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# **EXECUTIVE SUMMARY**

In 2021 Intermountain revised the Residential Program offering and launched a new Commercial Program, both of which went into effect on April 1, 2021. After a year of transition, retiring rebates and launching new and revised rebates, 2022 was the first full year of data on the revised Residential Program and the new Commercial Program. The first 9 months of rebate performance from April through December 2021, for both Programs, provided some early insight on how customers and the market might respond to Program changes, and most early indicators held true: the smart thermostat rebate quickly grew to one of the most redeemed rebates after its launch, water heating rebates grew after the incentive amount was increased, and new construction rebates decreased as builders converted from the retired program requirement of Energy Star Certified homes, to meeting higher energy performance target requirements and navigating supply chain issues for high-efficient equipment. On the commercial side, after initial slow uptake in the Commercial Program, this Program continued to lag in 2022.

The Company was successful in securing cost-effective energy savings. At the Portfolio level, which consists of the Residential Program and Commercial Program together, the Energy Efficiency Portfolio was cost-effective with a Utility Cost Test (UCT) ratio of 1.3. Individually, both the Residential and Commercial Programs were cost-effective at the Program level, UCT of 1.3 and 2.0 respectively. At the measure level, the residential storage water heater was the only measure with a UCT ratio less than 1.0, at 0.9, despite an increased number of redeemed storage water heater rebates. All other measures were cost-effective.

Customer participation in the Residential Energy Efficiency Program continued to grow in 2022. The number of rebates paid to residential customers increased from 5,553 rebates in 2021 to 7,945 rebates in 2022, or a 43% increase in participation. To accurately compare year-over-year participation, the 2022 total of 5,553 rebates included both rebates paid on measures that were retired or changed, and the revised rebates that went into effect April 2021 compared to the total rebate count for 2022.

For the Residential Program, of the 7,945 residential rebates, the high-efficiency furnace rebate and smart

thermostat rebates were the two most redeemed rebates, followed by the new construction Whole Home Tier II rebate, and water heaters. The boiler and combi boiler tied for last place, with 5 and 6 rebates paid for each measure, respectively.

Participation in the Commercial Program also increased, but at a far slower pace than the Residential Program. The Company paid commercial rebates for seven high-efficiency boilers in the healthcare and education sectors, an increase over 4 commercial boilers in 2021. There were no rebates paid for either of the other two space heating incentives: condensing unit heater or boiler reset control. Of the three commercial kitchen equipment rebates, there were 19 Energy Star fryer rebates paid, compared to 4 in 2021. There were no rebates paid for the Energy Star steamer or Energy Star griddle. The Company also offered complementary Energy Saving Kits (ESK) to commercial customers to offer some immediate, easy D-I-Y energy saving devices, and to raise awareness about the Program. Of the 350 kits purchased for the pilot offering, 348 kits were placed.

To comply with Order No. 35313 resulting from case No. INT-G-21-03, Intermountain implemented a one-time, customer refund to correct an over-collected Energy Efficiency Charge (EEC) balance of \$4,896,882. The over-collected balance was due to higher-than-expected therm sales and slower than forecast uptake of the revised program. The Company performed a one-time refund of \$4,850,000 in the 2022 PGA. In addition, to more accurately match on-going revenues with expenses, the Company filed to decrease the residential EEC rate. On October 1, 2022, the EEC was reduced from \$0.02093 per therm to \$0.01564 per therm.

To launch the Commercial Program in 2021 the Company used an 80/20 expense allocation, assigning 80% of expenses to the Residential Program and 20% to the Commercial Program. This allocation was based on the 2018 Conservation Potential Assessment (CPA) estimation attributing 80% of savings potential to the Residential Program and 20% to the Commercial Program. Due to the slow uptake of the Commercial Program, the 2022 expense allocation was revised. Costs were direct assigned where the Company was able to do so. In the case that costs could not be direct

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assigned, they were assigned based on an analysis of estimated therm savings and program activities. A 95/5 allocation was applied to this pool of expenses, assigning 95% to Residential and 5% Commercial.

The Company utilized both tried-and-true outreach methods and new approaches to raise awareness about the Residential and Commercial Programs. The annual residential customer bill insert, combined with the customer engagement activity resulted in the highest customer response in the history of the Program. Participation in the Building Contractor Associations, both statewide and regionally, continues to be one of the most effective means of builder and contractor outreach. For the Commercial Program, the Company engaged with new industry partners like the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) and the Association of Architects Idaho Chapter (AIA) to raise awareness about energy efficiency, targeting the design process. The use of email campaigns to residential and commercial customers helped build awareness, brand recognition and provided useful metrics for this outreach method.

The Company's collaboration with the Energy Efficiency Stakeholder Committee (EESC) remained a vital partnership in the advancement of the Energy Efficiency Portfolio. The Company held two meetings in 2022. At the Spring meeting in May, the Company provided an overview of 2021 program results as a preview to the annual report. Other agenda items also included the upcoming request for proposal (RFP) for a new CPA and the launch of a major project to streamline rebate processing by working with in-house talent on the development of a rebate processing application. The November meeting consisted of a program update on 2022 rebate performance

as well as outreach and education activities.

The Company demonstrated its commitment to an energy-efficient future through continued participation in the North American Gas Heat Pump Collaborative (Collaborative) and the Energy Solutions Center (ESC) Gas Heat Pump Consortium. Both groups are focused on accelerating the introduction and adoption of the most near-term, highly efficient, lower emission, gas technology: gas heat pumps. The Company promoted educational gas heat pump webinars to over 300 industry partners to raise awareness about this technology. The Company also participated in the member-driven collaboration Emerging Technology Program (ETP) facilitated by GTI Energy (GTI), to accelerate new emerging technologies to expand energy saving opportunities for Intermountain Gas customers.

This report details the 2022 Energy Efficiency (EE) Portfolio performance, cost-effectiveness testing, and outreach and education activities of the Residential and Commercial Energy Efficiency Programs.

# INTRODUCTION

Intermountain Gas Company, a subsidiary of MDU Resources Group, is a natural gas distribution company serving over 410,000 residential, commercial, and industrial customers in 74 different communities across Southern Idaho since 1955.

In addition to reliably providing affordable and safe natural gas for home space and water heating, 2022 marked the fifth year of delivering money and energy saving opportunities through the Energy Efficiency Program at Intermountain. The Program's mission to secure cost-effective therm savings provides a two-fold benefit to customers. Individual customers benefit by reducing energy use and realizing long term savings through lower monthly bills by installing high-efficiency equipment. All customers benefit from the efficient use of natural gas by maximizing today's assets and delaying the need for expensive system upgrades.

The Residential Program was approved by the Idaho Public Utilities Commission (Commission) and went into effect on October 1, 2017. All customers receiving natural gas through the Company's residential rate schedule were eligible to participate in the Program. The Program offers rebates for natural gas equipment meeting specific high-efficiency requirements and can be applied to replacement equipment, conversions from other fuel sources, and new construction. The Residential Program also offers rebates for the construction of residential homes that meet specific energy efficiency performance targets.

The Commercial Program was approved by the Commission on March 2021 and went into effect April 1 of the same year. All customers receiving natural gas through the Company's commercial rate schedule were eligible to participate in the Program. The Commercial Program offers three space heating rebates and three commercial kitchen equipment rebates.

## Cost-Effectiveness Testing Methodology

Intermountain's objective is for all rebates to have benefit/cost ratios equal to, or greater than, one when measured by the Utility Cost Test. The UCT measures cost-effectiveness from the utility company's perspective and takes into consideration avoided supply costs, program administration costs, and incentives paid by the utility. Rebates undergo cost tests at several stages: preliminary design, implementation, annual review, and during the Evaluation, Measurement and Verification study (EM&V.) The cost-effectiveness of rebates is also evaluated based on the customer's perspective using avoided supply costs, program administration costs, and net participant costs in a test commonly referred to as the Total Resource Cost Test (TRC.) The TRC is not the primary cost test used for decisions regarding the inclusion of rebate offerings. In calculating the UCT and TRC, Intermountain relies on the calculations outlined in the California Standard Practice Manual and the National Action Plan for Energy Efficiency's (NAPEE), Understanding Cost-effectiveness of Energy Efficiency Programs: Best Practices, Technical methods, and Emerging Issues for Policy-Makers.

