To:	Michael Strom, Stephen Bonanno, National Grid New York
Cc:	Beth Delahaij, National Grid New York
From:	Najoua Jouini, Kimberly Bakalars, Tetra Tech
Date:	April 22, 2021
Subject:	National Grid New York Residential Energy Efficiency Platform program (the Marketplace) – Year 2 Process Evaluation Results

National Grid New York (National Grid) selected Tetra Tech to conduct a process evaluation of the Residential Energy Efficiency Platform (the Marketplace) program over two years to allow National Grid and the program implementer to identify future improvements. The first round of process evaluation was conducted in November 2019[1]. This memorandum summarizes the results of the second round of participant and nonparticipant surveys. The surveys were implemented to help understand customers' experiences and satisfaction with the Marketplace, any barriers to purchasing from the Marketplace, and engagement with the Online Home Energy Assessment program. This memorandum provides a description of the history of the Marketplace, key findings and recommendations, key researchable issues, survey methodology, and detailed findings from the customer survey.

INTRODUCTION

The Marketplace is an e-commerce platform designed to provide an intuitive, visual, and interactive tool to engage National Grid's customers and allow them to purchase energy-efficient products with instant financial incentives and rebates. Customers can purchase small, self-install measures such as thermostats, power strips, water-saving devices, and lighting from the Marketplace. The objective of the Marketplace is to drive action, educate, and provide customer intelligence for a more customized online experience.

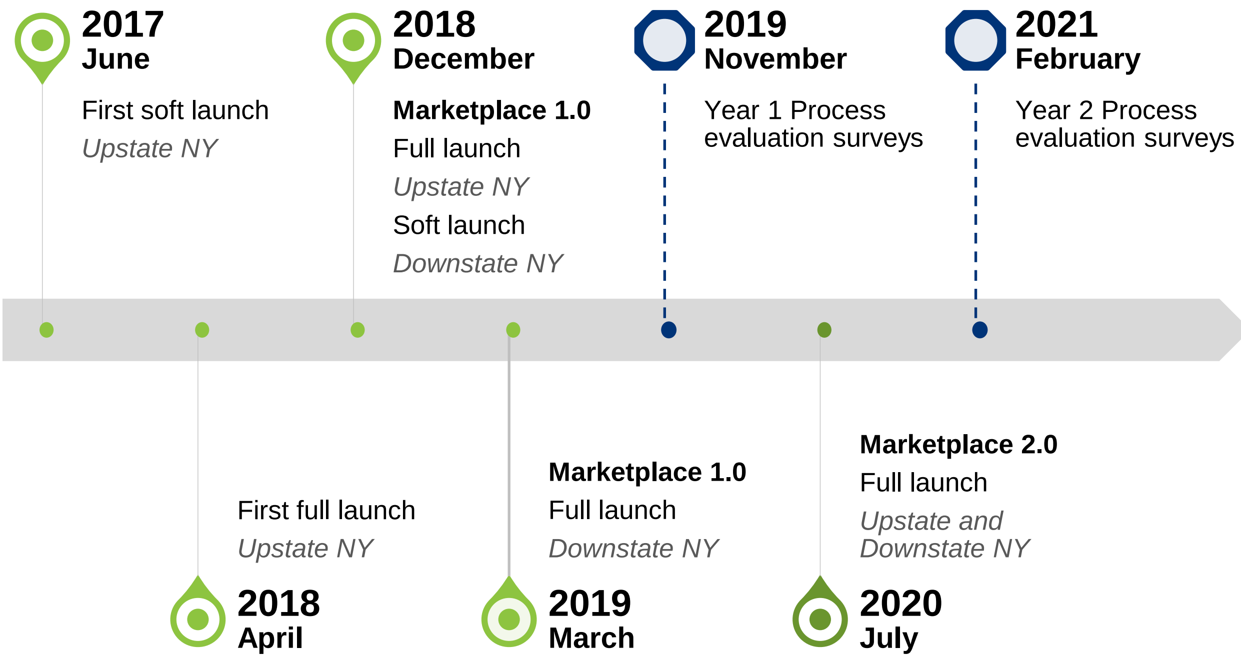
Figure 1 outlines the Marketplace timeline and when the Year 1 and Year 2 process evaluations occurred. In June 2017, the Marketplace had a soft launch in Niagara Mohawk Power Corporation's territory (upstate New York) with a full roll-out in April 2018. The platform evolved later that year to prepare for an expansion to other services and territories. The new platform was fully launched in December 2018 in upstate New York, along with a soft launch in downstate New York (Brooklyn Union Gas Company and KeySpan Gas East Corporation's territories). The downstate platform was fully launched in KeySpan Gas East Corporation's territory in March 2019. The Marketplace platform transitioned from Shopify (Marketplace 1.0) to Salesforce Commerce Cloud (Marketplace 2.0) in early July 2020.

The plan is for the new platform to serve as the foundation for all e-commerce and marketplace solutions across National Grid. The platform will evolve into a multi-jurisdictional platform enabling customers to be advised on the products or solutions that are most important to them and seamlessly transact and apply instant rebates while selecting the financing terms that work

[1] "Preliminary results from the Efficiency Platform Process Evaluation Customer Surveys." Memo report to Stephen Bonanno, Michael Strom and Beth Delahaij (National Grid) from Pam Rathbun and Najoua Jouini (Tetra Tech), March 20, 2020.

best for their situation. In addition to serving residential customers, the platform is now serving small business customers. The platform will eventually diversify its product portfolio to include electric vehicle products, solar products, water heaters, and other products. This evaluation focuses only on the residential offering.

Figure 1. Marketplace Launch and Evaluation Timeline



The Marketplace is delivered by Uplight (previously known as SIMPLE Energy), the program implementer. Uplight manages the Marketplace platform, education, data tracking, and analytics in partnership with National Grid. Customer insights inform future initiatives, offerings, and strategies, as well as customized and targeted messaging. National Grid manages customer outreach for the Marketplace while Uplight supports with sales and marketing promotions.

Customers are directed to the Marketplace via the National Grid website, Home Energy Reports (HERs), National Grid marketing messaging, and through presentations at community events. Customers can also opt in to complete an online home energy assessment that collects information about their home and their usage habits. The online assessment then generates a report that provides customers with disaggregation of their energy usage and details a variety of recommendations on how they can save energy. These tips direct the customer to the Marketplace website, where they have the opportunity to purchase small, self-install measures. National Grid provides an instant rebate for some of these small measures. Additionally, National Grid offers customers the opportunity to purchase other products such as connected home products, outdoor living products, and window air conditioning (A/C) controls, which may or may not be discounted.

KEY FINDINGS AND RECOMMENDATIONS

YEAR 2 FINDINGS

Both National Grid staff and Uplight report that the Marketplace program is running well.

- The working relationship between the two entities is effective. The program exceeded its gas savings goals in both territories and met 50 percent of its electric savings goals in upstate New York for PY2019 goals (double the electric savings achieved in PY2018).
- The Marketplace effectively transitioned to the new platform, and the new features are expected to enhance customers' experience and provide customized promotions.
- Email blasts continue to be the main venue for program promotions, and new marketing strategies are expected to increase awareness and participation.

Awareness is higher in upstate New York and interest in the Marketplace is increasing.

- Reflecting the earlier launch in upstate New York compared to downstate New York, the upstate respondents were 16 percent more likely to be aware of the Marketplace and 26 percent more likely to have visited.
- The reasons for not visiting the Marketplace did not vary by territory; 42 percent do not know enough about the Marketplace, and 39 percent already have energy-saving products.
- Ninety percent of nonparticipants who have heard or seen messages about the Marketplace but have not visited the website *were extremely* or *very interested* in visiting the website.
- The majority of participants and nonparticipants who already visited the Marketplace said they would visit the Marketplace again in the future (90 percent and 75 percent, respectively).

Email continues to be the main source of awareness.

- Participants and nonparticipants cited email as their main source of information about National Grid's Marketplace, followed by the National Grid website. Participants and nonparticipants also agreed that an email from National Grid was their preferred method of receiving information about the Marketplace.

Cost savings, convenience, and environmental consciousness continue to be the main drivers to the Marketplace website.

- Participants' and nonparticipants' main motivations for visiting the Marketplace were the instant rebates, the energy and water savings, and doing something good for the environment. Downstate respondents were more motivated by the rebates, while upstate respondents were more motivated by the energy and water savings and doing something good for the environment.
- Participants' reasons for purchasing from the Marketplace rather than from somewhere else was the lower prices. Convenience was the second most frequently mentioned reason. Downstate participants were more motivated by the lower prices, while upstate participants also valued convenience.

Participants were happy with the ease of participation.

- More than 90 percent of participants said understanding how to use the Marketplace website, finding the products they wanted, understanding the product features, and understanding which products qualified for the instant rebate were *very* or *somewhat easy*. Participants also felt it was *very* or *somewhat easy* to make the payment.
- Consistent with the ease customers had accessing the Marketplace, few participants reported calling, emailing, or live chatting with the Customer Support Center with questions about the products, rebates, or checkout process for the Marketplace. Most of these participants found customer support to be *somewhat, very,* or *extremely useful* (73 percent).

Customers cited few barriers to participating in the Marketplace.

- Only 10 percent of participants had any initial concerns about purchasing products through the Marketplace. The top three concerns were shipping costs, speed of delivery, and online security (the number one concern in the last evaluation).
- Half of the nonparticipants who visited but did not purchase were just looking to see what was available.
- A majority of participants and nonparticipants could not think of any other products that they would like to see offered through the Marketplace (64 percent and 59 percent, respectively). This was lower than the last evaluation where more customers could not think of other products (81 percent and 85 percent, respectively).

Participants were the most satisfied with the Marketplace.

- Overall, 83 percent of participants and 54 percent of nonparticipants were *extremely* or *very satisfied* with the Marketplace.
- The vast majority of participants were *very* or *extremely satisfied* with all aspects of the Marketplace. Participant and nonparticipant satisfaction with competitive pricing and instant rebates received the highest satisfaction rating. Participants were least *satisfied* with the amount and types of products available. Nonparticipants were least *satisfied* with the competitive pricing, and the amount and types of products available.
- Consistent with their satisfaction ratings, two-thirds of participants had already recommended the Marketplace to others (compared to one-third of nonparticipants).
- Pricing and rebates, convenience and ease of use are the top two aspects they liked best about the Marketplace.
- About one-third of the participants recommended adding more products to the website and one-third felt that the website is good as is.

Participants expressed higher satisfaction with National Grid.

- Seventy-six percent of participants and 63 percent of nonparticipants were *extremely* or *very satisfied* with their overall experience with National Grid. About one-fifth of participants and one-third of nonparticipants are *more satisfied* with National Grid because of the Marketplace.

There were no significant differences in any of the demographic characteristics between participants and nonparticipants. The main differences between downstate and upstate New York participants were related to the house age, household size, participant age, and level of education. Downstate New York participants are more likely to have an older house, household size of at least three persons, more likely to have household members under the age of 19 years of age, more likely to be younger in age, and more likely to have some college education.

RECOMMENDATIONS

Continue following best practices for the Marketplace.

- National Grid continues to enhance and customize its customers' experience through the new Marketplace platform (Marketplace 2.0). The platform's new features include mobile-friendly design, product search and comparison tools, more product details, and a capability of personalized offers and post-purchase recommendations.
- National Grid continues to increase the level of detail on the products offered through the Marketplace. This increased detail is achieved through the new platform features such as product details page, product reviews, and comparison with similar products.

Findings from the benchmarking study:

Marketplace platforms are optimized to enhance customers' experience, increase access, and support informed decisions for efficient products.

- Fewer pages can make the marketplace platform simpler to use. This, combined with succinct marketing messages and a uniform rebate process across programs, can enhance the customer experience.
- Customer data can personalize the marketplace platform for both new and repeat customers. The initial entry to the website is central to the customer experience.
- Marketplace platforms are optimized to handle mobile traffic. Generally, mobile traffic is overtaking desktop traffic. Additionally, mobile devices are the device of choice for low-income customers.
- Potential savings associated with a product is information that is often hard to find. Both potential savings information and scoring metrics lead to customers choosing more efficient products.

Implement various strategies to increase Marketplace awareness and visits.

- National Grid is already experimenting with new marketing channels. Marketing strategies are attracting new as well as returning customers.
- The new platform will allow National Grid to customize outreach and promotions to specific segments or geographies.
- Messages to downstate New York customers may need to differ from messages to upstate customers. Downstate customers are more motivated by instant rebates, and upstate customers are more motivated by energy/water savings and doing something good for the environment.

Findings from the benchmarking study:

Marketing methods, such as email and social media, continue to be effective in promoting marketplace programs.

- Effective marketing strategies include targeting shoppers with abandoned shopping carts, utilizing eye-catching visuals, providing informative custom content, and using A/B testing[3].
- Promotions and sweepstakes have been effective at increasing traffic to marketplace platforms.

Marketplace programs improve utilities' brand and support a trusted advisor role.

- Utilities claim that programs like the Marketplace have improved their image with customers.
- Utilities are looking to become a "trusted energy advisor" to the customers or a "utility of the future."

Actively monitor metrics and analyze market information.

- National Grid is already tracking many metrics. We recommend that National Grid:

[2] A/B testing (also known as split testing) is a process of showing two variants of the same website to different segments of website visitors at the same time and comparing which variant drives more conversions.

