433,726	12,798

Gas Savings	Annual Therms	Peak Therms
2014	176,734	519
2015	171,405	504
2016	145,939	429
2017	102,457	302
2018	89,194	264
Total	685,728	2,017

Participation

Participation estimates for each measure offered in this program are provided in Appendix C.

Cost Effectiveness

Anticipated total net economic benefits of the program are as follows:

Program	Electric	Gas	Total
Program Benefits	\$ 87,995,326	\$ 8,399,535	\$ 96,394,861
Program Costs	\$ 50,492,843	\$ 8,141,032	\$ 58,633,875
Net Economic Benefits	\$ 37,502,483	\$ 258,503	\$ 37,760,986
Societal Test Ratio	1.74	1.03	1.64

Operations

Description of Operations

The program provides no-cost facility-wide assessments, assistance with the development of investment-grade detailed project studies and rebates for custom or prescriptive projects. Customers are encouraged to pursue comprehensive energy savings opportunities and will work in coordination with their key account manager.

Key steps in program operation include:

- **Application** – The customer submits a program application form.
- **Screening** – Applications will be screened to determine customer level of interest, energy goals and eligibility. Once any requested information is received, and a determination is made that the program is appropriate for the customer, the customer will officially be enrolled in the program.
- **Facility assessment** – An assessment will be completed that includes a review of the industrial facility and operating equipment, systems and processes. Potential energy-saving opportunities that will reduce energy usage and cost will be identified.
- **Energy assessment report** – An assessment report will be provided to the customer. This report will summarize the recommended energy-saving opportunities and provide methods to better manage energy issues and usage. The results will provide the necessary details to make informed decisions about which of the recommended energy-saving opportunities will help an organization achieve its short- and long-term energy goals. During program design, appropriate timelines for report delivery will be established to ensure adequate analysis and timeliness to the customer.
- **Implementation support** – Customers have the option of receiving assistance with the contract bid process to help convert committed projects to installed projects.

- **Detailed study option** – The customer is provided an option for detailed studies of capital intensive modifications. This type of analysis:
 - Focuses on specific systems or processes that may present energy-savings potential but could not be adequately evaluated as part of the facility assessment.
 - Includes detailed field data gathering and more rigorous engineering analysis.
 - Provides detailed project cost and savings calculations sufficient for investment grade decisions.
- **Rebate application** – When a customer completes a prescriptive or custom project as a result of their assessment, they submit an application form for review and processing.
- **Rebate processing and database maintenance** – The program contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- **Verification** – The program contractor conducts verification on a sample of measure installations.

Description of Outside Services

MidAmerican staff provides overall strategic direction for the program, conducts research and development, and provides promotion, trade ally support, evaluation, and other administrative functions.

The program is delivered through the assistance of a program contractor(s) that provides energy assessments, technical assistance, energy analysis, reporting, project management and verification services. The contractor(s) also helps MidAmerican strengthen relations with key trade allies. A fulfillment contractor assists with data tracking and rebate processing.

MidAmerican currently contracts with Nexant, Inc. for administrative and evaluation services for industrial customers. MidAmerican regularly reviews its contractor needs and contractual agreements as part of its internal program evaluation process.

Value Proposition

Customers participating in the program receive three main benefits:

- Financial benefits in the form of free assessments, rebates that reduce the payback of implemented energy efficiency measures, energy savings for the lifetime of the installed measures, and potentially increased property values.
- Technical Assistance in the form of access to energy efficiency engineers to help identify and scope energy efficiency opportunities.
- Confidence in their investment decision due to senior management involvement in the process and independent estimation and verification of measure savings.

Market Barriers

The table below presents the key market barriers to an effective nonresidential assessment program and strategies the program uses to address each barrier. Note these program strategies can only partially offset the barriers.

Market Barriers and Strategies

Market Barriers to Energy-Efficient Buildings	Program Strategies
High cost of efficient equipment and competition for capital expenses	Provide rebates set at levels to help offset incremental costs and compete favorably with other investments
Time and resource constraints	Provide free technical consultation to help determine cost-effective options Provide a streamlined participation process Provide customers with assessments and reports to help them organize and take advantage of efficiency opportunities Provide a trade ally network and assistance with obtaining a qualified contractor Provide flexibility, high-level customer support and follow-through
Lack of confidence in savings estimates from vendors	Offer independent third-party estimation and verification of energy savings
Capital expense may not be in budget cycle (project timing)	Take a long-term approach and provide flexibility
Low customer awareness of program	Marketing and direct outreach to targeted customers Provide consumer education and outreach Program promotion/advertising Use of nontraditional marketing approaches
Low trade ally awareness	Ongoing trade ally communications and outreach Provide dealer sales training

Incentives

The incentive strategy is designed to offset the cost barrier associated with efficient equipment and systems, to promote comprehensive efficiency strategies and to encourage customers to follow through with implementation.