To conduct cost-effectiveness testing for the respective programs, the Company assigned expenses to each Program through a two-step process: direct assignment and by an expense allocation. The Company first identified and direct assigned expenses to the respective Programs. For example, the Company purchased a mailing list of restaurants in the Company's service territory in order to send promotional material about commercial kitchen equipment rebates. This expense was applied directly to the Commercial Program expense workorder. Likewise, all expenses related specifically to Residential Program activities, were charged to the residential workorder.

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To comply with Order No. 35663 to "assign EE costs when possible or provide explanations as to why costs are not assignable," the Company direct assigned as many Program expenses as possible as well as re-examined the allocation that was being used for expenses that could not be direct assigned.

When possible, expenses are applied directly to the related program. Residential customer promotions like engagement activities or email campaigns are direct expensed to the residential program. As are expenses for training webinars covering specific topics like, "Whole House and Attic Ventilation," where the program relevance and applicability is apparent. The Company also developed guidelines to directly apply expenses as they occur, primarily driven by the audience of the activity. Any expenses related to participation or promotion in the Building Contractor Association, focused on residential home building, is expensed to the Residential Program. Commercial customer email campaigns, as well as, promotional and educational activities related with ASHRAE or AIA, whose primary audience is engineers and architects, is expensed to the Commercial Program. Community-wide events are expensed to the residential program as that is the primary audience.

Labor is the largest expense that could not be direct assigned. The Energy Efficiency Portfolio, which includes both the Residential and Commercial Program, is delivered and administered by all EE staff, no team member works exclusively on either the Commercial or Residential program. This is true for both full time energy efficiency employees and the ESR team. ESRs engage in business development for both the residential and commercial sector and also promote the relevant energy efficiency program to those customers. This has allowed the Company to leverage the expertise and flexibility of the team to promote and educate about either program as the opportunities arise, creating a one-stop-shop for customers.

While efficient, this model of program delivery does present some challenges in the ability to directly apply expenses as they occur. The main challenge to direct assigning expenses is the administrative time required to do so. The following examples demonstrate why labor expenses are more difficult direct expense. ESRs out in the field take a phone call from a commercial customer in-between visiting a residential customer and a developer. Rather than referring the customer to another contact, they are able to respond to the customer at that point and time. Program promotion at Chamber of Commerce events is an audience primarily related to business, and expenses related to this event would on the surface apply to the commercial program, but it is not uncommon to also field questions about the residential program as attendees are often also Intermountain residential customers. The Company may spend time with a vendor designing and negotiating ad placement for an ad campaign for both the commercial and residential programs, and while the specific ads can and are direct assigned to the appropriate program, expenses for the labor spent developing the general campaign are more difficult to isolate by program. For these reasons, the Company focused on applying the appropriate allocation ratio to shared expenses.

Expenses related to travel, training, meals and lodging are much smaller than labor and are primarily investments in activities that cover both commercial and residential topics. Training webinars with AESP, for example cover general program administration topics like program outreach or EM&V, that are relevant to both Programs. Emerging Technology Program (ETP) member meetings with the Gas Technology Institute-Energy (GTI) and the Energy Solutions Center also cover both residential and commercial equipment and technology discussions.

Promotional items (like pens, pencils, banners) are branded with Intermountain Gas Energy Efficiency logo, which does not specify commercial or residential, and the web address used on promotional items points to a webpage that references both the commercial and residential program so that these items can be used for both residential and commercial events. See Figure 1 and 2. This has allowed the Company to leverage price breaks for ordering greater quantities and avoiding additional set up fees, rather than ordering and managing individual program specific materials and promo items. Booth kit items like tablecloths are used for both commercial and residential events and professionally laundered on an as needed basis, rather than a per event basis. Rather than maintain and manage two inventories of promotional items for each program, there is only one stock of inventory. Meetings about energy efficient technologies, like gas heat pumps, consist of commercial and residential sector applications together.

The Company also re-evaluated the allocation that was being used for expenses that could not be direct assigned. When the Company launched the Commercial Program in 2021, Intermountain used an 80/20 expense allocation, 80% of expenses to the Residential Program and 20% to the Commercial Program. Without any history on which to base an expense allocation, the allocation was based on the 2018 Conservation Potential Assessment estimate that attributed 80% of potential savings to the Residential Program and 20% to the Commercial Program. The uptake of the Commercial Program was much slower than anticipated. For this reason, and based on Staff recommendation, the Company prioritized re-evaluating the expense allocation. Seeking a way to track the activities, or labor, of the ESR team, the Company conducted an analysis of service starts recorded in Construction Tracking. In 2021 there were 11,983 residential service starts and 568 commercial starts or a 95% and 5% split between residential and commercial activity. Assuming secured therm savings also reflect the effort, or labor, applied to promotion and rebate processing, program delivery and administration also very closely reflected the residential/commercial split witnessed in the analysis of service starts. Total estimated therm savings for the

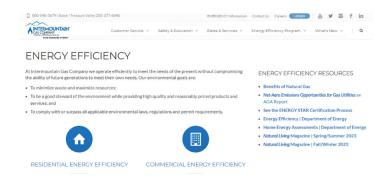


Figure 1. Webpage referencing the commercial and residential programs



Figure 2. Branded pen and pencil samples

Energy Efficiency Portfolio were 652,650 therms: 615,806 attributed to the Residential Program and 36,844 from the Commercial Program, or a 96/4 split between the two programs. Since service starts represented actual activity, or labor, the largest program expense, any expense that could not be direct assigned was allocated on a basis of 95% to the residential program and 5% to the Commercial Program. As the Portfolio grows to a size where the Company can afford separate staff dedicated to each program, the Company will begin to directly assign labor costs for program-specific employees.

Program outreach and education activities for both the Residential and Commercial Energy Efficiency Programs are contained in this report. Together, the Residential Program and the Commercial Program make up the Energy Efficiency Portfolio. Any Program level discussion or reporting will specify Residential or Commercial Program. For simplicity, Program reporting is separated into two distinct sections which will cover Program funding, Program cost-effectiveness, individual measure cost-effectiveness, lessons learned as well as Program outreach, awareness, and education.

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# RESIDENTIAL ENERGY EFFICIENCY PROGRAM

The Residential Energy Efficiency Program is funded by the Energy Efficiency Charge (EEC-RS) rider, a monthly per therm charge to residential customers. As of June 30, 2022, the Company had an over-collected EEC-RS Program balance of \$4,893,882. The over-collected balance resulted from: 1) actual therm sales higher than the forecast used to calculate the current EEC-RS, and 2) the entire, then-current, under-collected balance of \$1,097,907 was included in the determination of the EEC-RS rate rather than amortizing the balance over time. Additionally, the large revisions to the Residential Program that went into effect April 2021 changed the rebates and rebate amounts upon which the previous forecast was based. To reduce the \$4,893,882 over-collection, the Company completed a one-time customer refund of \$4,850,000 of the over-collected balance. In addition, to more accurately match ongoing revenues with expenses, the Company filed to decrease the residential EEC rate. On October 1, 2022, the EEC was reduced from \$0.02093 per therm to \$0.01564 per therm. The Company will continue to monitor fluctuations in the rider balance to keep rates as stable as possible and avoid excessive over or under collections balances. Table 1 provides detailed information on the 2022 Rider balance.

## Residential Energy Efficiency Program

In this section, 2022 performance, costeffectiveness, and lessons learned will be covered for each rebate. Program outreach and promotional activities by target audience are also included.