- Ensures that Uplight is tracking customers who abandoned their carts. This is a rich source of data. A best practice is to follow up with these customers to encourage them to complete their purchase.
- Monitor customer purchases and reasons customers abandon the cart, in addition to implementer research, to determine new product categories that may be of interest and incentive levels that may motivate purchases.
- Continue tracking metrics that impact sales and customer satisfaction, including shipping costs and delivery speed.

METHODOLOGY

The Tetra Tech team has conducted a process evaluation of the Marketplace program over two years to allow National Grid and the program implementer to determine if any changes need to be made to the Marketplace to serve customers and key stakeholders better. Process evaluations are an effective tool to understand any issues associated with newly launched programs efforts or pilot initiatives after deploying them into the Marketplace.

KEY RESEARCHABLE ISSUES

Key researchable questions we explored and tracked over time as part of this process evaluation are listed in Table 1. . Our process evaluation included participant and nonparticipant surveys to understand customers' experiences and satisfaction with the Marketplace, any barriers to purchasing from the Marketplace, and engagement with the Online Home Energy Assessment program.

For each question in Table 1, we provide the activity that was conducted to support the information gathering in Year 2 of the evaluation. We define a program participant as a residential customer who visited the Marketplace and completed a purchase after July 1, 2020 (the launch of Marketplace 2.0). We also differentiate between four types of nonparticipants: (1) those who visited the Marketplace and abandoned their cart, (2) those who visited the Marketplace and took no action, (3) those who are aware of the Marketplace but did not visit, and (4) those who are unaware of the Marketplace.

Table 1. Energy Efficiency Platform Researchable Questions for Year 2

Researchable questions	Activity to support the question
Program design	
How effective are the program design and delivery process? Focusing on the three success indicators: • How effective is the customer participation process, and how could the number of program participants be increased? • What strategies have been used for cross-promotion of National Grid's programs? • Are there ways to reduce costs or increase savings of the program?	• Program documentation review • Program staff interviews • Implementation staff interviews • Participant surveys • Program tracking data • Key performance metrics* (web portal, email statistics)
Customer awareness, education, outreach, and marketing	

Researchable questions	Activity to support the question
How effective are the program marketing and outreach in generating customer awareness as well as participation in the Energy Efficiency Platform?	• Program documentation review • Program staff interviews • Implementation staff interviews • Participant surveys • Nonparticipant surveys (all types)
What information do customers find most useful? Least useful?	• Participant surveys • Nonparticipant surveys (those who, at least, visited the Marketplace)
What prompts customers to request an Online Energy Assessment or visit the Marketplace website?	• Participant surveys • Nonparticipant surveys (all types)
Customer engagement	
What barriers are there to participate in the Online Energy Assessment and/or Marketplace website and how could these be minimized?	• Program staff interviews • Implementation staff interviews • Participant surveys • Nonparticipant surveys (all types)
What additional measures are customers interested in seeing on the Marketplace website?	• Participant surveys • Nonparticipant surveys (those who, at least, visited the Marketplace)
What is the customer experience with the website, products available, product prices, and customer support?	• Participant surveys • Nonparticipant surveys (those who, at least, visited the Marketplace)
How satisfied are they with the Marketplace?	• Participant surveys • Nonparticipant surveys (those who, at least, visited the Marketplace)
How satisfied are they with the National Grid?	• Participant surveys • Nonparticipant surveys (all types)
Program administration, processes, and resources	
How well are program processes developed and working for the program? Is the program data collection and tracking system collecting the type of data needed for program evaluation activities?	• Program documentation review • Program staff interviews • Implementer interviews • Program tracking system review
Program satisfaction	
How satisfied are customers with the Energy Efficiency Platform processes (Online Energy Assessment, recommendations, Marketplace store)? How could this satisfaction be improved?	• Participant surveys • Nonparticipant surveys (those who, at least, visited the Marketplace)

* Key performance metrics may include visits to the website, completion of online assessments if available, email information received, number of visits to the website, subsequent energy efficiency measures purchased, non-instant energy efficiency measures researched, and test of the website.

EVALUATION ACTIVITIES

Activities to answer the researchable issues of the evaluation included:

Interviews with National Grid program staff and representatives of Uplight. We interviewed the National Grid e-commerce platform manager, the residential programs manager, and the energy efficiency residential marketing analyst in June and July 2020, and Uplight staff in August 2020 to review the program design and discuss process evaluation priorities. The interviews helped inform the design and content of the questionnaire that will be used for the quantitative survey for participating and nonparticipating customers. An additional interview was conducted with the National Grid marketplace strategy brand and marketing manager in June 2020 to learn more about Marketplace 2.0 and its new features.

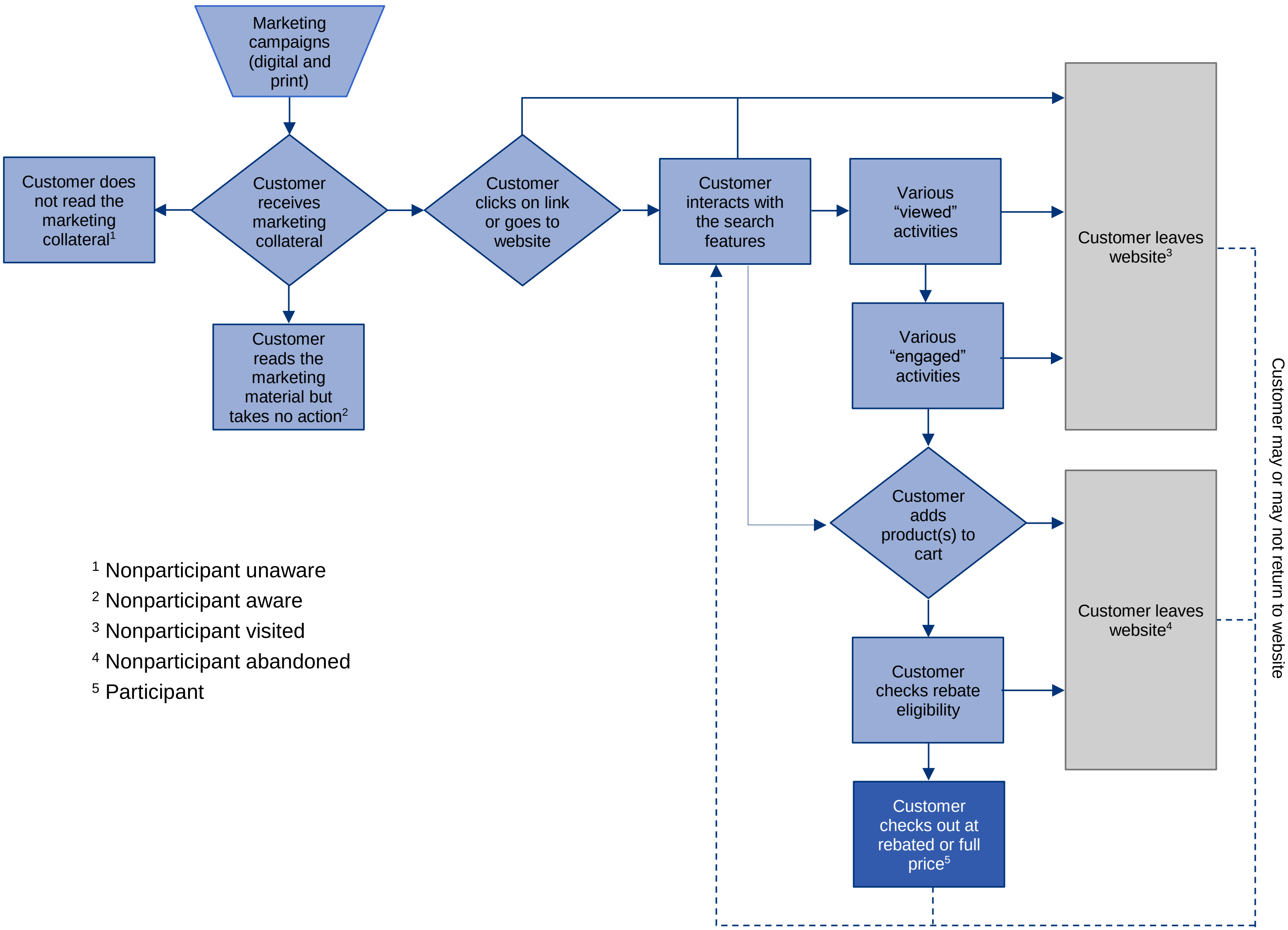
Participant and nonparticipant quantitative survey. We conducted a second round of web surveys with a representative sample of participating and nonparticipating customer groups to track changes from Year 1 and learn about the customer experience with the new platform, Marketplace 2.0. The participant and nonparticipant survey included questions about program awareness, program interest, motivation and barriers for participation, experience with the online home energy assessment, participation process, satisfaction with the Marketplace, satisfaction with National Grid, household characteristics, and demographics. The participant and nonparticipant sample included customers who completed the online energy assessment. These customers were asked questions about their experience with that program in addition to their experience with the Marketplace.

For the Year 2 survey, we followed a screening process within the survey to identify various levels of customer awareness and activity with the Marketplace; this screening allowed us to ask customers specific questions to address researchable issues, depending on their level of awareness and experience. As shown in the flowchart (**Error! Reference source not found.**) below, we identified four categories of nonparticipants. National Grid also supplied a list of participants that we verified through the survey screener.

We define a program participant as a residential customer who visited the Marketplace and completed a purchase after July 1, 2020 (the launch of Marketplace 2.0). We also differentiate between four types of nonparticipants:

- **nonparticipant unaware:** customers who are unaware of the Marketplace;
- **nonparticipant aware:** customers who are aware of the Marketplace but did not visit the site;
- **nonparticipant visited:** customers who visited the Marketplace after July 1, 2020, and took no action; and
- **nonparticipant abandoned:** customers who visited the Marketplace after July 1, 2020, and abandoned the Marketplace shopping cart.

Figure 2. The Marketplace Program Process Flow and Participation Types



[1] Nonparticipant unaware
[2] Nonparticipant aware
[3] Nonparticipant visited
[4] Nonparticipant abandoned
[5] Participant

The web survey was conducted in February 2021. Our goal was to complete up to 70 participant surveys for each territory: upstate and downstate New York. For the nonparticipant survey, we targeted a lower number of completed surveys (up to 100 across both territories) for *nonparticipant visited* and *nonparticipant abandoned* groups; these customers would be especially hard to reach because they have not been tracked by Uplight since the launch of Marketplace 2.0. We were mainly asking questions about awareness, program interest, satisfaction with National Grid, household characteristics, and demographics for *nonparticipant unaware* and *nonparticipant aware* groups. Our goal was to complete up to 100 surveys for each territory.

To be cost-efficient, we conducted a web survey. Each sampled customer was sent an invitation email inviting them to participate in the online survey; the email invitation explained the purpose of the study and included a link to the web survey. Those who did not respond also received a reminder email. To better represent the participant population, the participant sample was stratified by measure type purchased.

An incentive of $5 was offered to participating customers as well as *nonparticipant visited* and *nonparticipant abandoned* groups for completing the survey. *Nonparticipant unaware* and *nonparticipant aware* groups were not promised $5 for completing the survey. Table 2 summarizes the survey completes by respondent type and their eligibility for an incentive as a thank you for completing the survey.

Table 2. Survey Completes and Incentive Eligibility by Respondent Type

Respondent type	Completed surveys	Eligible for incentive
Nonparticipant unaware	524	No
Nonparticipant aware	103	No
Nonparticipant visited	28	Yes
Nonparticipant abandoned	11	Yes
Participants	262	Yes

For the participant survey, we selected a sample of 2,000 customers across upstate and downstate New York, as outlined in Table 3 (note that 31 respondents were initially classified as nonparticipants and were re-classified as participants after the survey screening questions). The response rate was higher than anticipated. Upstate New York participants and nonparticipants were more likely to respond to the survey, which is consistent with our past experience when surveying New York customers.

Table 3. Participant Response Rate

	Upstate	Downstate	Overall
Population*	**9,243**	**1,950**	**11,193**
Sample**	**1,026**	**1,005**	**2031**
Not a utility customer	0	0	0
Affiliated with utility	3	0	3
Eligible sample	**1,023**	**1,005**	**2,028**
Screened out	2	0	2
Quota filled	39	27	66
Incompletes (partial surveys)	18	17	35
Not completed	776	887	1,663
Completed	**188**	**74**	**262**
Response rate (Completed/eligible sample)	**18.4%**	**7.4%**	**12.9%**

* Population excludes accounts with missing email information, duplicate cases, and accounts that were surveyed in Year 1 or could not be matched to participation data.

** 31 respondents (26 from upstate and five from downstate New York) who were initially classified as nonparticipants actually purchased a measure after sampling and were re-classified as participants.

Table 4 shows the response rate of upstate and downstate New York nonparticipants. In an attempt to increase the survey response rate of nonparticipating customers, we embedded the first question of the survey in the invitation email. This question was as follows: *"National Grid offers a Marketplace (our online store) where customers can purchase rebated and non-rebated energy efficiency products such as lighting products and thermostats. Before today, had you heard or seen messages about the Marketplace?"*

Recent studies conducted by Tetra Tech suggest that embedded question emails can result in response rates higher than traditional emails. Recipients of the embedded question email are more likely to click on the email (three to eight percent) and more likely to complete the survey (four to nine percent). In addition to capturing customer awareness with the Marketplace, National Grid will be able to test whether an embedded question email is an effective technique in increasing response rates in upstate and downstate New York in other survey efforts.