The following types of incentives are offered through this program:

- **Technical assistance** – Technical assistance is provided throughout the project cycle at no cost to customers. Assistance includes management assessments; walk-through engineering assessments and project management support to help customers finalize, implement, and expand energy efficiency action plans and verification of installed projects.
- **Implementation support** – Customers have the option of receiving additional technical assistance with project implementation which may include:
 - Providing customers with independent third-party representation during the bidding process and overseeing the implementation of projects.
 - Developing detailed requests for proposals on committed projects.
 - Obtaining and reviewing vendor bids.
 - Performing and/or refining energy analysis as project scope matures.
 - Acquiring and reviewing trend data as required by the program or to help inform an investment decision.
 - Assisting with applications for rebate, measurement and verification of energy impacts, etc.

As part of the implementation support process, the program contractor will have the unique opportunity to engage and educate a subset of trade allies on all Nonresidential Energy Analysis program details, including how to leverage the program with all customers to sell energy efficiency projects.

- **Detailed studies** – As a part of the walkthrough energy assessment, detailed studies may be recommended to identify additional energy-saving opportunities for systems or processes that could not be fully evaluated during the facility assessment. The customer receives the benefit of a closed network of study providers to ensure quality analysis at a competitive price and can earn rebates towards the study cost when completion milestones are achieved. Providers are required to meet minimum program guidelines, including qualified staff, experience, compliance with reporting standards and attending mandatory training sessions. These studies will be at least partially funded through the program.
- **Equipment incentives** – Prescriptive rebates, as outlined in the Nonresidential Equipment program, will apply to projects in the Nonresidential Energy Analysis program. Custom rebates are set at 25 percent of incremental cost or an amount that buys down the project to 25 percent of its useful life, whichever is greater. Incentives will be capped at a one year simple payback.
- **Enhanced incentives** – Enhanced incentives will be offered to encourage multiple projects.

Detailed incentive levels for each measure offered in this program are provided in Appendix A. MidAmerican performs an annual review of incentive levels and performance criteria and may adjust incentives in the future as market conditions change.

Marketing Plan

General Marketing Plan

MidAmerican will target industrial facilities primarily through its key account managers. MidAmerican also will use traditional and non-traditional marketing channels to provide education and outreach to customers, trade allies and building community organizations to encourage customer participation and implementation of energy efficient measures and equipment.

MidAmerican will regularly review and update customer-facing program information and marketing materials as part of its internal program evaluation process, and adjusts materials as needed based on program adjustments and market characteristics.

Customer Targets

The program targets existing industrial (manufacturing) facilities of any size.

The table below outlines customer eligibility requirements.

Customer Eligibility Parameters

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential electric rates	Nonresidential natural gas rates Gas transportation customers with daily metering are ineligible
Customer Status	Customer facility or company management	Customer facility or company management
Building Type	Industrial facilities (i.e., manufacturing)	Industrial facilities (i.e., manufacturing)
Building Vintage	Existing facility	Existing facility
Geography	MidAmerican Iowa electric service territory	MidAmerican Iowa natural gas service territory
Building Size	All	All

Trade Ally Targets

The program relies primarily on the following trade allies for program delivery:

- Lighting dealers and installers
- Insulation contractors
- HVAC contractors
- Mechanical, electrical and equipment contractors
- Detailed study providers
 - Compressed air
 - Refrigeration
 - Process cooling and heating
 - Manufacturing processes

Trade allies play a key role in supporting the program. To support its trade allies and keep them informed of program opportunities and changes, MidAmerican maintains an active trade ally program.

The Nonresidential Energy Analysis program will include an expanded trade ally initiative to educate a subset of trade allies on program details, including how to leverage the program with all customers to sell energy efficiency projects, which will enable trade allies to further assist their customers with projects.

Further information regarding trade allies can be found in the Education program.

Promotion

MidAmerican will engage in a promotional strategy that will include:

- Direct outreach to industrial customers in coordination with key account managers.
- Direct outreach to targeted trade allies.
- Ongoing trade ally education about program procedures and benefits, qualifying measures, and equipment and rebate structures.
- Promotional and educational activities, such as workshops and presentations for customers as well as other stakeholders in the community.
- Attendance and program promotion at conferences and trade shows.
- Periodic articles in MidAmerican's monthly electronic newsletter as well as its quarterly newsletter that is sent with customer bills.
- A dedicated Web page that includes program information and qualification requirements and a program brochure.
- A reference to the energy efficiency website will appear periodically on customer bills and in the electronic newsletter.

Program referrals also are expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about program changes, and provide contact information for future communications.

To keep trade allies informed and engaged with the program, MidAmerican will periodically provide program information and training via a variety of different communication modes to create overarching energy efficiency and program awareness among our customers and trade allies. MidAmerican's Trade Ally Central website provides additional resources for trade ally engagement.