Cost-effectiveness testing was conducted on all rebates paid in 2022. The Residential Program, as an entire portfolio, shown in Table 2, was cost-effective based on the UCT analysis with a benefit-to-cost ratio of 1.3. The TRC benefit-to-cost ratio was 0.4. With the exception of the furnace incentive, all of the residential rebates were either revised or new to the Program starting April 2021, therefore year to year rebate counts reported here compare 9 months of 2021 to the full 12 months of 2022.

Revenue	\$ 5,738,001
Program Expenses	
Residential Rebates	\$ 2,555,389
Labor	618,141
Program Delivery	27,185
Special Studies	
Market Transformation	23,750
Direct Expenses	47,179
Total Program Expenses	\$ 3,271,644
2022 Rider Deferral	
Over/(Under) Collection	\$ 2,466,357
Prior Year Rider Balance	
Over/(Under) Collection	\$ 2,834,164
Residential Rider Refund	
	\$ (4,850,000)
Rider Account Balance	
Over/(Under) Collection	\$ 450,521

Rebate	Residential Program						
	Therm Savings	Annual Therm Savings	U	CT Benefits		UCT Costs	UCT Ratio
Whole Home Tier I	161	161	\$	1,265	\$	990	1.3
Whole Home Tier II	128	179,072	\$	1,407,149	\$	1,105,571	1.3
Furnace - 95% AFUE	87	273,876	\$	1,868,195	\$	1,385,933	1.3
Combination Boiler - 95% AFUE	155	930	\$	6,753	\$	5,342	1.3
Boiler - 95% AFUE	159	795	\$	6,247	\$	4,451	1.4
Storage Water Heater	38	1,216	\$	6,036	\$	6,568	0.9
Tankless Water Heater Tier I	65	37,050	\$	291,139	\$	236,697	1.2
Tankless Water Heater Tier II	58	870	\$	6,836	\$	5,854	1.2
Smart Thermostat	44	121,836	\$	529,128	\$	521,434	1.0
		615,806	\$	4,122,748	\$	3,272,840	1.3

### **Residential Rebates**

#### Whole Home Tier I Incentive

The Whole Home Tier I incentive provided residential customers a \$900 rebate for new construction homes that met the following criteria:

- HERS rated
- Air sealing at or below 3 ACH at 50 Pa
- Ceiling insulation at or above R-49
- Ducts and air handler located inside conditioned space or duct leakage to outside of less than 4 CFM25/100 ft<sup>2</sup> CFA
- Furnace efficiency at or above 97% AFUE

The Company received 1 qualifying application for this incentive during the 2022 Program Year. There were no qualifying Whole Home Tier I rebates paid in 2021. The incentive was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.3. The TRC ratio was 0.6.

### Whole Home Tier II Incentive (New)

The Whole Home Tier II incentive provided residential customers a \$700 rebate for new construction homes that met the following criteria:

- HERS rated
- Air sealing at or below 4 ACH at 50 Pa
- Ducts and air handler located inside conditioned space or duct leakage to outside of less than 4 CFM25/100 ft<sup>2</sup> CFA
- Furnace efficiency at or above 95% AFUE

There were 1,399 rebates paid for this incentive, compared to 263 in 2021. The measure was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.3. The TRC ratio was 0.5.

Builders are also able to "stack-on" rebates for qualifying smart thermostats and water heaters to the Whole Home Tier I or Whole Home Tier II rebate. Of the 1,400 Whole Home rebates issued in 2022, 716 had at least one qualifying stack-on rebate issued.

To simplify certification of energy performance targets, Intermountain leveraged the HERS Index rating system, which measures the same energy performance targets required for the rebate as for a HERS rating. HERS ratings are also verified by an independent, accredited third party home energy rater. Although a HERS rating is required for Whole Home I & II, the Program does not have a HERS Index score threshold requirement. Since measures that do not impact therm savings can be implemented to achieve a HERS Index threshold, the Whole Home rebates instead target the space and water heating equipment and related home energy performance like air change per hour (home tightness) and duct leakage limits that impact therm usage. Another benefit of requiring a HERS Index score is the fact that the HERS score is an easy way for a homeowner or home buyer to compare the energy efficiency performance of a home, much like a miles-per-gallon comparison of a car.

#### Lessons - Whole Home Tier I & II

Upon implementing these energy performance targets it was previously thought the building process change required to meet the ceiling insulation requirement or air change per hour (ACH) target might be the biggest hurdle to builder participation. Instead, feedback from home energy raters indicated ongoing supply chain issues impacted the availability of high-efficient equipment in 2022 often preventing builders from meeting the 97% AFUE furnace equipment requirement of Whole Home Tier I. One rater reported wait times in excess of 12 weeks. This seemed to match analysis of Whole Home applications. There were 132 Whole Home applicants that did not meet the higher Whole Home Tier II rebate amount because they did not meet the 97%AFUE furnace requirement. Three other Whole Home II applicants did not meet Whole Home Tier I requirements due to either ACH or attic insulation requirements.

#### **Furnace Incentive**

The furnace incentive provided residential customers a \$350 rebate for the installation of a high-efficient natural gas furnace with a minimum efficiency rating of 95% AFUE. A total of 3,148 furnace rebates were issued by the Company, an increase compared to 2,704 rebates the previous year.

The incentive was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.3. The incentive was not cost-effective under TRC analysis, with a benefit-to-cost ratio of 0.4.

#### Lessons – Furnace

Overall, furnace rebates accounted for 40% of the total number of rebates issued. New construction homes accounted for 50% of all furnace rebates.

#### **Boiler - 95% AFUE Incentive (New)**

The Boiler incentive provides customers an \$800 rebate for the installation of a 95% AFUE or greater efficiency boiler. There were 5 rebates issued in 2022, compared to 3 issued in 2021.

The incentive was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.4. The incentive was also cost-effective under the TRC analysis, with a benefit-to-cost ratio of 1.0

#### Lessons - Boiler

The Boiler incentive was added to the offering based on customer and contractor feedback. Because a combination boiler cannot be installed in certain retrofit situations, the Company added this offering to promote efficient space heating when installation of a standard furnace or combination boiler ins not an option.

#### **Combination Boiler - 95% AFUE Incentive**

The Combination Boiler incentive provides customers an \$800 incentive for the installation of a 95% AFUE or greater efficiency combination boiler (combiboiler.) There were 6 incentives issued in 2022.

The incentive was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.2. The incentive was not cost-effective under the TRC analysis, with a benefit-to-cost ratio of 0.3.

#### Lessons - Combination Boiler

This offering is for a specific piece of equipment used for both space and water heating, and as such lacks awareness and may be limited by size and capacity to specific instances where it can do both jobs.

#### **Smart Thermostat Incentive**

The smart thermostat incentive provided residential customers a rebate of up to \$100 for the installation of an Energy Star Certified smart thermostat. There were 2,769 rebates issued during 2022. There were 596 rebates issued in 2021.

The incentive was cost-effective under the UCT, with a benefit-to-cost ratio of 1.0. It was not cost-effective under the TRC analysis, with a benefit-to-cost ratio of 0.6.

#### Lessons - Smart Thermostat

This incentive makes up approximately 35% of the total residential rebate count. Of the 2,769 rebates approximately 57% are installed at new construction.

## **Storage Water Heater Incentive**

The storage water heater incentive provided residential customers a \$115 rebate for the installation of a storage water heater with a minimum efficiency rating of 0.68 UEF. A total of 32 rebates were issued during 2022, compared to 12 rebates in 2021.

The incentive was not cost-effective under the UCT analysis, with a benefit-to-cost ratio of 0.9. The incentive was not cost-effective under the TRC analysis, with a benefit-to-cost ratio of 0.4.

#### Lessons - Water Heater

High Efficiency storage water heaters that require power venting may present a potential barrier to participation if the installation of an electrical outlet is also required. A new high-efficiency storage water heater that does not require power venting is now available on the market but may lack awareness and availability. This information was shared with ESRs to help raise awareness about this new option. New construction accounted for 81% of storage water heater rebates issued.

#### **Tankless Water Heater Tier I Incentive**

The Tankless Water Heater Tier I incentive provided residential customers a \$325 rebate for the installation of a condensing tankless water heater with a minimum efficiency of 0.91 UEF. There were 570 rebates paid in 2022, compared to 142 incentives paid in 2021.