For the nonparticipant survey, we selected a sample of 20,000 customers across upstate and downstate New York, as outlined in Table 4 (note that 31 respondents were initially classified as nonparticipants and were re-classified as participants after the survey screening questions). We estimated a conservative response rate for nonparticipants. The response rate for *nonparticipant unaware* and *nonparticipant aware* groups was close to the response rate for the general population survey conducted in the Year 1 process evaluation. The response rate for the *nonparticipant abandoned* group was, however, lower compared to the previous process evaluation. The data received for the Year 2 process evaluation did not flag the *nonparticipant abandoned* group*,* which eliminated any targeted outreach. Instead of utilizing a list of customers who abandoned their shopping cart to identify those within the *nonparticipant abandoned* group, we relied on self-reports through the survey to identify those individuals.

Similar to the participant survey, upstate customers were more likely than downstate customers to respond to the survey.

Table 4. Nonparticipant Response Rate

	Upstate			Downstate			
	Abandoned and visited	Aware and unaware	Unknown	Abandoned and visited	Aware and unaware	Unknown	Overall
Population*	**800,880**			**868,627**			**1,669,507**
Sample**	**9,974**			**9,995**			**19,969**
Not a utility customer	0			0			0
Affiliated with utility	20			6			26
Eligible sample	**9,954**			**9,989**			**19,943**
Screened out	6	0	73	0	0	18	97
Quota filled	0	15	0	0	0	0	15
Incompletes (partial surveys)	11	48	304	2	34	199	598
Not completed	0	0	9,107	0	0	9,460	18,567
Completed	**34**	**356**	**-**	**5**	**271**	**-**	**666**
Response rate (completed/eligible sample)	**3.9%**			**2.8%**			**3.3%**

* Population excludes accounts with missing email information, duplicate cases, and accounts that were surveyed in Year 1 or could not be matched to participation data.

** 31 respondents (26 from upstate and five from downstate New York) who were initially classified as nonparticipants actually purchased a measure after sampling and were re-classified as participants.

DETAILED FINDINGS

In the next sections of the memo, we first summarize our interviews with National Grid staff and Uplight representative and then present the survey results around the following topics: sources of program awareness and motivation for participation, ease of participation, barriers to participation, satisfaction with the Marketplace and National Grid, use of the online energy assessment, household characteristics, and demographics. Notable differences in the responses between participants and nonparticipants and between upstate New York and downstate New York participants are described for the relevant survey topics. It is important to note that the number of completes for nonparticipant visited and nonparticipant abandoned groups is small compared to the overall customer population; therefore, any major difference with other customers (participants or nonparticipant unaware and nonparticipant aware groups) may be misleading and not be representative of the customer type.

INTERVIEWS WITH NATIONAL GRID STAFF AND UPLIGHT

National Grid staff and Uplight believe the program is running well and that their working relationship is effective. In upstate New York, National Grid exceeded its PY2019 gas savings goals and reached 50 percent of its PY2019 electric savings goals (double the electric savings achieved in PY2018). National Grid also exceeded its gas savings goals in downstate New York.

Program changes

One major change in PY2020 was the transition to the new Marketplace platform (Marketplace 2.0), which includes many new features such as:

- filtering tools (e.g., by color, brand, or rebate),
- sorting tools (e.g., by price or top sellers),
- comparison tools for similar products and related offers with integrated product reviews,
- redesigned product detail pages (description, features, installation) with integrated buyer's guides and energy savings data,
- product suggestions at check out, and
- product reviews.

Additional features include mobile-friendly design, localization capability, personalized offers and post-purchase recommendations capability, and stacked rebates capability. National Grid staff indicated that the capability to customize promotions is a valuable feature. For example, National Grid will be able to offer bundles or different promotions for each territory. In the future, National Grid also hopes to offer unique coupon codes allowing them to market to a specific segment or customers.

In the previous evaluation, free or reduced shipping costs emerged as a recommendation for the program. As a result, National Grid has been offering free shipping with certain promotions or free shipping for orders over $49.

Since the last evaluation, National Grid added air filters as a new product category on the Marketplace. National Grid reported that they are looking to add new categories such as dehumidifiers.

Marketing and Impact of COVID 19

Email blasts continue to be the main venue for program promotions. National Grid teamed up with a marketing agency and is working on expanding its marketing strategies which include:

- Digital banners
- Paid search using Google
- Paid social media (Facebook, Instagram, and Twitter) through static placements and carousel/story placements
- Blog on the front page of the Marketplace
- Native ads that look like an article but drive customers to the Marketplace website
- Over-the-top (OTT)[3] ads through streaming sources
- Sponsored content with This Old House website
- Streaming radio advertising
- Videos and product photoshoot to enhance photo options

These marketing strategies are already attracting new as well as returning customers.

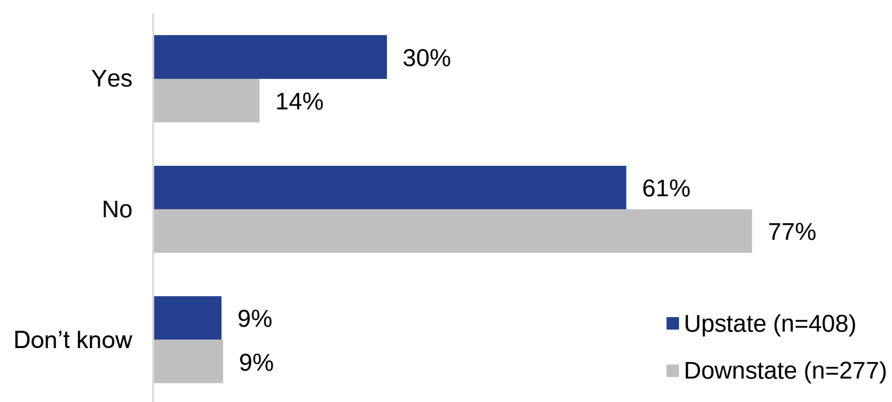
[3] OTT (over-the-top) advertising is advertising delivered directly to viewers over the internet through streaming video services or devices, such as smart or connected TVs (CTV).

In PY2020, COVID 19 resulted in a shift in the marketing approach and timing: messaging shifted from a focus on sales, pricing, and limited-time offers to fewer messages with a focus on health and wellness. The shift in marketing is anticipated to impact participation.

AWARENESS AND INTEREST IN THE MARKETPLACE

This section outlines general awareness of the Marketplace among nonparticipants. As shown in Figure 3, awareness is higher among nonparticipating upstate customers (30 percent versus 14 percent of downstate), which is consistent with the longer amount of time the Marketplace has been active in upstate New York.

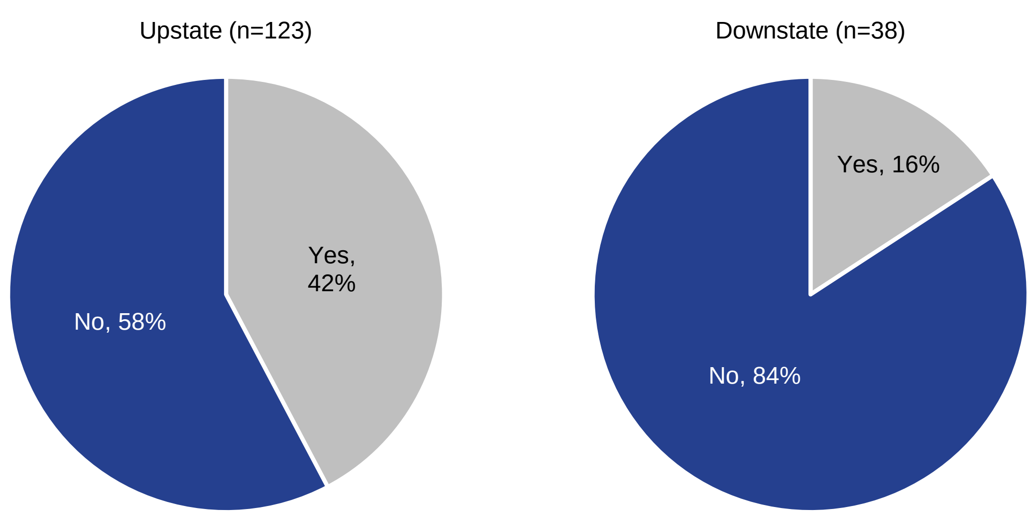
Figure 3. Heard or Seen Messages about the Marketplace by Territory



Source: Survey Question AW1

Nonparticipants in upstate New York who had heard of the Marketplace (*nonparticipant aware* group) were more likely to have visited the Marketplace website than in downstate New York (Figure 4).

Figure 4. Whether Customers Visited the Marketplace Website by Territory



Source: Survey Question PI1

Table 5 summarizes the reasons reported by the *nonparticipant aware* group for not yet visiting the Marketplace. The two most frequently mentioned reasons were that they (1) already have efficient products (42 percent), or (2) do not know enough about the Marketplace (39 percent). More customers from upstate New York said they do not like to purchase products online or through their utility company.

Table 5. Reasons for not Visiting the Marketplace Among the *Nonparticipant Aware* Group

Reason	Upstate	Downstate	Overall
Do not know enough about Marketplace	40.8%	43.8%	41.7%
Already have efficient products	39.4%	37.5%	38.8%
Do not like to purchase products online	9.9%	3.1%	7.8%
Do not like to purchase products through my utility	7.0%	3.1%	5.8%
Rented or seasonal home	4.2%	3.1%	3.9%
Lack of motivation or interest	4.2%	3.1%	3.9%
Products are too expensive	2.8%	0.0%	1.9%
Do not need anything	1.4%	3.1%	1.9%
I have a negative experience with the Marketplace	1.4%	0.0%	1.0%
Do not have internet connection	1.4%	0.0%	1.0%
Do not have time	0.0%	9.4%	2.9%
Someone I know had a negative experience with Marketplace	0.0%	0.0%	0.0%
Other	2.8%	0.0%	1.9%
Respondents (n)	**71**	**32**	**103**

Source: Survey Question PI2

We also asked those labeled *nonparticipant aware* who have not visited the Marketplace how interested they were in visiting the website. Most of them (90 percent) were extremely or very interested (Table 6), which is much higher than the last evaluation where the majority were *somewhat interested*. Among those who responded that they were *somewhat interested* or *not at all interested* in visiting the Marketplace, we asked if National Grid could do anything to encourage them to visit the Marketplace. The top response was that (1) the respondent was not sure or (2) that there was nothing National Grid could do to encourage them to visit the website (46 percent, n=43). Other responses included (1) offering more information or promotions (n=14) and (2) offering lower prices (n=10).

Table 6. Interest in Visiting the Marketplace Among the *Nonparticipant Aware* Group

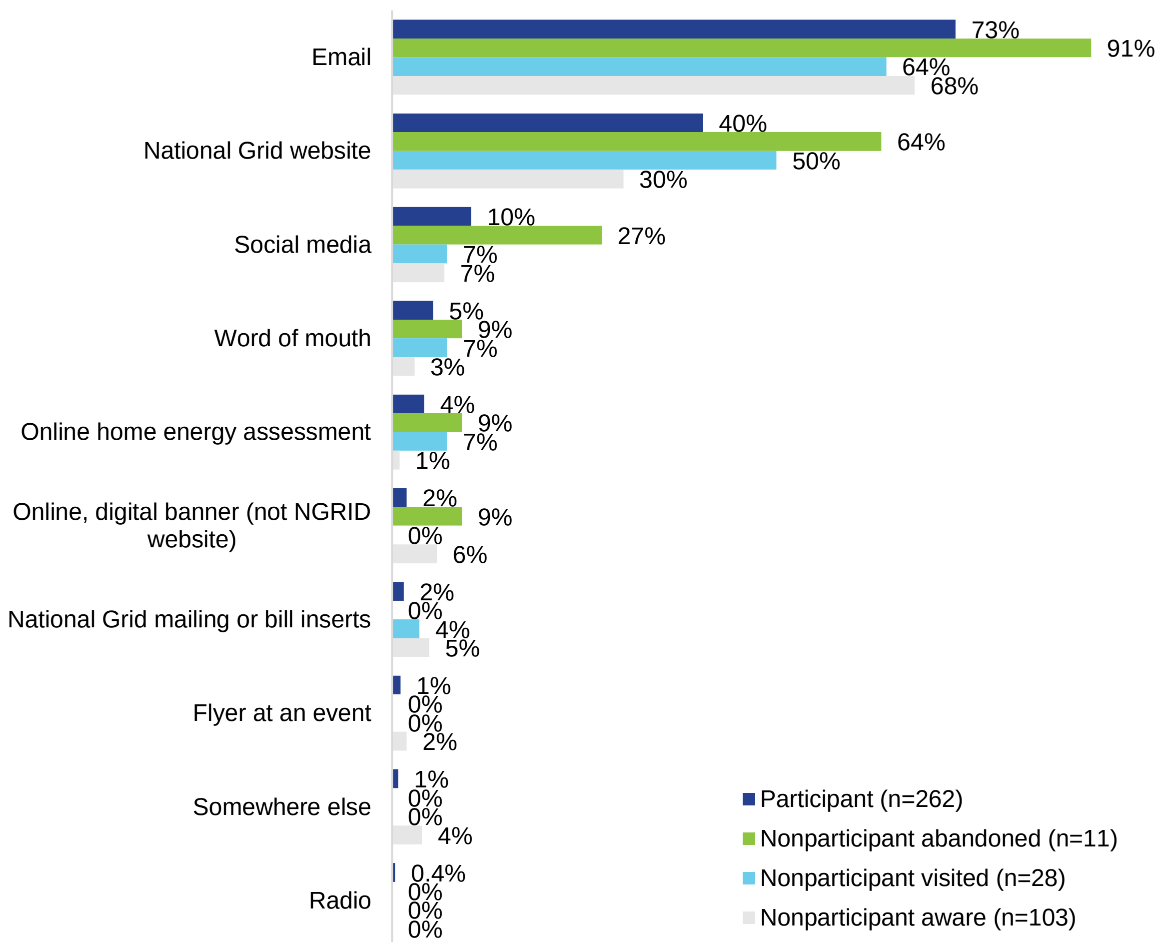
	Upstate	Downstate	Overall
Extremely interested	33.8%	21.9%	30.1%
Very interested	63.4%	53.1%	60.2%
Somewhat interested	1.4%	21.9%	7.8%
Not at all interested	1.4%	3.1%	1.9%
Respondents (n)	**71**	**32**	**103**

Source: Survey Question PI3

SOURCES OF AWARENESS

Figure 5 shows that both participants and nonparticipants cited email as their main source of information about National Grid's Marketplace (64 to 91 percent), followed by the National Grid website (30 to 64 percent) and social media (7 to 27 percent). Word of mouth and the online home energy assessment were each cited by less than ten percent of participants and nonparticipants as a source of information about the Marketplace.