The incentive was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 1.2. It was not cost-effective under the TRC analysis, with a benefit-to-cost ratio of 0.3.

#### Tankless Water Heater Tier II Incentive

The Tankless Water Heater Tier II incentive provided residential customers a \$300 rebate for the installation of a condensing tankless water heater with a minimum efficiency rating of 0.87 UEF, and a maximum efficiency rating of 0.90 UEF There were 15 rebates issued in 2022, compared to 4 rebates issued in 2021.

The Tankless Water Heater Tier II incentive was costeffective under the UCT analysis, with a benefit-tocost ratio of 1.2. It was not cost-effective under the TRC analysis, with a benefit-to-cost ratio of 0.4.

#### Lessons - Tankless Water Heater

**Tier I** -The installation of tankless water heaters in new construction continues to increase. New construction accounted for 75% of all Tier I Tankless Water Heater rebates, compared to 49% in 2021. An increasing number of builders and consumers are choosing highefficiency water heating options. Like most equipment, installation of a tankless water heater is often easier in new construction than in a retrofit situation.

**Tier II** – Uptake of this rebate has been slow. The decision to offer an additional water heating incentive at a lower efficiency was based on the recommendation from the EM&V and the EESC. Low uptake may be an indication that the difference between the initial purchase price of a Tier I and a Tier II tankless water heater is inconsequential relative to the higher-efficiency option with a higher incentive. The Company will continue to monitor performance of this rebate offering.

#### Lessons – Residential Program

In addition to growing participation in the rebate program to secure cost-effective savings the Company also strives to embrace efficiency in its processes. To improve rebate validation and streamline rebate payment processing with internal systems, the Company participated in a major project to develop a rebate processing application (rebate app). Rather than purchase a third-party product with a likely ongoing subscription use fee, that might not adequately meet Program needs, the Company embarked on a development project with the in-house Enterprise Information Technology (EIT) department to develop the rebate app. This user interface will allow the Company to validate customers, build and maintain customized libraries of the most frequently rebated equipment brands and models, builders, contractors, and home raters. Once rebate applications are entered and validated, the rebate app will streamline payment approval, and payment processing, record keeping of payment and storage of support documents, such as the rebate application, invoices, pictures, and notes. Phase I, or the back-office process of the rebate app, is expected to complete in 2023. The Company anticipates beginning work on Phase II of the rebate app, which will be the customer facing component that will enable customers to apply for rebates from their online customer account late 2023.

## **Energy Efficiency Team**

Energy Efficiency continued its partnership with Energy Services Representatives (ESR) to provide a one-stop-shop experience for builders, contractors, and customers. Since EE and ESRs pursue the same audiences, rather than duplicate efforts, energy efficiency leverages the ESRs daily interactions with builders, developers, contractors, and customers to promote energy efficiency. ERSs also participate in community events like builder contractor association events, chamber of commerce, and industry trade shows to promote energy efficiency.

The EE team received valuable feedback from the field by the ESRs. Through their feedback EE is able to keep a finger on the pulse of energy efficiency in the service territory, such as trends in attitudes about energy efficiency, frequently asked questions about equipment or about the Program, and any barriers to participation. This allows EE to better identify areas for improvement as well as gauge general awareness about energy saving opportunities within these customer groups. The monthly check-in meeting provided an excellent opportunity for this kind of information sharing, as well as any Program updates.

The EE and ESR team came together for an inperson training meeting for the first time since 2019. The meeting agenda was shared with Business Development to cover the energy efficiency topics of today and tomorrow. Energy efficiency topics ranged from a review of current equipment and new construction rebates to the role of energy efficiency for a decarbonized future. Emerging technologies discussion included a brief presentation from a gas heat pump manufacturer. The group also brainstormed additional outreach methods and opportunities for EE and the ESR teams.

The group identified IGC employees as one of the most under-utilized means of outreach to raise awareness about the Program. As a result, the ESRs conducted a brief presentation about the EE Program at the monthly employee safety meeting in each of their respective districts. The presentation had a two-pronged approach: to raise awareness of the EE Program with employees, encouraging them not only to take advantage of the Energy Efficiency Program for their own home but to also share energy saving opportunities with friends and family, and to provide EE awareness to employees who also encounter customers in their day-to-day duties, but do not have official EE duties. The EE team also conducted an employee awareness campaign which will be covered in detail in a later section of this report.

# **Energy Efficiency Outreach and Education Activities**

In 2022, the EE Program focused outreach efforts by audience: employees, new and existing customers, builders and the home buying community, kids, business community and the community at large. Outreach efforts varied from social media to email campaigns as well as attending community events and specific event sponsorships.

## **Employees**

To raise awareness about the Energy Efficiency Program with employees, EE conducted an email campaign over a period of three weeks. Employees were asked to take an Energy Efficiency quiz and were entered into a drawing for 1 of 3 \$25 gift cards in exchange for their participation, regardless of quiz results. Quiz questions focused on both Residential and Commercial Programs, available equipment rebates, where to find information about rebates, deadlines for applying for rebates, and the purpose of the Energy Efficiency Program. About 100 employees participated in each round of the three rounds of the Energy Efficiency quiz. While almost all respondents correctly identified the purpose of the program, to help customers save energy and money and to visit the website for information about rebates, respondents incorrectly identified high-efficiency windows as a program rebate. Fortunately, after each quiz response, correct answers were revealed to confirm right answers, or remedy wrong answers.

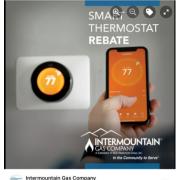
#### **Customers**

To ensure all customers are aware of the Energy Efficiency Program, a Program brochure was included with each new customer letter. These letters are sent to customers that start new gas service for the first time, as well as customers that have changed locations. There were 33,333 energy efficiency brochures sent with new customer letters in 2022.

The Company also maintains a presence on social media, dedicating a monthly post to an energy efficiency topic. Energy Efficiency also uses social media to promote special engagements like the "Hungry for Savings" sweepstakes or energy efficient homes featured in the Parade of Homes. Sample posts are shown in Figure 3.







Intermountain Gas Company

Published by Buffer O October 25, 2022 . O

Get Smart with energy efficient Programmable Thermostats. Use devices like your phone or smart watch to make adjustments to

Figure 3. Social Media Samples

Energy Efficiency also conducted its annual customer engagement activity in conjunction with the annual bill insert. The 2022 bill insert/customer engagement theme was "Hungry for Savings?" A bill insert, shown in Figure 4, was sent with all paper bills and a digital version was included for all online bill payers. The insert provided the list of all residential rebates and information about the Home Energy Rating System (HERS), the energy efficiency score of a home which is also a requirement of the new construction Whole Home rebate. The insert also encouraged customers to take an energy efficiency quiz to be entered into a drawing for a \$100 grocery gift card. The quiz consisted of three True/ False questions about home energy usage. Upon



Figure 4. 2022 Residential Bill Insert

providing a quiz answer, along with the correct answer a related energy efficiency tip was revealed. These tips focused on ways to save energy other than equipment replacement such as easy, Do-it-Yourself projects like checking air filters, fixing water leaks and sealing window and door leaks. Customers that completed all three quiz questions were automatically entered in the grocery card sweepstakes, regardless of whether quiz responses were correct. Ninety-five percent of responses were correct on all three questions.

To promote the "Hungry for Savings" campaign, in addition to paper bill inserts with each residential bill, 211,248 customer emails were sent, and the campaign was promoted on Facebook, Figure 5. The email campaign had an open rate of 60%, a click thru rate of 10% and over 27,000 page views. Overall, the campaign resulted in over 12,000 energy efficiency quiz participants, which far outpaced the best response rate of approximately 6,000 customer responses to the 2019 engagement activity. There was also a significant increase in web activity during the month of the bill insert, as measured by web Analytics, Table 3.



Figure 5. Social Media Customer Engagement

To attempt to gage the effectiveness of outreach methods, there is a question on the rebate application, "How did you hear about the Program?" "Equipment Dealer/Installer" is the most frequent response to this question and was removed from Table 4 to focus on the increase in the following categories after the October bill insert/customer engagement activity: bill insert, direct mail (email), social media, and website. There was also an increase in rebate applications after the bill insert/customer engagement activity in October 2022. Table 4 and Table 5 provide a visual representation of this analysis.

Table 3. 2022 Web Analytics for October Engagement

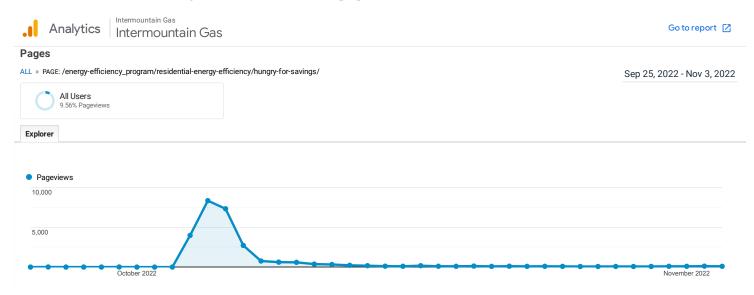


Table 4. "How did you hear about the Program" Responses

"How did you hear about the Program?"

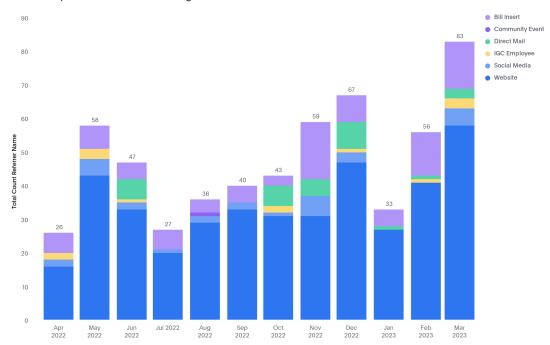
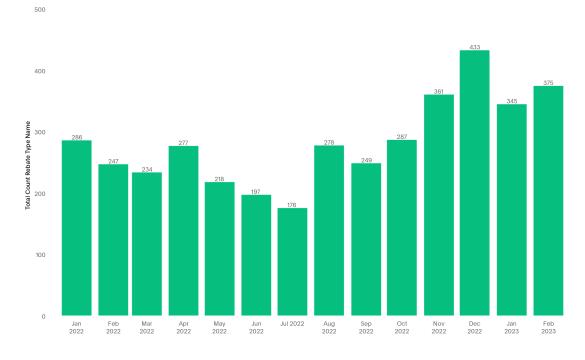


Table 5. Rebates Received post October Customer Engagement

Rebates Applied for Monthly



# **Builders and the Home Buying Community**

This was the first full year of the Whole Home Tier I and Tier II rebate offering, as 2021 was a transition year of retiring the Energy Star Certified Home requirement and implementing the energy performance target requirements for the revised Whole Home Tier I & II.

Partnering with the Building Contractor Associations (BCA) continued to be one the best outreach methods to promote the Program with home builders and home buyers. The Company is a member of five regional BCAs across the service territory as well as the state organization, the Idaho Home Builder Association (IHBA). To leverage the attendance of BCA members from across the state all in one location, Intermountain hosts an information table at the state conference to raise awareness about the Program. In fact, a Whole Home builder new to the Program in 2022 noted "IBCA meeting" on their participation agreement regarding "how did you learn about the program?"

All five BCAs essentially operate in the same way, with similar events. Participation on the Associate's Council, a committee of non-builder members, provided networking opportunities with "builder adjacent" industries such as HVAC contractors, real estate agents, home lenders, home energy raters and appraisers. Three signature BCA events provided the most direct access to builders, the decision makers when it comes to implementing energy efficiency measures in new construction, the builder expo, shown in Figure 6, the Parade of Homes, and the annual golf tournament. The builder expo is a mandatory event for builders

No place like home.

No place

Figure 6. Building Contractor Builder Expo Event

participating in the Parade of Homes (Parade, POH) and provided an opportunity for Intermountain to promote energy efficiency for homes featured in the Parade of Homes. This event allowed for one-to-one conversations with builders about the Energy Efficiency Program. Since different builders participate in the Parade each year, this is an opportunity to reach new builders each year. At one builder expo, half of the builders in attendance were learning about the IGC Energy Efficiency Program for the first time.

The Parade of Homes is an excellent opportunity to engage with energy efficient builders, as well as the home buying community, about home energy efficiency. The energy efficient features of a home, let alone a show home, aren't something one can easily observe like granite countertops or a spacious kitchen. Due to the difficulty of highlighting energy efficiency, it is often an overlooked attribute of the home. In 2022, the Company partnered with Parade builders who earned IGC rebates and provided signage and informational materials to be shared with POH visitors. Signs highlighting energy efficient equipment in the home and a HERS certificate, see Figures 7 and 8, were displayed with the home's HERS score and energy savings estimate. One builder even replicated these signs and placed them in all their model homes to raise awareness about energy efficient equipment installed in all their model homes. In Eastern Idaho, during the highest traffic times, the Company hosted an information table in the garage space of a parade home to be available to answer questions and promote the energy efficient aspects of the home with Parade home visitors.





Figures 7 & 8. :Energy Efficiency Signage in Parade Of Homes

The Company placed a full-page ad focused on home energy efficiency in five Parade magazines across the region, with regional distribution counts of 8,000 magazines in Eastern Idaho and Magic Valley each and as high as 63,000 magazines in Canyon County and 132,000 in Ada County, not including visits to the digital magazine version. For the two BCAs that track POH visitors through ticket sales, they reported approximately 15,000 visitors to parade homes in their respective events.

Since builders are busy building homes, they do not typically attend general membership meetings, however they do tend to participate in BCA golf tournaments. The Company continued this successful builder outreach avenue by sponsoring a golf hole at annual BCA golf tournaments, see Figure 9. Each team visits every hole as they progress through the tournament. As a hole sponsor the Company was provided an opportunity to visit with each golf team and promote the Energy Efficiency Program. The Company hosted energy efficiency themed golf games to raise awareness about the Energy Efficiency Program, such as the speed hole, giving a prize to the most "efficient" team. This outreach approach provided an opportunity to expand outreach to more BCA builders beyond the smaller group of Parade builders who attend builder expo events.

In 2022, there were 61 builders who received at least one Whole Home rebate, this number was up from 21 participating builders in 2021. Of the 61 participating builders, 13 were returning builders who received at least one rebate in 2021, resulting in 48 new builder participants in 2022. Builders also have the opportunity to stack on water heating and smart thermostat rebates to the Whole Home rebate. Restructuring of the Whole Home incentive and estimated therm savings did not include high efficient water heating options or

a smart thermostat. In order to capture these therm savings in new construction, water heating and smart thermostat incentives are allowed to be combined with the Whole Home incentive. In 2022, 49 builders opted to maximize savings by adding on either a water heater or smart thermostat, compared to 14 builders in 2021.

Contractors are also valuable partners in energy efficiency when it comes to Program awareness and education with customers. Equipment Dealer/Installer is the most frequent customer response on the rebate application question "How did you hear about the program?" Most contractor outreach is accomplished through industry adjacent events like BCA events, AIA, ASHRAE, industry trainings and through ESRs daily interaction with contractors. In 2022 there were 164 contractors identified on rebate applications, an increase from 96 the previous year. Sixty-five of the contractors were considered returning, and 99 were considered "new," or 2022 was the first time they were the contractor on record for the Program.

The real estate community is another home-builder-adjacent industry that provides another industry for energy efficiency to partner for raising awareness about home energy efficiency. While real-estate licensing and certification have their own continuing education program regarding "green building" or home energy efficiency, the Company continues to reach out to the real-estate community to raise awareness about energy efficient homes in the Intermountain Gas service territory. For the first time in 2022, Energy Efficiency sponsored breakfast at the Boise Regional Realtors Economic Summit, which included an opportunity to share Program brochures, conference attendance, and sponsor promotion at the beginning of the conference, see Figure 10.