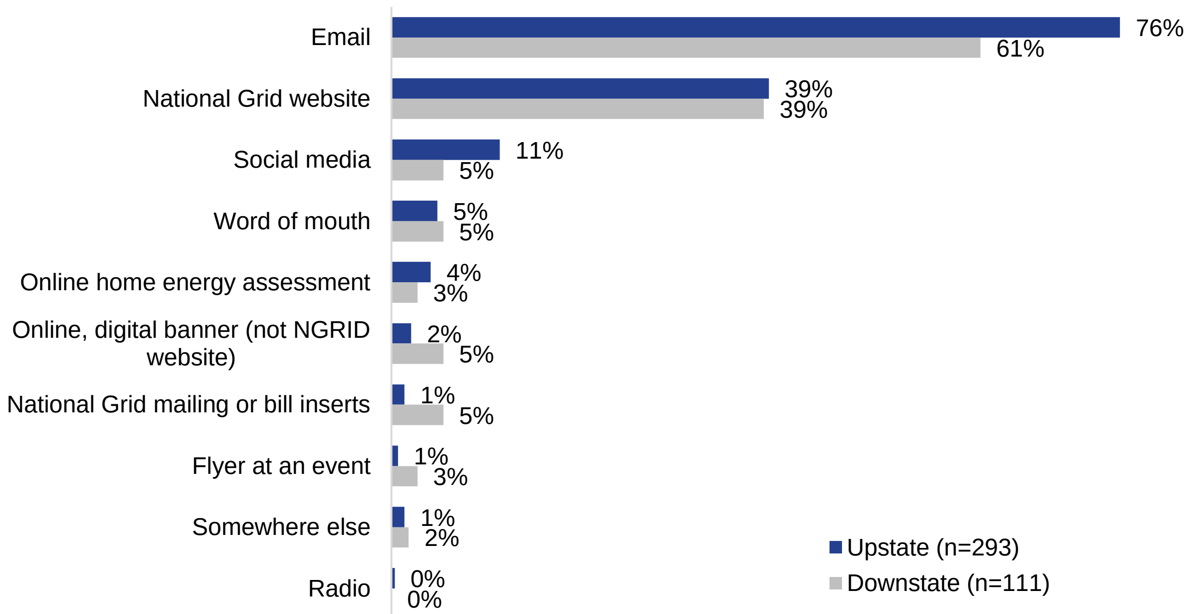
Figure 5. Source of Marketplace Awareness



Source: Survey Question AW2
Note: May not total 100 percent as respondents could select more than one answer.

When viewed by territory (Figure 6), survey responses indicated that upstate New York participants are more likely to use email and social media as their main source of information compared to participants in downstate New York. Downstate respondents were slightly more likely to see information about the Marketplace on a non-National Grid site or on a National Grid mailing or bill insert than upstate New York respondents.

Figure 6. Source of Marketplace Awareness Among Participants by Territory

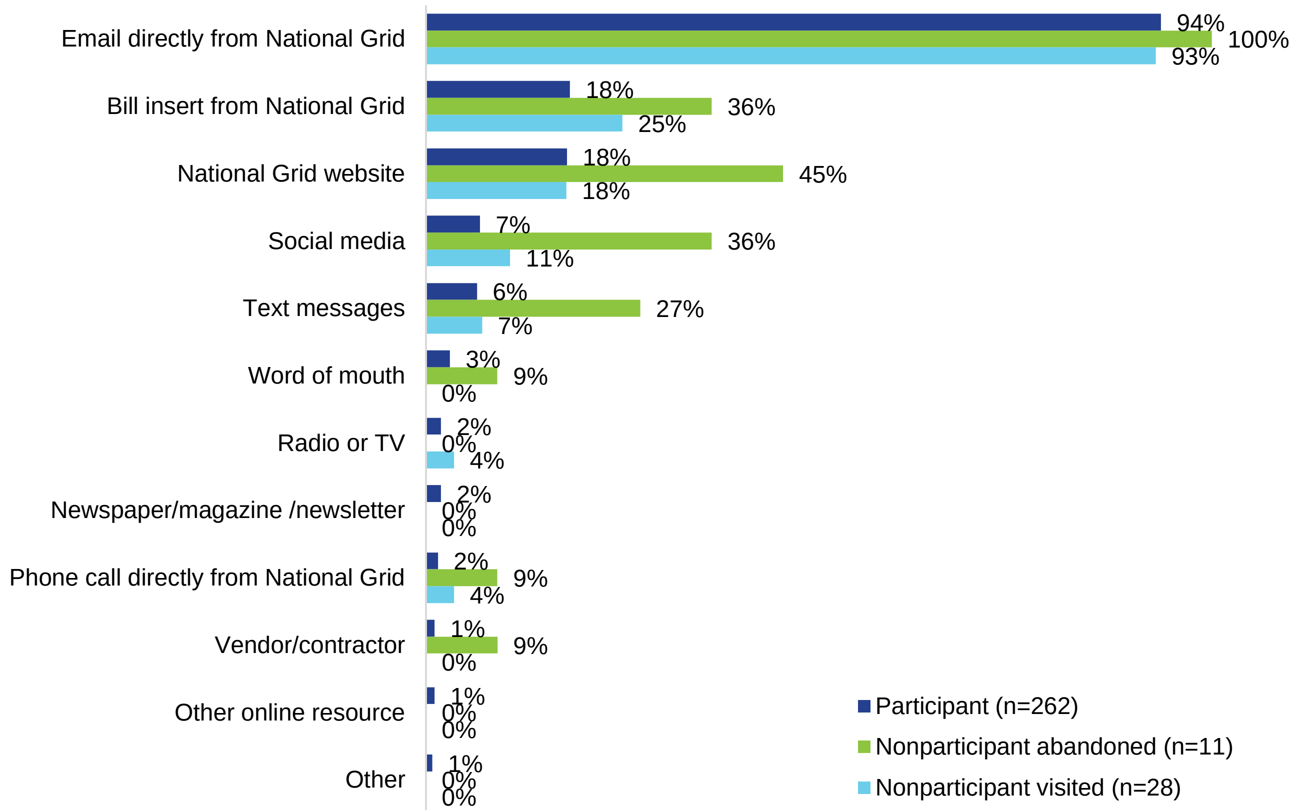


As shown in Figure 7, participants and nonparticipants also indicated that an email directly from National Grid was their preferred method of receiving information about the Marketplace (93 to 100 percent).[5] Other preferred sources included a bill insert from National Grid (18 to 36 percent), the National Grid website (18 to 45 percent), social media (7 to 36 percent), and text messages (6 to 27 percent).

Note: the counts for both *nonparticipant visited* and *nonparticipant abandoned* groups are much lower than for participants. For that reason, it is important to understand that nonparticipants are not necessarily more likely to prefer a form of communication over participants. Still, the proportions selecting each method provide some insights.

[5] Note that the sample of participants and nonparticipants was drawn from customers having an email address, so this may be the reason for the large percentage of respondents preferring email notifications.

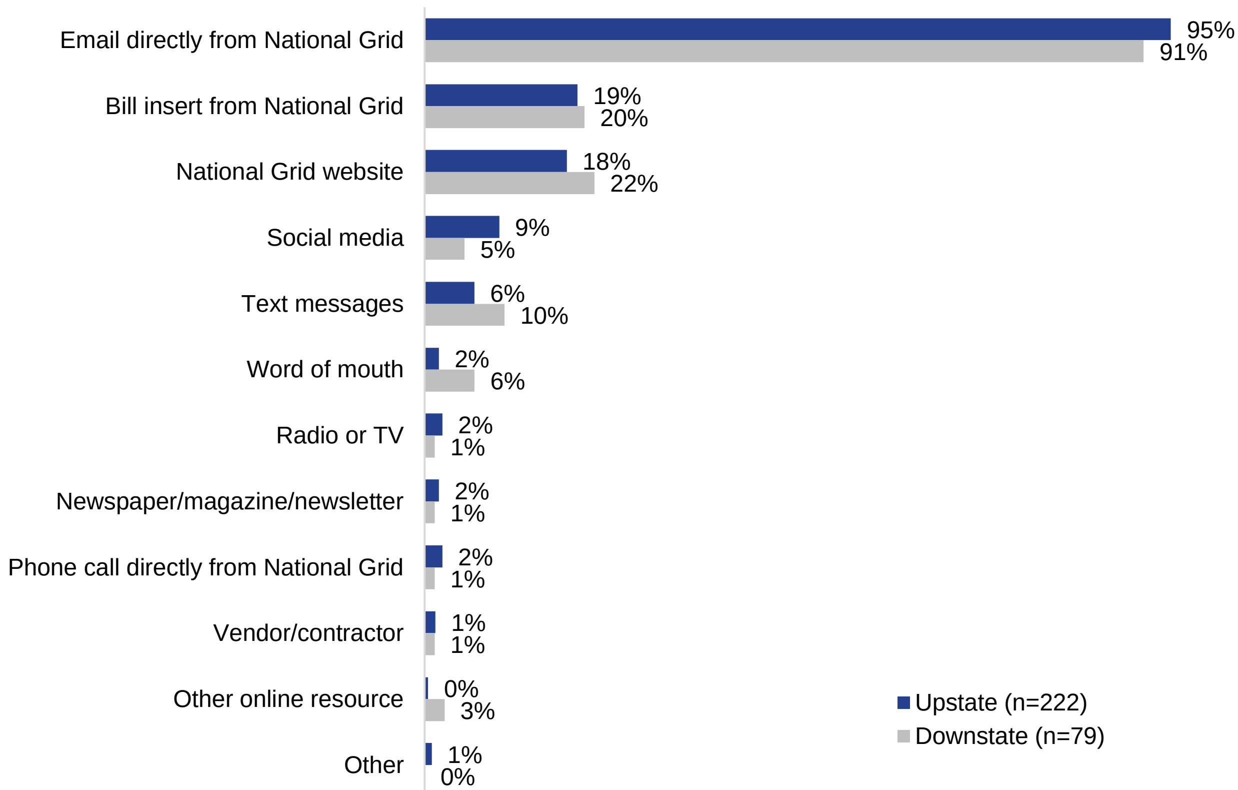
Figure 7. Preferred Source of Awareness



Source: Survey Question AW4
Note: May not total 100 percent as respondents could select more than one answer.

The patterns are similar when comparing preferred sources of awareness by territory (Figure 8). Customers overwhelmingly prefer an email directly from National Grid (91 to 95 percent), followed by bill inserts and information on the National Grid website.