Figure 9. Energy Efficiency Golf Hole Sponsorship



Figure 10. Boise Regional Realtors Economic Summit Sponsorship

#### **Community**

In addition to promoting energy efficiency with specific target audiences, the Company promoted energy efficiency with the community at large, with kids, and with the business community. The Company participated in the Buy Idaho Show at the Capitol, a free show open to the public to showcase Idaho products. At events like the Capitol Classic, a fun run for parents and kids, and the Meridian Public Works Expo, Figure 11, the Company incorporated kid-friendly handouts like energy-saving themed coloring books, Figure 12, to promote easy ways to save energy at home and answered questions about saving energy. Events with membership organizations like the Chambers of Commerce provided opportunities to reach out to the business community by hosting information tables at the Boise Metro Chamber golf tournament, the Leadership Boise golf tournament, and the Meridian Chamber State of the City annual event, as well as the Pocatello Chamber Law Enforcement Appreciation BBQ, Figure 13.

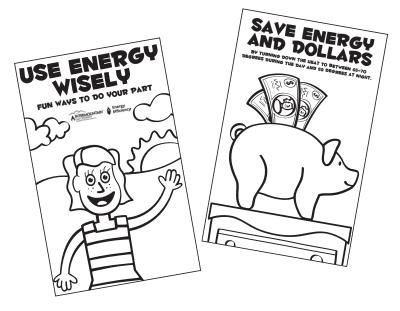


Figure 12. Energy Efficiency Coloring Book Sample



Figure 11. Meridian Public Works Expo Info Table



Figure 13. Pocatello Law Enforcement Appreciation Community BBQ

# COMMERCIAL ENERGY EFFICIENCY PROGRAM

The Commercial Program was approved by the Commission and went into effect as of April 1, 2021. All customers receiving natural gas through the Company's GS-1 rate class were eligible to participate in the Program through 2022. The Commercial Program offers rebates on natural gas equipment meeting specific high-efficiency requirements and can be applied to replacement equipment, conversion from other fuel sources, and new construction.

The Commercial Program is funded by the Energy Efficiency Charge (EEC-GS) rider, a monthly per therm charge of \$0.00320 to commercial customers. The EEC-GS went into effect at the launch of the program April 1, 2021. The EEC-GS ended the year with an over-collected balance of \$463,938. In 2022, the Company paid out \$503,147 directly to customers in the form of incentive rebates. Table 6 provides full details of the 2022 Commercial Rider balance.

In this section, 2022 performance, cost-effectiveness, and lessons learned will be covered for each rebate. Commercial Program outreach, promotion and education activities are also included.

# **Commercial Energy Efficiency Program**

The Commercial Program, as an entire portfolio, was cost-effective under the UCT analysis, with a benefit-to-cost ratio of 2.0. The portfolio was also cost-effective under the TRC analysis, with a benefit-to-cost ratio of 1.8, as shown in Table 7.

Revenue	\$ 472,346
Program Expenses	
Commercial Rebates	\$ 53,147
Labor	32,534
Program Delivery	2,321
Special Studies	
Market Transformation	1,250
Direct Expenses	3,745
Total Program Expenses	\$ 92,997
2022 Rider Deferral	
Over/(Under) Collection	\$ 379,349
Prior Year Rider Balance	
Over/(Under) Collection	\$ 84,589
Rider Account Balance	
Over/(Under) Collection	\$ 463,938

Rebate	Commercial Program						
	Therm Savings	Annual Therm Savings	U	CT Benefits		UCT Costs	UCT Ratio
Condensing Unit Heater	409	-	\$	-	\$	-	-
Boiler Rest Control	1,212	-	\$	-	\$	-	-
High-Efficiency Condensing Boiler	1,295	9,064	\$	71,225	\$	18,710	3.
Fryer - Energy Star Certified	508	9,652	\$	44,949	\$	17,214	2.
Steamer - Energy Star Certified	1,054	-	\$	-	\$	-	
Griddle - Energy Star Certified	76	-	\$	-	\$	-	
Energy Saving Kit	53	18,128	\$	66,597	\$	56,168	1
		36,844	\$	182,771	\$	92,092	2.

#### Rebates

#### **Condensing Unit Heater Incentive**

The Condensing Unit Heater incentive offers customers a \$1,500 rebate for the installation of a high-efficient unit heater with a minimum efficiency rating of 90% AFUE. The Company received no applications for the installation of this piece of equipment in 2022.

#### **Boiler Reset Control Incentive**

The Boiler Reset Control incentive offers customers a \$350 rebate for the installation of a boiler reset control. The Company received no applications for the installation of this piece of equipment in 2022.

#### High Efficiency Condensing Boiler Incentive

The High Efficiency Condensing Boiler incentive offers customers a \$4.50/kBTUh incentive for the installation of a high-efficient condensing boiler with a minimum efficiency rating of 90% Thermal Efficiency (TE) and a minimum input of 300,000 BTU. The Company issued 7 rebates in 2022. Two of the rebated boilers were in the healthcare sector, and the other five in the education sector.

The incentive was cost-effective under the UCT analysis, with a cost-effectiveness ratio of 3.8. The incentive was also cost-effective under the TRC analysis, with a cost-effectiveness ratio of 2.0.

## Fryer - Energy Star Certified Incentive

The Fryer incentive offers customers an \$800 incentive for the installation of an Energy Star Certified Fryer. The Company issued 19 rebates during 2022.

The incentive was cost effective under the UCT analysis, with a cost-effectiveness ratio of 2.6. The incentive was also cost-effective under the TRC analysis, with a cost effectiveness ratio of 15.2.

#### Steamer - Energy Star Certified Incentive

The Steamer incentive offers customers a \$1,100 incentive for the installation of an Energy Star Certified Steamer. The Company received no applications for the installation of this piece of equipment in 2022.

#### **Griddle - Energy Star Certified Incentive**

The Griddle incentive offers customers a \$200 incentive for the installation of an Energy Star Certified Griddle. The Company received no applications for the installation of this piece of equipment in 2022.

#### **Energy Saving Kits**

In order to jump start awareness building about the Commercial Energy Efficiency Program, the Company offered complimentary energy savings kits (ESK) to commercial customers. The kits contained easy to install Do-It-Yourself devices: kitchen faucet aerators (2), bathroom faucet aerators (2), a pre-rinse spray valve, pipe tape and a digital water heater thermometer. The Company started with 350 ESKs. At the end of 2022, 348 of the 350 kits were placed with customers. The kits were cost effective with a UCT of 1.2, and a TRC of 1.1. This measure was a pilot program offered until all kits

were placed. Rather than carry the offering into another Program year, the Company ended this offering December 31, 2022, with two kits remaining in stock. These two kits were charged to the promotional budget and no savings were attributed to these kits. See Figure 14 for a sample of Commercial Energy Efficiency email.



Figure 14. Commercial Customer email

#### Lessons - Commercial Program

Condensing Unit Heaters require special collection of the condensate generated from the operation of the unit, which poses a potential barrier to participation for the incentive. There is equipment readily available in the market called High Temperature Heating and Ventilation (HTHV), that does not require condensate collection. The Company will explore the energy saving potential of this equipment in the next CPA.

Contractor and customer feedback indicated that the Program lacks offerings for small/light commercial customers. These customers are on the commercial rate, but usage is smaller and may not require a 300K Btu/h boiler, but smaller sized equipment such as a forced air furnace or water heater. The Company will address the potential for energy saving opportunities in the "light/converted" commercial sector in the next CPA.