Figure 8. Preferred Source of Awareness Among Participants by Territory



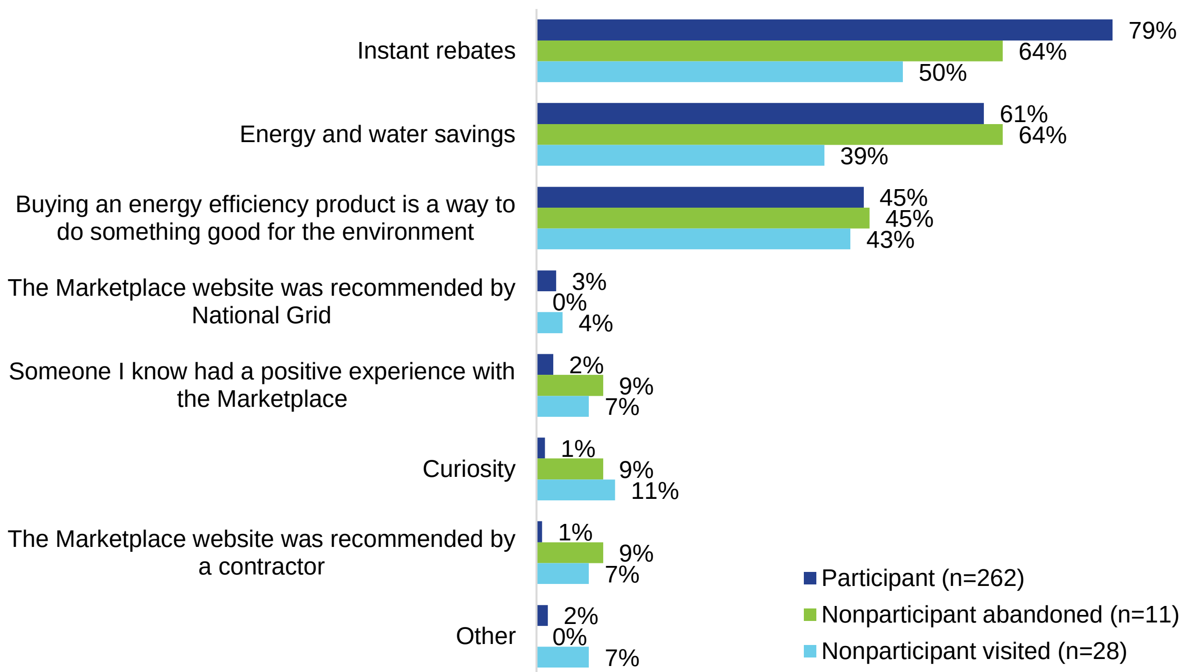
MOTIVATION FOR PARTICIPATION

This section outlines participant and nonparticipant responses regarding their motivation to visit and purchase from the Marketplace.

Figure 9 shows the participants' and nonparticipants' main reasons for visiting the Marketplace. The top three selected reasons were (1) instant rebates (50 to 79 percent), (2) energy and water savings (39 to 64 percent), and (3) doing something good for the environment (43 to 45 percent).

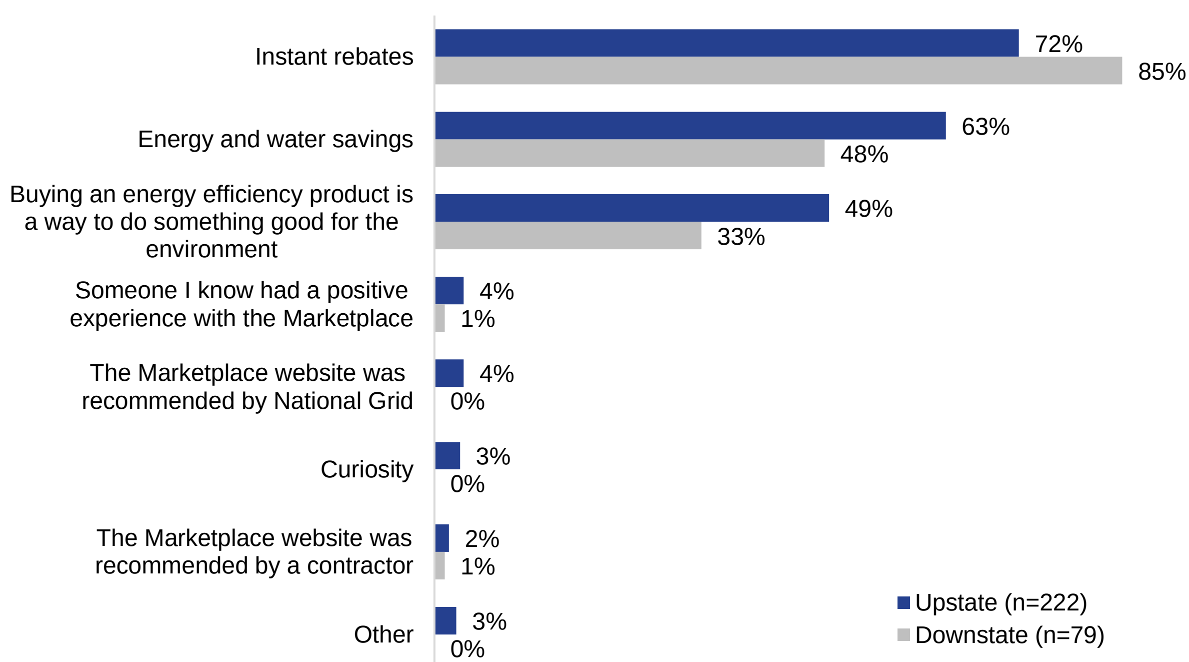
In contrast, Figure 10 shows participants' reasons for visiting the Marketplace by territory. Compared to participants in upstate New York, participants in downstate New York are more likely to be motivated by instant rebates and less likely to be motivated by the energy and water savings or doing something good for the environment.

Figure 9. Reasons for Visiting the Marketplace



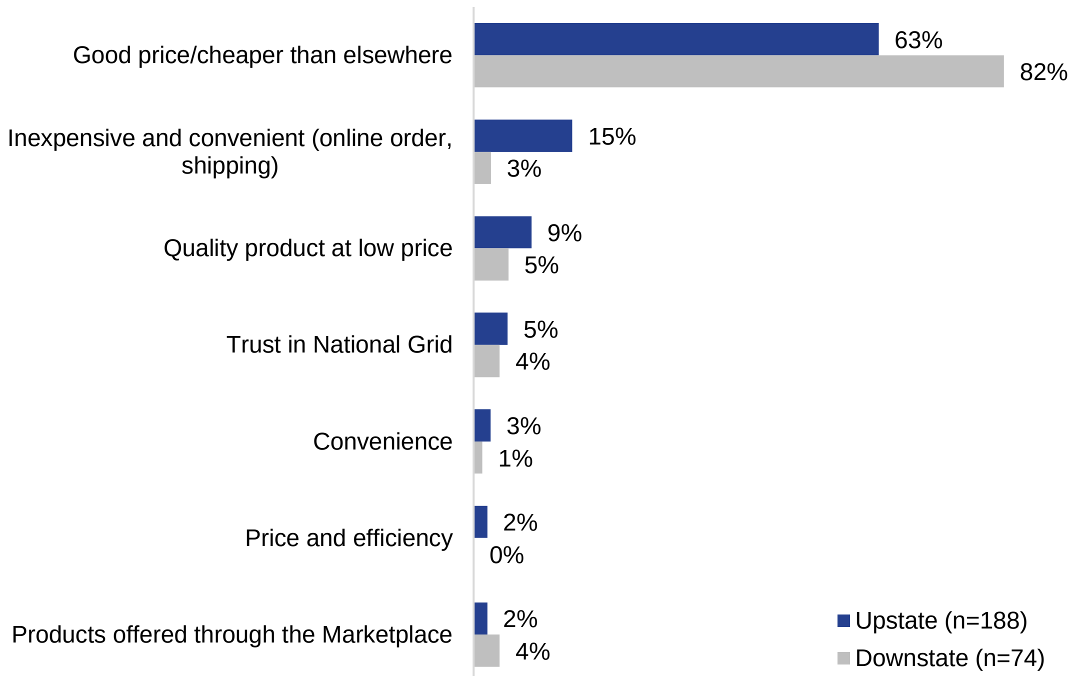
Source: Survey Question AW5
Note: May not total 100 percent as respondents could select more than one answer.

Figure 10. Reasons for Visiting the Marketplace Among Participants by Territory



We also asked participants why they purchased from National Grid's Marketplace rather than buying the product somewhere else (Figure 11). The main reason cited was the price point; convenience was the second most frequently mentioned reason.

Figure 11. Reasons for Purchasing from the Marketplace Versus a Competitor by Territory



Source: Survey Question AW5a

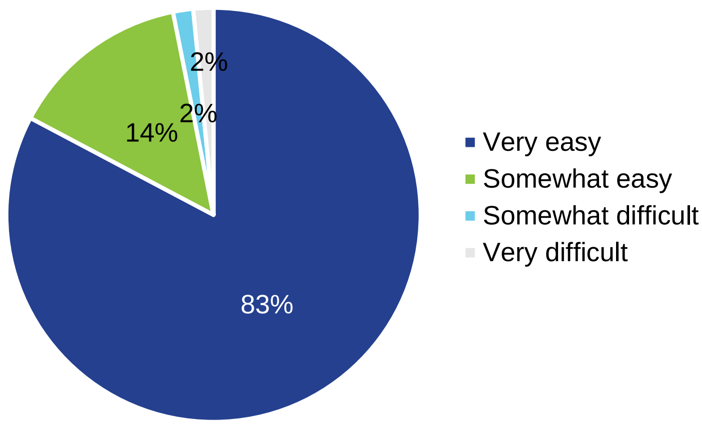
Among those participants and nonparticipants who had already visited the Marketplace, a majority said they would visit it again in the future (90 percent of participants and about 75 percent of those labeled *nonparticipant abandoned* and *nonparticipant visited*). The remainder of the nonparticipants were not sure if they would visit the website again in the future; the remainder of the participants were also undecided except for one participant who indicated they would not visit the website again. When asked about the main reason, the participant reported not receiving the product ordered from the website.

EASE OF PARTICIPATION

We asked participants and nonparticipants a series of questions on the ease or difficulty of navigating National Grid's Marketplace. The response categories were *very easy*, *somewhat easy*, *somewhat difficult*, and *very difficult*.

The only question not asked of nonparticipants was regarding the ease of payment (Figure 12). Most customers who purchased products from the website felt the payment process was *easy*. Eighty-three percent felt it was *very easy*, and another 14 percent felt it was *somewhat easy*. Only two percent (n=4) felt that the payment process was *very difficult*: two participants reported issues with the eligibility verification process, one participant reported not getting the ordered product, and one participant asked for fewer steps to complete the purchase.

Figure 12. Ease or Difficulty for Participants to Complete the Payment Process (n=255)



Source: Survey Question PP1

Over 90 percent of participants found that all the Marketplace aspects listed in Figure 13 were either *somewhat easy* or *very easy*. Those labeled as *nonparticipant visited* and *nonparticipant abandoned* felt the same about the following aspects of the Marketplace: find the products they wanted, find information about the products, and find information about potential energy savings. In general, nonparticipants were more likely to say *somewhat easy* rather than *very easy*.

Those labeled *nonparticipant visited* and *nonparticipant abandoned* were more likely to find the ability to compare products *somewhat difficult*. Those customers recommended additional price comparisons with other "big box hardware" or online stores, or to provide a price match option.

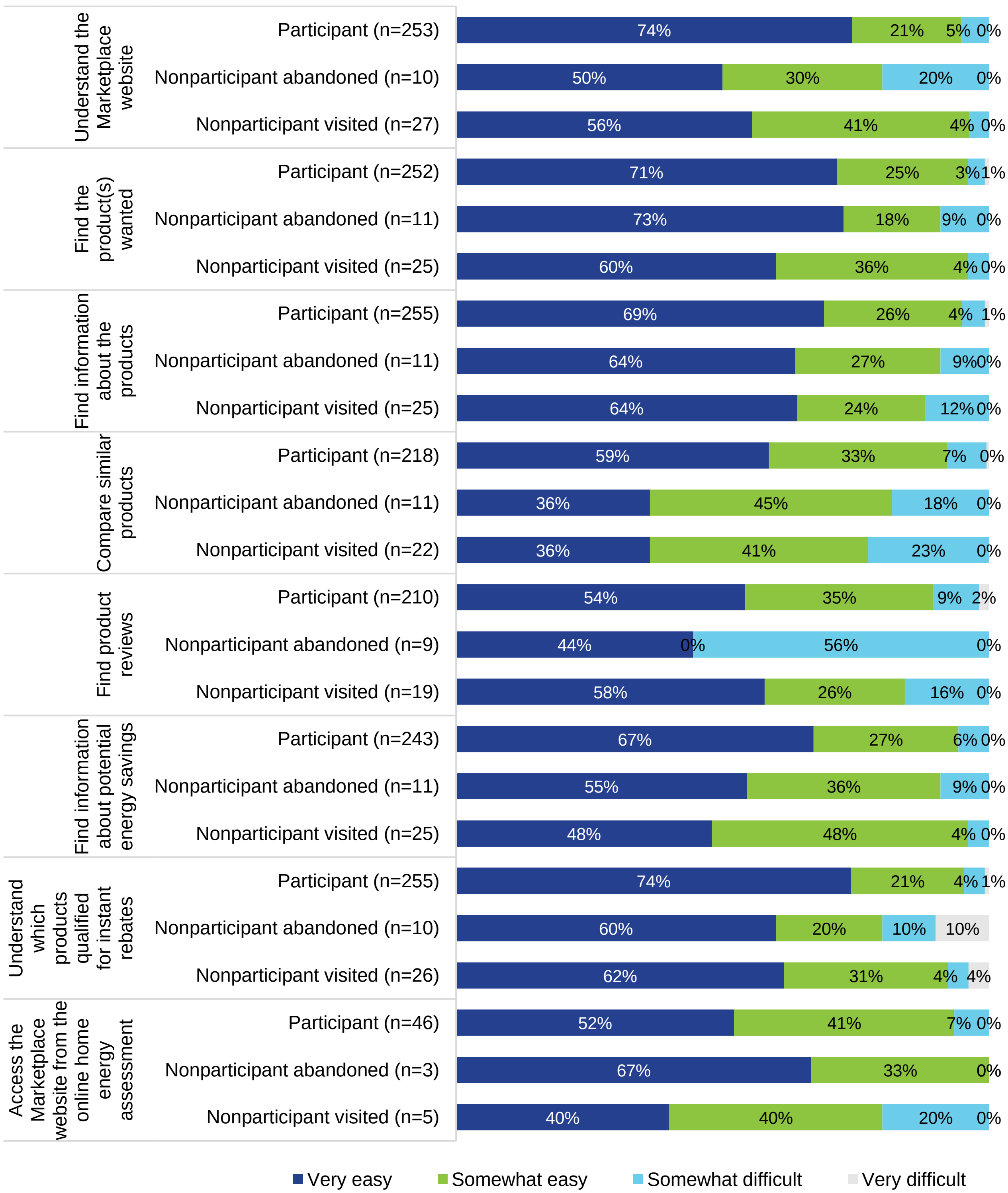
Individuals labeled *nonparticipant abandoned* were more likely to find product reviews *somewhat difficult*. When reviewing these customers' responses, no major theme emerged as to why it was *somewhat difficult* to find product reviews.

For those participants and nonparticipants who accessed the Marketplace from the online home energy assessment report, the majority said it was *very easy* or *somewhat easy* to access.

About nine percent of the participants (n=22) and no individuals labeled *nonparticipant visited* and *nonparticipant abandoned* reported calling, emailing, or live chatting with the customer support center with questions regarding the products, rebates, or the checkout process for the Marketplace. Among those who made contact, most participants found customer support to be *somewhat*, *very*, or *extremely useful* (73 percent). The remaining 27 percent (n=6) said customer support was *not at all useful*. The main reasons were related to issues with the order (not getting the order, the order getting canceled and having to pay more later, having to change the order to get the rebate) and not being able to get hold of customer support[6].

[6] This may be a result of the time difference and availability of customer support which is provided by Uplight. Customer support is on Mountain time and only available Monday through Friday.

Figure 13. Ease or Difficulty with Different Marketplace Aspects

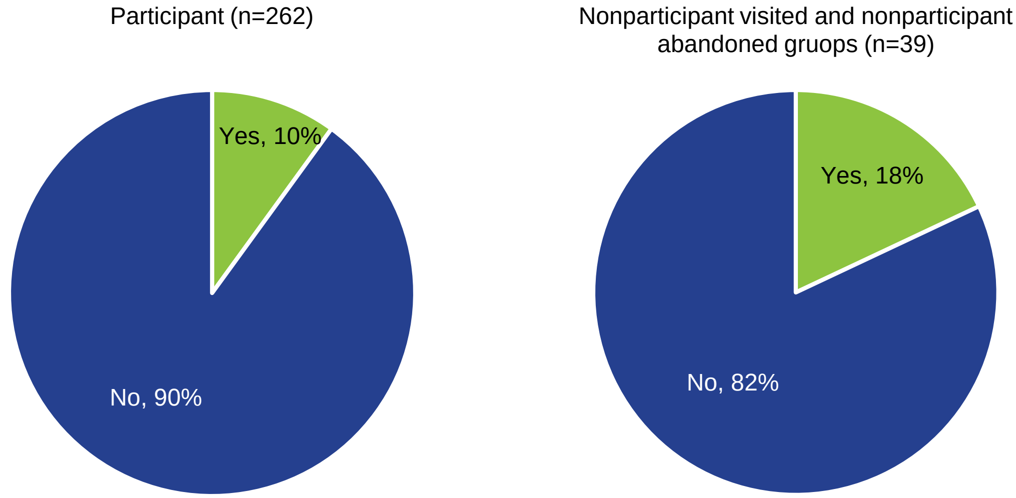


Source: Survey Question PP1
Don't know responses excluded

BARRIERS TO PARTICIPATION

Only ten percent of participants said they had any initial concerns about purchasing products from the Marketplace (Figure 14). Among this group, shipping costs (n=10), concerns about receiving the product in a short timeframe (n=8), security of buying online (n=7), and instant rebate amount (n=6) were the most frequently selected concerns. Individuals labeled *nonparticipant visited* and *nonparticipant abandoned* were also asked about initial concerns related to purchasing products from the Marketplace. Seven out of 39 expressed concerns.

Figure 14. Initial Concerns About Purchasing from the Marketplace



Source: Survey Question PP3

Individuals in the *nonparticipant visited* and *nonparticipant abandoned* groups indicated why they visited the Marketplace but did not make a purchase. Fifty-nine percent of those labeled *nonparticipant visited* and *nonparticipant abandoned* combined) said they were just looking to see what was available. Other reasons for not making a purchase included 1) no need for any of the products (20 percent), and 2) products were too expensive (13 percent). Ten percent of respondents selected shipping costs as the reason. However, due to the small number of completes from individuals labeled as *nonparticipant visited* and *nonparticipant abandoned*, this represents only 4 respondents out of 39 total.

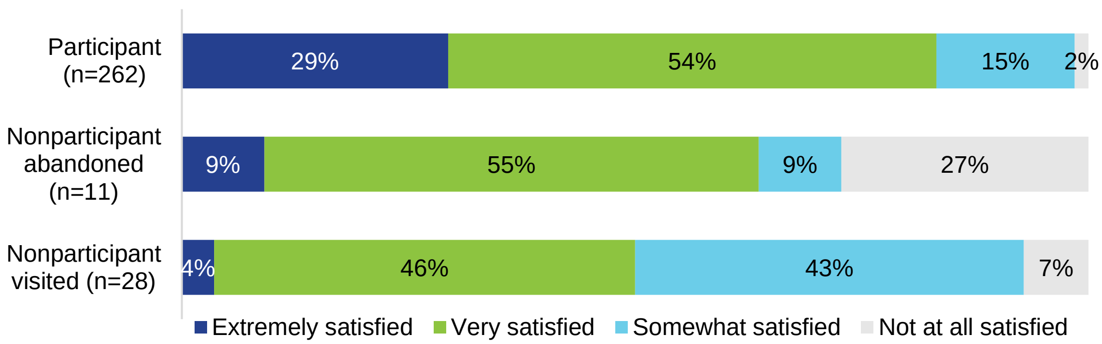
Respondents were asked if there are additional energy-efficient products they would be interested in having available on the Marketplace. Sixty-four percent of participants and 59 percent of individuals labeled *nonparticipant visited* and *nonparticipant abandoned* combined said they did not know of any other products that they would be interested in seeing on the Marketplace. Those who were interested in other products (22 percent of participants and 10 percent of *nonparticipant visited* and *nonparticipant abandoned* combined) listed a variety of products including more types of light bulbs (n=18), smart devices or monitoring devices for energy savings (n=12), a wider variety of thermostats (n=7), water heating devices (n=6), renewable options such as solar and wind (n=6), and larger appliances (n=4).

SATISFACTION WITH MARKETPLACE

We asked participants and nonparticipants about their overall satisfaction with the Marketplace as well as satisfaction with various aspects of the Marketplace. Respondents were asked to rate their satisfaction on a scale of *extremely satisfied*, *very satisfied*, *somewhat satisfied*, and *not at all satisfied*.

Participants were more likely than nonparticipants to be *extremely satisfied* or *very satisfied* with the Marketplace overall. Eighty-three percent of participants and 50 to 64 percent of nonparticipants were *very satisfied* or *extremely satisfied (*Figure 15). Only nine survey respondents were *not at all satisfied*, four of them were participants, and five were in the *nonparticipant visited and abandoned* groups. Reasons reported by participants included not receiving the product, issues verifying eligibility, and the return policy. Reasons reported by nonparticipants included not receiving the product, issues verifying eligibility, prices being too high, and lack of comparison with other vendors for enhanced transparency.

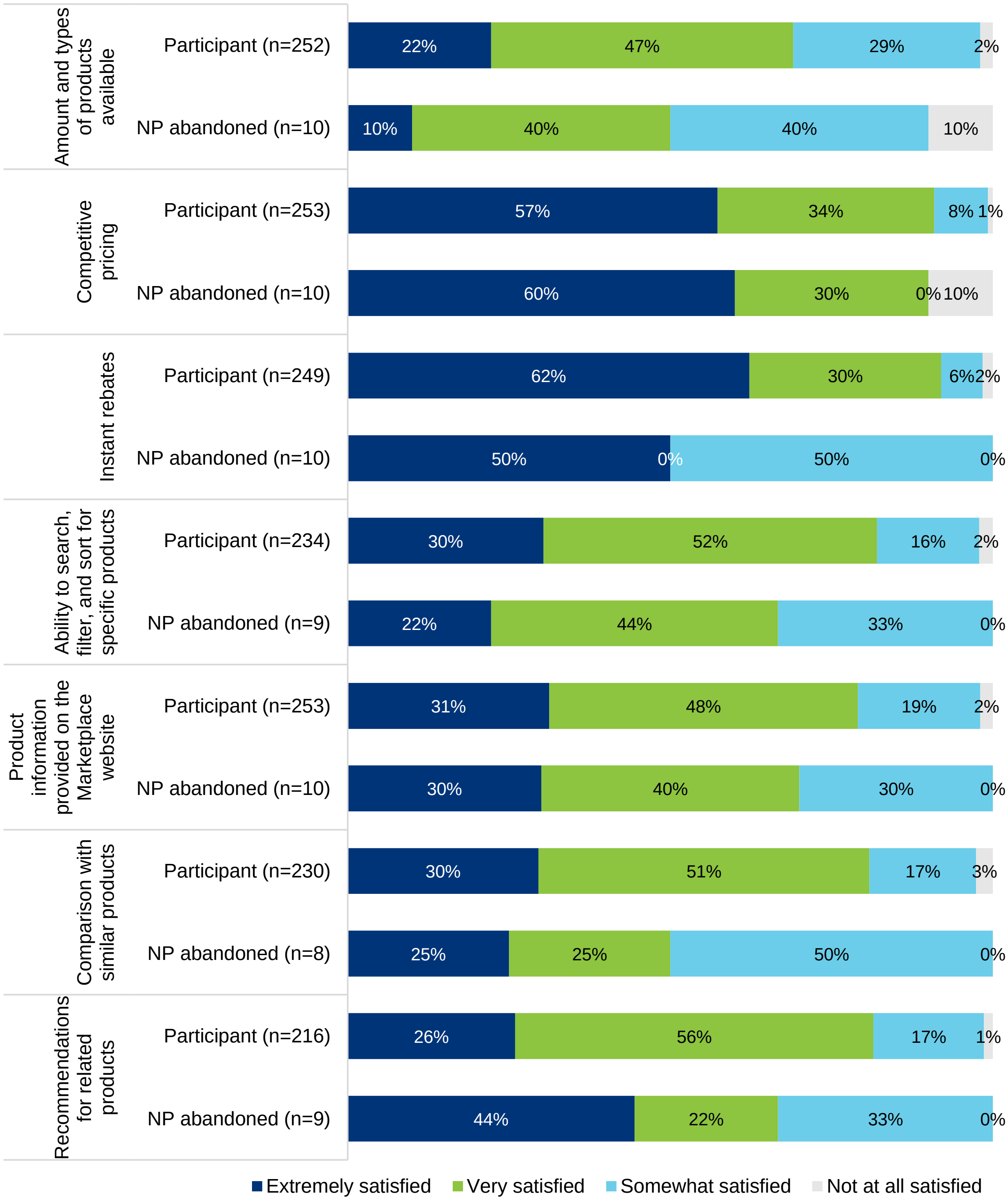
Figure 15. Overall Satisfaction with National Grid's Marketplace



Source: Surrvey Question SAT1

When asked to rate their satisfaction with different aspects of the Marketplace, the majority of participants were *very satisfied* or *extremely satisfied* with all aspects of the Marketplace (Figure 16). Participant and nonparticipant satisfaction with competitive pricing and instant rebates received the highest satisfaction rating. Participants were least *satisfied* with the amount and types of products. Those labeled *nonparticipant abandoned* were least *satisfied* with the competitive pricing and the amount and types of products available.

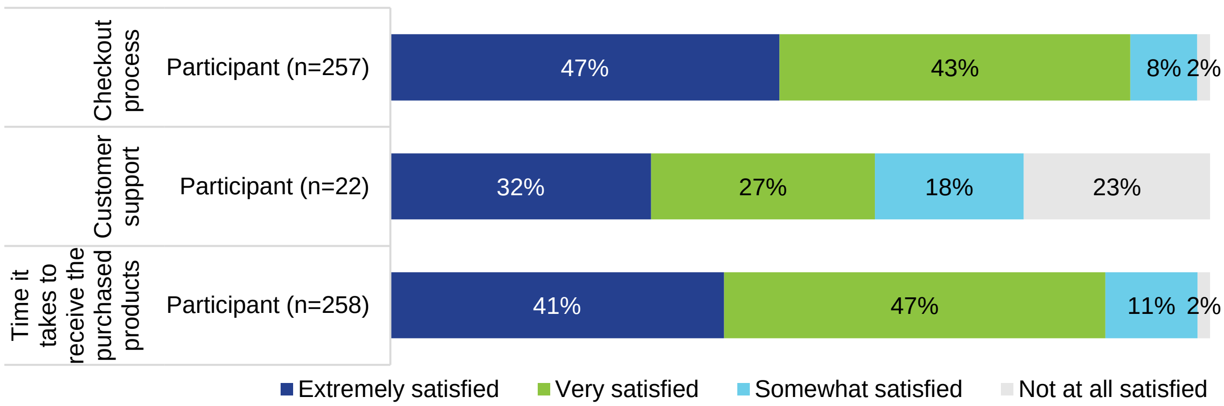
Figure 16. Satisfaction with Different Marketplace Aspects



Source: Survey Question SAT2
Don't know responses excluded

Three satisfaction questions were not asked of nonparticipants, which are highlighted in Figure 17. Most customers who purchased products from the website were *very satisfied* or *extremely satisfied* with the three aspects, including "the time it takes to receive the purchased products," which was one of the top three initial concerns about purchasing products from the Marketplace. Satisfaction with customer support was slightly lower, which can be a result of issues discussed in the Ease of Participation section (also note that the number of completes is small for this aspect of the Marketplace, n=22).