The Company is still learning about its customers, their interest in energy efficiency and more importantly getting energy efficiency messaging to the right audience. Unlike the Residential Program where it is relatively easy to reach out directly to the decision maker, the homeowner, it is not as easy in the commercial sector. Although Intermountain has a customer contact on file, the commercial customer contact on record isn't necessarily the person who manages equipment for the company or is familiar with building equipment. This sentiment was echoed in EESC feedback indicating commercial customers aren't always familiar with the equipment they have on site or what equipment might be eligible for an energy efficiency upgrade. The Company has identified that the next step to make communications more effective will be to identify building operators or facility managers who are more familiar with building equipment and operations.

Gas usage by commercial customers varies greatly by commercial sector. In order to tailor messaging to customers, the Company created a customer database to assign Standard Industrial Classification (SIC) codes, a U.S. government code used to identify the primary business purpose, to commercial customers. This information will allow the Program to customize communications by sector.

Like the Residential Program, contractors and installers play a key role in promoting energy efficient options. And, like the Residential Program, while savings opportunities exist in the equipment replacement market, considerations regarding energy efficiency are also important in the design phase. For this reason, the Company also implemented several outreach efforts to engineers and architects in the commercial sector.

## Commercial Program Outreach, Awareness and Education

Intermountain continued outreach to commercial customers through traditional means such as bill inserts, emails, and bill onserts, see a sample onsert in Figure 15. Promotional messaging sent to commercial customers about the Rebate Program was combined with offers for a complimentary ESK to help raise awareness about saving energy in commercial buildings. The Company also sent a Commercial Program brochure as a bill insert and utilized an onsert (promotional message on the utility bill), to promote the Program.

The Company also experimented with customized messaging by purchasing a restaurant mailing list for restaurants in the Intermountain service territory. Over 2,300 postcards, Figure 16, were sent to raise awareness about rebates for commercial kitchen equipment.

It appears that almost every industry organization, or at least those in the Company's target audiences, hosts a golf tournament. The Company attempted to duplicate the success this outreach method provided the Residential Program, with industry partners in the commercial sector. Intermountain sponsored golf holes with two industry partners in the commercial design and engineering space: Association of Architects-Idaho (AIA), Figure 17, and the Idaho Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). These events provided opportunities for one-on-one conversations with industry participants about commercial energy efficiency.

Intermountain was also a conference sponsor, Figure 18, with AIA and ASHRAE. Sponsorship benefits not only included educational opportunities for the Energy Efficiency team through conference attendance, but also offered an opportunity to host an information table to visit with conference attendees. These two types of events provided excellent opportunities to raise awareness about the Commercial Program, as the Program continues to be in an awareness building mode, and the chance to network and leverage industry relationships in the commercial space.



Figure 16. Commercial Food Service Mailer

# Have you received your FREE Energy Savings Kit?

Hurry while supplies last to receive an Energy Savings Kit delivered directly to your business!

Scan the QR code with your smart device to access the simple kit request form. You may also request a kit by visiting www.intgas.com/esk/ Energy Savings Kit includes:

- 1 pre-rinse spray valve
- 2 kitchen aerators
- 2 bathroom aerators
- 1 roll of pipe tape
- 1 digital water & refrigerator thermometer





Figure 17.ASHRAE Golf Hole Sponsorship



Figure 18. Energy Efficiency ASHRAE Technical Conference Sponsorship

The Company combined efforts to raise awareness about the Commercial Energy Efficiency Program with market transformation efforts to increase adoption of gas heat pump technology. Currently, only commercial gas heat pumps are available for purchase. To raise awareness about this technology and availability, the Company promoted a free gas heat pump webinar hosted by the Energy Solutions Center (ESC), to industry partners in the commercial sector, Figure 19. Intermountain provided a unique link to track attendance by member organization, and all attendee data and post webinar surveys were collected by ESC and shared with ESC members. The first webinar was held in May and was promoted by Intermountain to all HVAC contractors (both residential and commercial since most HVAC serve both sectors) participating in the Energy Efficiency Program, which is to say any contractor ever identified on a rebate application. Two HVAC contractors accessed the May webinar through the Company's invitation link. ESC hosted an additional webinar in November 2022. Intermountain again promoted the program to all HVAC Program participants, but also shared this opportunity with contacts established through participation in AIA and ASHRAE. Both organizations sent invitations to the gas heat pump webinar to their full membership. At the November webinar, there were thirty-four customer (non-utility) attendees and nine utility attendees attributed to the Company's invitation link. Additional details regarding webinar take-ways will be provided later in this report.

The Company continues to seek out new and additional audiences to raise awareness about the Commercial Program in this awareness building mode. The Company placed advertisements in the Construction section of the Idaho Business Review Book of Lists, Figure 20, and continues to reach out to other industry related organizations like the Idaho Lodging and Restaurant Association and Food Agricultural Restaurant Association.



Program outreach activities have been met with mixed success. The Company tracked website visits as an indicator of activity effectiveness. Table 8 illustrates increased activity on the Commercial Program webpage after commercial customer emails were sent in July and December. There was a slight increase in web activity after sending the restaurant mailer in September 2022, which promoted commercial kitchen equipment rebates and a commercial kitchen savings calculator.

The Company has identified two areas to improve the effectiveness of commercial outreach activity: proper audience and education. The Commercial Program was promoted via email communications to the commercial customer account contact on record. These contacts are often responsible for the administration of the account, such as account payment, but may not be the building operator or physical plant manager. Other industry partners have indicated that identifying and reaching the building operator or resident equipment manager is a universal challenge in this space. In addition, the customer's knowledge about their own equipment can also be a challenge. In a very specific example, from EESC stakeholder meeting feedback, one customer indicated that while they are receiving the Program energy efficiency messaging,



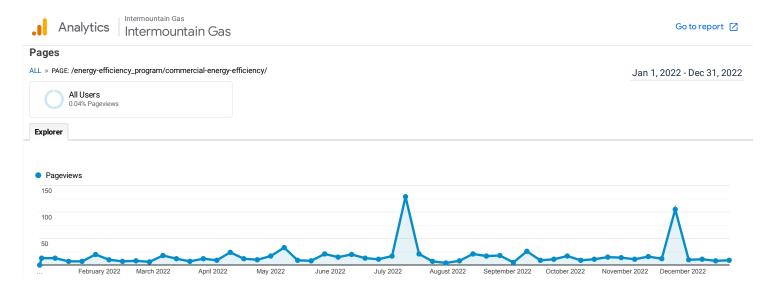
Figure 19. ESC Gas Heat Pump Webinar Invitation

Figure 20. Commercial Program advertisement in Idaho Business Review

just knowing the Company has a boiler rebate isn't enough information, stating, "I know we use boilers, but I didn't know it had to be certain size, or even how boilers are sized, so I didn't know if we would qualify."

As a next step the Company has identified a plan to identify and reach customer building operators and facility managers with energy efficiency messaging. Continuing to build a robust contractor network, as well as Program awareness with architects and engineers, who have the expertise to field specific equipment questions for customers will also be key to Program participation.

#### Table 8. Commercial Website Activity



# ENERGY EFFICIENCY STAKEHOLDER COMMITTEE

Intermountain conducted two meetings with the EESC and one Avoided Cost Subcommittee meeting in 2022.

On March 9, the Avoided Cost Subcommittee (Subcommittee) met regarding the on-going discussion regarding the possible inclusion of distribution costs in the avoided cost calculation. There is a zero assigned as a distribution cost placeholder in the current avoided cost formula. The Company presented a brief history on the Subcommittee's work, before presenting a proposed method to capture variable distribution costs. The Company noted because utilities are unique and there is no "one size fits all" solution or best practice of capturing distribution costs, especially for gas utilities, this remains a challenge to identify. Distribution costs have the least impact on cost-effectiveness testing but require significant effort to identify. After a robust discussion about the proposed method to capture distribution costs, the Company was asked to provide the worksheets to the Subcommittee. Due to the fact the method relied on confidential inputs; the Company was asked to revise the method using publicly available data instead of confidential plan data that could be shared with Subcommittee. The Company revised the distribution cost calculation and shared the new method with the Subcommittee via email along with request for questions and any further explanations of the calculation. Further iterations and discussions did not result in an agreed upon method to capture distribution costs. The distribution cost component for avoided costs continues to be a zero-value placeholder. The Company will review the avoided cost calculation again as part of its Integrated Resource Plan filing process.