Figure 17. Satisfaction with Different Marketplace Aspects (Participants only)

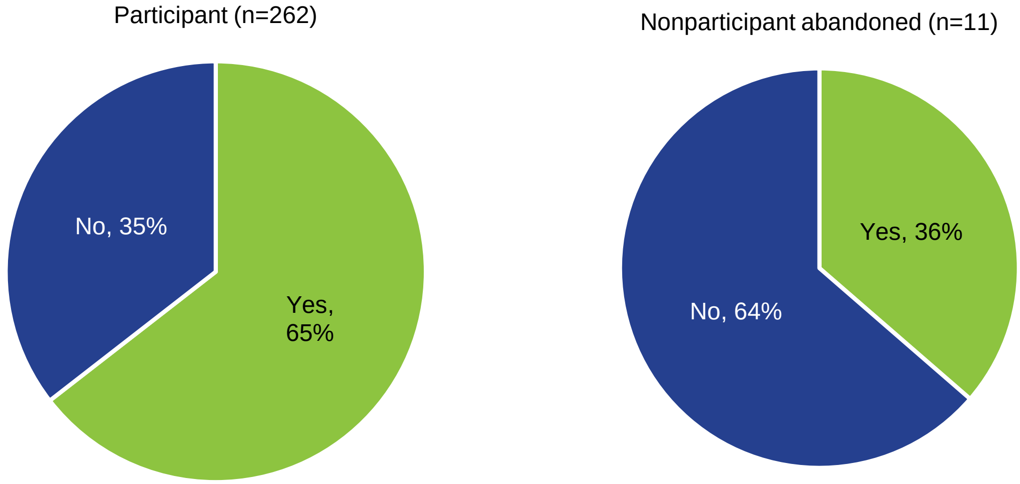


Source: Survey Question SAT2

Another measure of satisfaction is having recommended or planning to recommend the Marketplace to others. While almost two-thirds of participants have already recommended the Marketplace to others and one-third of *nonparticipant abandoned* have done so (Figure 18). Among those who haven't yet recommended the Marketplace to others, most participants (84 percent) are very or somewhat likely to do so, as are 71 percent of those labeled *nonparticipant abandoned*.

When comparing both territories, downstate New York participants are slightly less likely to recommend the Marketplace to others compared to upstate New York participants (78 percent and 86 percent, respectively).

Figure 18. Recommended Marketplace Website to Others



Source: Survey Question SAT3

We also asked participants to describe what they liked best about the Marketplace and if they could change one thing to make the Marketplace more valuable to them, what would it be (open-ended questions). Participants said the pricing and rebates, convenience and ease of use, and quality of products and savings were what they liked most about the Marketplace (Table 7). When asked what was the one thing they would like changed about the Marketplace, the most frequent response was more product offerings followed closely by "nothing" (Table 7). Other frequently mentioned responses included lower prices, eliminating ordering issues, more detailed product information and comparisons, and faster delivery.

Table 7. What Customers Liked Best and Would Like to Change About the Marketplace

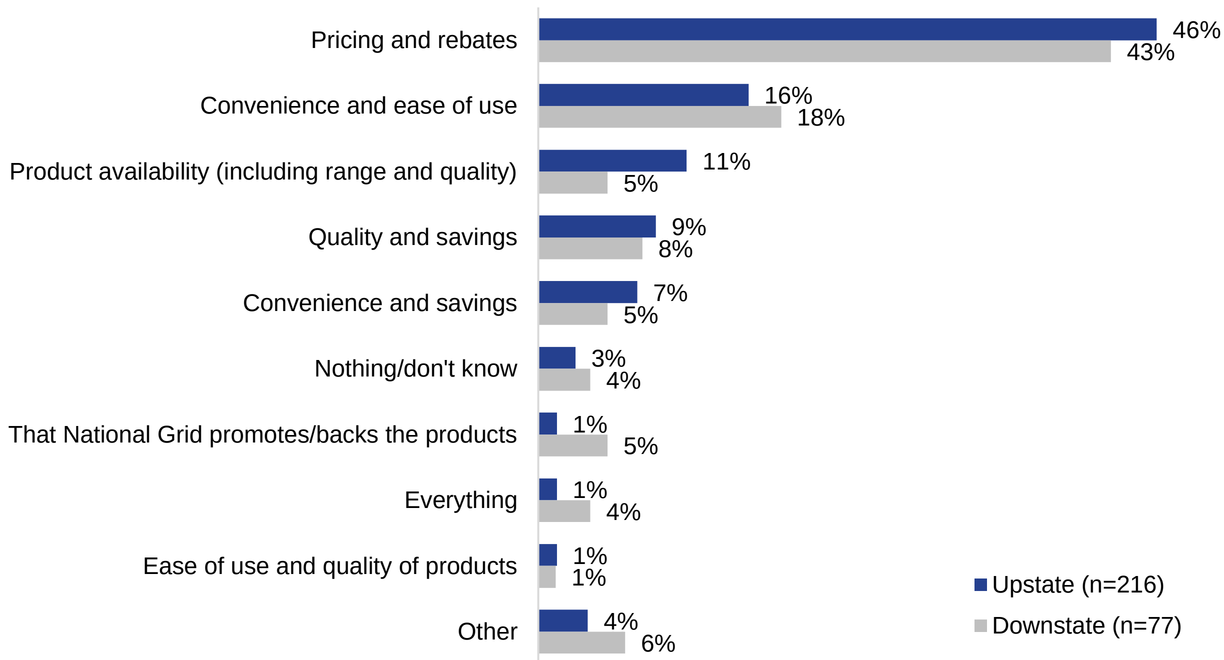
	Participant		Nonparticipant abandoned		Nonparticipant visited	
Categories	Respondents (n)	Percentage	Respondents (n)	Percentage	Respondents (n)	Percentage
Liked best about National Grid's Marketplace						
Pricing and rebates	121	46.9%	9	81.8%	3	12.5%
Convenience and ease of use	42	16.3%	0	0.0%	6	25.0%
Quality and savings	24	9.3%	0	0.0%	1	4.2%
Product availability (including range and quality)	19	7.4%	0	0.0%	9	37.5%
Convenience and savings	19	7.4%	0	0.0%	1	4.2%
Nothing/don't know	7	2.7%	0	0.0%	2	8.3%

Categories	Participant		Nonparticipant abandoned		Nonparticipant visited	
	Respondents (n)	Percentage	Respondents (n)	Percentage	Respondents (n)	Percentage
That National Grid promotes/ backs the products	7	2.7%	0	0.0%	0	0.0%
Everything	4	1.6%	1	9.1%	1	4.2%
Ease of use and quality of products	4	1.6%	0	0.0%	0	0.0%
Other	11	4.3%	1	9.1%	1	4.2%
Total	**258**	**100.0%**	**11**	**100.0%**	**24**	**100.0%**
Would like changed about National Grid's Marketplace						
Add more products	69	28.6%	2	18.2%	2	8.3%
Nothing	64	26.6%	1	9.1%	7	29.2%
Don't know	32	13.3%	0	0.0%	6	25.0%
Lower/more competitive prices	14	5.8%	1	9.1%	5	20.8%
Fix login and ordering issues	10	4.1%	2	18.2%	0	0.0%
More detailed product information and comparisons	10	4.1%	0	0.0%	1	4.2%
Faster delivery	9	3.7%	0	0.0%	0	0.0%
More communication and sales	5	2.1%	1	9.1%	1	4.2%
No limits on purchases	5	2.1%	1	9.1%	0	0.0%
Low or free shipping and tax adjustments	3	1.2%	2	18.2%	0	0.0%
Other	20	8.3%	1	9.1%	2	8.3%
Total	**241**	**100.0%**	**11**	**100.0%**	**24**	**100.0%**

Source: Participant Survey SAT5, SAT6
NAs excluded

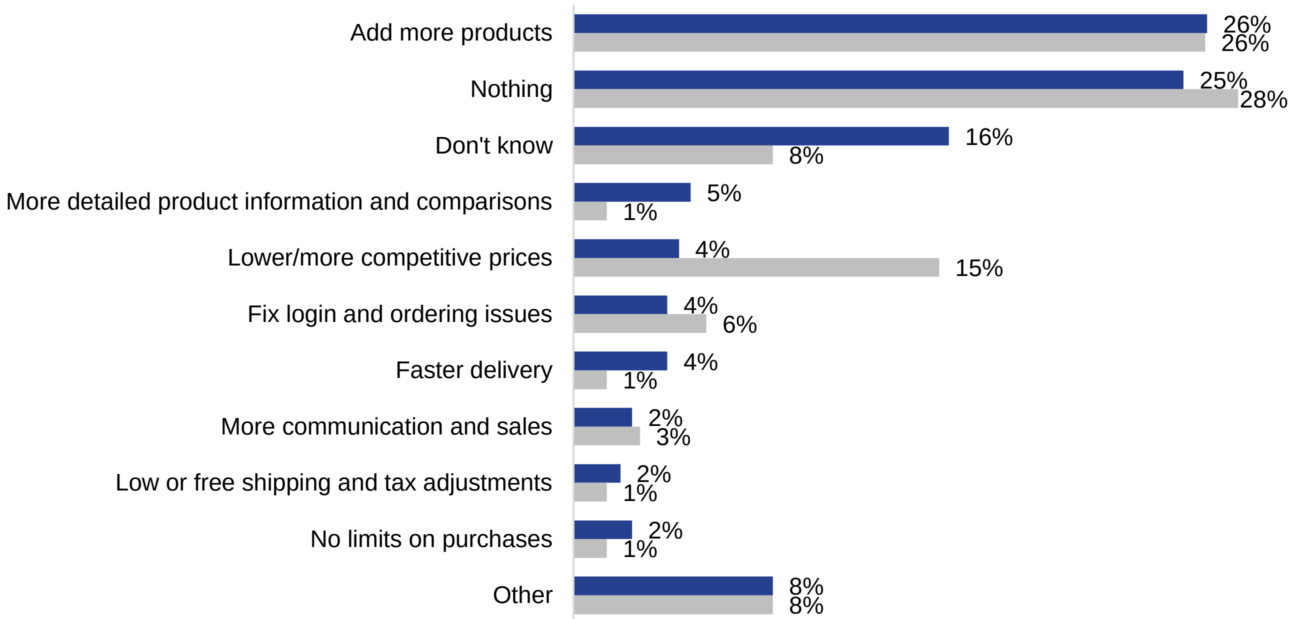
As outlined in Figure 19 and Figure 20, minor differences were reported between upstate and downstate New York participants. Upstate New York participants are more likely to appreciate the product availability. The slight difference can be linked to the fact that upstate New York customers are offered electricity-using products including lighting products which are not offered to downstate New York customers (National Grid New York provides natural gas only in the downstate territory). Downstate New York participants are more likely to ask for lower product prices (Figure 20).

Figure 19. What Participants Liked Best About National Grid's Marketplace by Territory



Source: Survey Question SAT5
NAs excluded

Figure 20. What Participants Would Change About National Grid's Marketplace by Territory

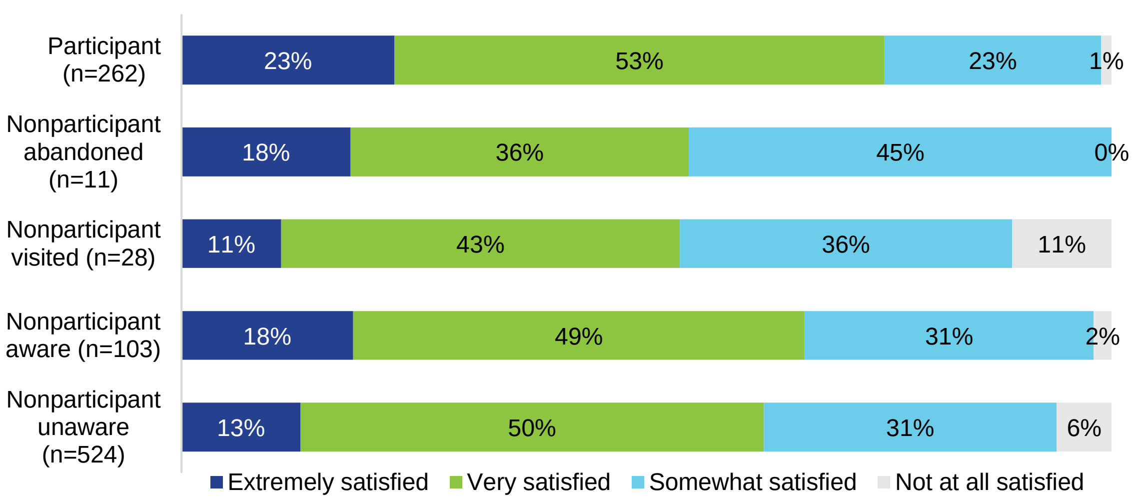


Source: Survey Question SAT6
NAs excluded

SATISFACTION WITH NATIONAL GRID

One final measure of satisfaction is customers' overall experience with National Grid (Figure **21**). Seventy-six percent of participants and 54 to 67 percent of nonparticipants were *very satisfied* or *extremely satisfied* with their overall experience with National Grid. Only one percent of participants and five percent of nonparticipants (comprised of *unaware, aware, visited, abandoned*) were *not at all satisfied*.