The EESC met on May 5 and November 16, 2022. The May meeting focused on a recap of 2021 activities and rebate performance, as well as an update on 2022 rebate performance. The Company stated an interest in exploring a weatherization kit program and fielded questions regarding cost, cost-effectiveness, and suggestions to research how other organizations in Idaho have handled installation and deployment of similar programs.

The November meeting was an opportunity to provide an update on rebate performance for the first three quarters of 2022, as well as an overview of promotion and outreach activities. The Company reported 143 of the 350 the Commercial Energy Savings Kits, a complimentary savings kit for commercial customers upon request, had been placed, with additional ESK promotion planned for later in the year. The Committee also discussed the slower uptake of the Commercial Program and steps being taken to increase awareness and participation in the program. The Company stated plans to increase outreach efforts with design engineer and architect industry partners to continue to raise awareness about commercial energy efficiency savings opportunities.

A synopsis of the Avoided Cost Subcommittee work, and EESC meeting notes can be found in Exhibit 1.

# SECURING AN ENERGY EFFICIENT FUTURE

Intermountain is continually exploring cost-effective energy saving solutions that can be implemented today, in addition to seeking the energy saving measures of tomorrow. The Company participated in several member driven groups, each focused on different stages and efforts of bringing new innovative energy saving products to market:

- The Emerging Technology Program (ETP) is a membership-based utility collaboration governed by GTI Energy (formerly called Gas Technology Institute). The collaborations works to "accelerate the commercialization and adoption of energy efficient technologies," and "provides expertise for program planning, implementation and assessment as well as tailoring initiatives to meet regional needs, support pilots and custom programs."
- Intermountain Energy Efficiency continued membership in North American Natural Gas Heat Pump Collaborative (NAGHPC, Collaborative) since joining as a charter member in 2019. The Collaborative is comprised of 17 dual fuel utilities and energy efficiency program administrators, representing 33% of all U.S. and Canadian gas households.<sup>2</sup>
- MDU Resources Group is a corporate member of the Energy Solutions Center (ESC). ESC is a non-profit organization that promotes energy-efficiency natural gas solutions for use by residential, commercial, and industrial energy users. ESC also creates educational and marketing materials, case studies and training manuals to "enhance the success of those utility customer service professionals responsible for enhancing customer productivity, efficiency, reliability and comfort." Through corporate membership, the Energy Efficiency team is an active member of the Gas Heat Pump Consortium, a member driven group whose objective is to "prepare communication and marketing outreach materials as well as studies and tools to alert and

educate end users, engineers architects, consultants, installers, contractors and trade allies about higher efficiency, lower carbon HVAC option."<sup>3</sup>

The Intermountain Energy Efficiency team participated in the Spring and Fall ETP meetings. These sessions are dedicated to updates on the market readiness status of emerging technologies, as well as the status and outcomes of equipment pilot assessments and demonstrations for residential and commercial HVAC, water heating and commercial food service. The Spring meeting provided an opportunity to visit the GTI Energy End Use Lab designed to "foster the development and advancement of natural gas appliances and equipment, including improvements in efficiency, safety, performance, cost and emissions."

The Collaborative continued work to grow its membership as well as its library of resources. In addition to the NAGHPC Resource Report which outlines the role of gas heat pumps in accelerating decarbonization, the Collaborative also released four additional documents for customers and contractors, to aid in market adoption of gas heat pump technology: a gas heat pump technology opportunity brief, a residential HVAC opportunity brief, a residential HVAC brief on installation considerations, and a gas heat pump water heater consideration for installation. The





Figure 21. Collaborate Educational Collateral

<sup>&</sup>lt;sup>1</sup> Emerging Technology Program • GTI Energy

<sup>&</sup>lt;sup>2</sup> North American Gas Heat Pump Collaborative | Technology for a Cleaner Future

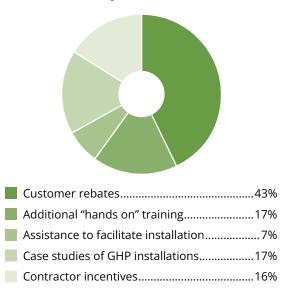
<sup>&</sup>lt;sup>3</sup> Energy Solutions Center | Accelerating Gas Fuel Technologies

opportunity brief highlights gas heat pump benefits that are important to customers such as: heating efficiencies up to 126%, superior performance in cold climates, high reliability, and lower maintenance. These resources and updates on gas heat pump industry news live on the Collaborative website and are publicly available. Another member-exclusive deliverable produced by the Collaborative included a Stakeholder Guide of gas heat pump talking points, to allow members to communicate the benefits of gas heat pumps. Participation in the Collaborative allowed Intermountain to leverage the shared expertise of the group and develop educational resources for Intermountain customers and contractors, more costeffectively and without duplicating industry efforts.

The EE team is an active member of the ESC Gas Heat Pump Consortium. As mentioned earlier in the report, Intermountain partnered with ESC to offer two free gas heat pump webinars. The webinar also provided attendees an opportunity to earn 2.5 professional development hours. The webinar focused on an overview of gas heat pumps, commercially available gas heat pumps, other gas heat pump products and potential savings from gas heat pumps. ESC surveyed all webinar attendees to better understand how utilities can help support the adoption of gas heat pumps. The results of the survey are illustrated in Table 9.

**Table 9.** Attendee Survey Responses after May 2022 Gas Heat Pump webinar, data provided by Energy Solutions Center

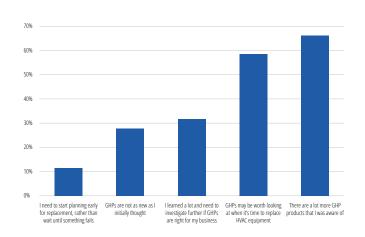
# How can Utilities support you with the adoption of GHPs?



The November post-webinar survey also provided valuable insights from webinar attendees:

**Table 10.** Attendee Survey Reponses after November 2022 Gas Heat Pump Webinar, data provided by Energy Solutions Center

#### **ESC GHP Webinar Survey Take-Aways**



These surveys provided confirmation the Company's gas heat pump investments are in line with the needs identified by key industry players. The Company will continue to address heat pump customer education and awareness as well as installation education for contractors, HVAC engineers and designers to accelerate gas heat pump adoption. The Company plans to continue to leverage the collaborative work with industry experts like the Emerging Technology Program, the Collaborative, and ESC to accelerate gas heat pump technology through the development of proven products, marketing materials, and educational opportunities.



# **ENERGY EFFICIENCY: NEXT STEPS**

The Company strives for continual improvement and opportunities to increase cost-effective savings for Intermountain Gas customers in the ever-evolving environment of energy efficiency. Industry partners, collaborative efforts and an engaged and robust EESC continue to be joint partners in this shared mission.

In order No. 35663, issued in case No. INT-G-22-03, the Idaho Public Utilities Commission deemed the 2021 Program expenses as prudently incurred. The Commission commended the Company "for continuing to adjust its EE Program to deliver cost-effective energy savings to customers, the collaborative efforts of the Company, its EESC and Staff to provide and maintain a DSM program that has value."

In 2023, the Company will complete a Conservation Potential Assessment with the purpose of both providing inputs to the Integrated Resource Plan and as a valuable resource for Program planning. An updated transportation component of the avoided

costs will also be submitted as an exhibit to IRP filings, aligning Program planning with the most recent IRP filing as outlined in Order No. 35663. In addition, the Company will continue to direct assign expenses between the Residential and Commercial Programs and better explain when costs are not assignable.

The Company will also commission an independent 3rd party to conduct an impact evaluation of the high-efficiency furnace and Whole Home new construction measures based on billing analysis.

The Company continues to strive to secure costeffective savings for Intermountain Gas residential and commercial customers, through traditional methods of resource acquisition rebate programs as well as working towards an energy efficient future through market acceleration of energy efficient technologies and equipment.



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