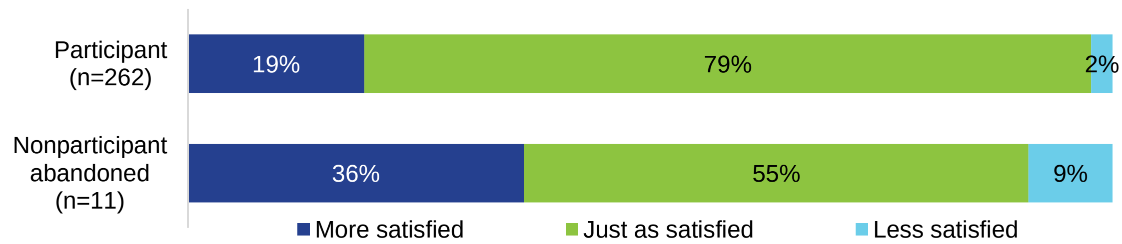
Figure 21. Overall Satisfaction with National Grid



Source: Survey Question SAT7

Since they have visited the National Grid Marketplace, 19 percent of participants are *more satisfied*, and 79 percent are *just as satisfied* with National Grid. This compares with 36 and 55 percent of *nonparticipant abandoned* respondents who are *more satisfied* or *just as satisfied* (Figure 22). However, we would not place significant weight on this finding, as the number of respondents in the *nonparticipant abandoned* group is very small.

Figure 22. Satisfaction with National Grid Since Visiting the Marketplace Website



Source: Survey Question SAT8

ONLINE HOME ENERGY ASSESSMENT

Customers can opt in to complete an online home energy assessment (or online assessment) that collects information about their home and their usage habits. The online assessment then generates a report that provides customers with disaggregation of their energy usage and details for a variety of recommendations on how they can save energy. These tips also direct the customer to the Marketplace website. Therefore, the participant and nonparticipant surveys asked customers about their awareness of and satisfaction with the online assessment and attempted to understand the impact that the referral from the online assessment might have had on customers deciding to interact with the Marketplace.

Participants were more likely to report hearing about the online assessment (57 percent of participants versus 27 percent of nonparticipants). Participants were also more likely to have already completed the online assessment (36 percent versus 21 percent of nonparticipants). The primary reasons among both participants and nonparticipants given for not completing the online assessment included lack of interest or need (29 percent), lack of time (15 percent), and renting the home (12 percent).

Participants were also more likely to be *satisfied* with the online assessment. Among those who completed an online assessment, 62 percent of participants and 41 percent of nonparticipants were *extremely satisfied* or *very satisfied* with the assessment. Most of the remaining participants and nonparticipants were *somewhat satisfied* with the assessment, and very few (one participant and three nonparticipants) were *not at all satisfied* with the assessment. Further, over 94 percent of both groups found the assessment *very easy* or *somewhat easy* to complete.

We asked customers who completed an online assessment and visited the Marketplace if they visited the Marketplace before or after the online assessment. Nonparticipants (*aware, visited,* and *abandoned* combined) were slightly more likely to say they visited the Marketplace before completing the online assessment (55 percent versus 41 percent). Note that the number of nonparticipating respondents is small (9 total) compared to the participating respondents (53 total).

HOUSEHOLD CHARACTERISTICS AND DEMOGRAPHICS

The last set of questions in the survey focused on the demographic and housing characteristics of participants and nonparticipants. The characteristics of the customer groups *nonparticipant unaware* and *nonparticipant aware* were similar. Some characteristics of the *nonparticipant abandoned* and *nonparticipant visited* customers groups were slightly different from the other nonparticipants. However, due to the small number of completes, those differences can be misleading. The last column in Table 8 shows the average of all the nonparticipant responses combined.

As shown in Table 8, most of the respondents own their home (91 percent of participants and 76 percent of nonparticipants), and almost all of them lived in their home year round (98 percent of participants and 97 percent of nonparticipants). For most respondents, their homes were built after the 1960s. Seventy-five percent of participating respondents and 62 percent of nonparticipating respondents utilize natural gas for water heating.

Table 8. House Characteristics

		Nonparticipant				
	Participant	Abandoned	Visited	Aware	Unaware	Overall
Own or rent home						
Own/Buying	91.1%	100.0%	78.6%	82.2%	74.6%	76.4%
Rent	8.2%	0.0%	21.4%	16.8%	24.0%	22.4%
Occupied without payment or rent	0.8%	0.0%	0.0%	1.0%	1.4%	1.2%
Respondents (n)	**258**	**10**	**24**	**94**	**512**	**648**
Year-round or seasonal home						
Year-round	98.4%	100.0%	95.8%	97.9%	96.5%	96.7%
Seasonal	1.6%	0.0%	4.2%	2.1%	3.5%	3.3%
Respondents (n)	**258**	**10**	**24**	**94**	**512**	**640**
Year built						
1930s or earlier	4.2%	18.2%	0.0%	5.8%	4.4%	4.7%
1940s	6.1%	0.0%	10.7%	4.9%	5.9%	5.9%
1950s	3.8%	0.0%	7.1%	4.9%	16.2%	13.8%
1960s	12.2%	9.1%	7.1%	12.6%	9.0%	9.5%
1970s	5.3%	0.0%	7.1%	9.7%	6.1%	6.6%
1980s	18.7%	27.3%	17.9%	14.6%	13.9%	14.4%
1990s	21.0%	18.2%	17.9%	24.3%	24.4%	24.0%
2000s	9.2%	9.1%	3.6%	6.8%	4.4%	4.8%
2010s	10.7%	9.1%	25.0%	5.8%	9.0%	9.2%
Don't know	8.8%	9.1%	3.6%	10.7%	6.7%	7.2%
Respondents (n)	**262**	**11**	**28**	**103**	**524**	**666**

	Participant	Nonparticipant				
		Abandoned	Visited	Aware	Unaware	Overall
Water heating fuel type						
Electricity	8.8%	18.2%	35.7%	20.4%	16.8%	18.2%
Natural gas	75.2%	63.6%	50.0%	64.1%	62.4%	62.2%
Fuel oil	7.6%	9.1%	7.1%	1.9%	3.6%	3.6%
Propane	5.7%	0.0%	7.1%	3.9%	3.1%	3.3%
Wood	0.4%	0.0%	0.0%	1.0%	0.6%	0.6%
Other	1.1%	9.1%	0.0%	1.9%	1.9%	2.0%
Don't know	1.1%	0.0%	0.0%	6.8%	11.6%	10.2%
Respondents (n)	**262**	**11**	**28**	**103**	**524**	**666**

Source: Survey Questions H1, H2, H3, H4
Refused responses excluded

The most common household size among participants and nonparticipants was two-to-four persons; nonparticipants were more likely to have a household size of one person (Table 9). About three-fourths of participants and nonparticipants did not have any household members under the age of 19 years of age, and 50 percent did not have a household member over 65 years of age.

Table 9. Household Characteristics

	Participant	Nonparticipant				
		Abandoned	Visited	Aware	Unaware	Overall
Number of people in household						
One person	16.7%	0.0%	23.1%	23.0%	24.7%	23.9%
Two persons	45.6%	27.3%	34.6%	42.5%	37.2%	37.7%
Three to four persons	30.5%	45.5%	42.3%	26.4%	29.1%	29.6%
More than four persons	7.1%	27.3%	0.0%	8.0%	9.0%	8.8%
Respondents (n)	**239**	**11**	**26**	**87**	**457**	**581**
Household members under 19						
Zero persons	73.7%	45.5%	69.2%	78.8%	75.3%	75.0%
One or more persons	26.3%	54.5%	30.8%	21.2%	24.7%	25.0%
Respondents (n)	**236**	**11**	**26**	**85**	**450**	**572**
Household members 65 or older						
Zero persons	50.8%	72.7%	64.0%	39.0%	56.4%	54.5%
One or more persons	49.2%	27.3%	36.0%	61.0%	43.6%	45.5%
Respondents (n)	**236**	**11**	**25**	**82**	**447**	**565**

Source: Survey Questions DE1, DE2, DE3, DE4
Refused responses excluded

As shown in Table 10, about two-thirds of participating and nonparticipating respondents are over 55 years old, and about 85 percent have at least some college. Two-thirds of the participant and about half of the nonparticipant respondents were male.

Table 10. Demographic Characteristics

		Nonparticipant				
	Participant	**Abandoned**	**Visited**	**Aware**	**Unaware**	**Overall**
Age						
18 to 24	0.4%	0.0%	0.0%	0.0%	1.3%	1.0%
25 to 34	8.1%	9.1%	8.0%	4.3%	7.8%	7.3%
35 to 44	12.6%	27.3%	16.0%	6.5%	14.4%	13.5%
45 to 54	14.2%	27.3%	4.0%	6.5%	13.1%	12.0%
55 to 64	24.4%	36.4%	44.0%	30.1%	27.7%	28.9%
65 or older	40.2%	0.0%	28.0%	52.7%	35.7%	37.4%
Respondents (n)	**246**	**11**	**25**	**93**	**473**	**602**
Education						
Less than high school	0.8%	0.0%	0.0%	1.1%	1.2%	1.1%
High school graduate or GED	10.0%	0.0%	14.8%	16.8%	12.2%	12.8%
Technical or trade school but no college	4.0%	0.0%	3.7%	2.1%	3.1%	2.9%
Some college or 2-year degree	23.7%	36.4%	29.6%	16.8%	26.7%	25.4%
College graduate	24.9%	9.1%	25.9%	24.2%	24.6%	24.3%
Some graduate work	5.2%	18.2%	0.0%	9.5%	5.6%	6.2%
Graduate degree	31.3%	36.4%	25.9%	29.5%	26.7%	27.2%
Respondents (n)	**249**	**11**	**27**	**95**	**484**	**617**
Gender						
Male	66.4%	54.5%	34.6%	56.3%	44.3%	46.0%
Female	33.6%	45.5%	65.4%	43.8%	55.7%	54.0%
Respondents (n)	**250**	**11**	**26**	**96**	**476**	**609**

Source: Survey Questions DE4, DE5, DE6
Refused responses excluded

There are several differences between downstate and upstate New York participants, highlighted in Table 11. Downstate New York participants are more likely to have an older house, household size of at least three persons, more likely to have household members under the age of 19 years of age, more likely to be younger in age, and more likely to have some college education. The difference in water heating fuel type reflects the type of fuel provided by National Grid (electricity and natural gas in upstate New York compared to electricity only in Downstate New York). Note that about 12 percent of participants who responded to the survey use electricity as the main fuel for water heating.

Table 11. Participant Household and Demographic Characteristics by Territory

	Upstate	Downstate	Overall
Year built			
1930s or earlier	5.3%	1.4%	4.2%
1940s	4.3%	10.8%	6.1%
1950s	3.2%	5.4%	3.8%
1960s	10.1%	17.6%	12.2%
1970s	7.4%	0.0%	5.3%
1980s	16.5%	24.3%	18.7%
1990s	19.1%	25.7%	21.0%
2000s	10.6%	5.4%	9.2%
2010s	13.3%	4.1%	10.7%
Don't Know	10.1%	5.4%	8.8%
Respondents (n)	**188**	**74**	**262**
Water heating fuel type			
Electricity	12.2%	0.0%	8.8%
Natural gas	68.1%	93.2%	75.2%
Fuel oil	9.0%	4.1%	7.6%
Propane	8.0%	0.0%	5.7%
Wood	0.5%	0.0%	0.4%
Other	1.6%	4.1%	1.1%
Don't know	0.5%	2.7%	1.1%
Respondents (n)	**188**	**74**	**262**
Number of people in household			
One person	18.6%	11.3%	16.7%
Two persons	50.8%	30.6%	45.6%
Three to four persons	25.4%	45.2%	30.5%
More than four persons	5.1%	12.9%	7.1%
Respondents (n)	**177**	**62**	**239**
Household members under 19			
Zero persons	76.7%	65.0%	73.7%
One or more persons	23.3%	35.0%	26.3%
Respondents (n)	**176**	**60**	**236**
Participant age			
18 to 24	0.5%	0.0%	0.4%
25 to 34	7.7%	9.4%	8.1%
35 to 44	11.0%	17.2%	12.6%
45 to 54	12.6%	18.8%	14.2%
55 to 64	25.3%	21.9%	24.4%

	Upstate	Downstate	Overall
65 or older	42.9%	32.8%	40.2%
Respondents (n)	**182**	**64**	**246**
Participant education			
Less than high school	1.1%	0.0%	0.8%
High school graduate or GED	10.4%	9.1%	10.0%
Technical or trade school but no college	4.9%	1.5%	4.0%
Some college or 2-year degree	23.0%	25.8%	23.7%
College graduate	24.6%	25.8%	24.9%
Some graduate work	5.5%	4.5%	5.2%
Graduate degree	30.6%	33.3%	31.3%
Respondents (n)	**183**	**66**	**249**

Source: Survey Questions H1, H4, DE1, DE2, DE4, DE5
Refused responses excluded