

April 30, 2018

Hon. Kathleen H. Burgess, Secretary New York State Public Service Commission Three Empire State Plaza Albany, NY 12223-1350

Re: Central Hudson Gas & Electric Corporation's REV Demonstration Project Implementation Plan Status Update (Q1 2018) in Case 14-E-0318 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric Service and Case 14-M-0101 – Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision

Dear Secretary Burgess:

Central Hudson Gas & Electric Corporation ("Central Hudson") submits for filing in the abovereferenced cases its REV Demonstration Project Implementation Plan Status Update. A request for confidential treatment was submitted to the Records Access Officer today, along with Report Attachments 1, 2, and 5.

If there are any questions related to this filing, please do not hesitate to contact Joe Hally, Manager-Energy Transformation & Solutions at 845-486-5373 (<u>ihally@cenhud.com</u>) or Laura Butler, Director-Digital Customer Experience at 845-486-5431 (<u>lbutler@cenhud.com</u>).

Respectfully submitted,

/s/Paul A. Colbert

Associate General Counsel Regulatory Affairs

cc: Marco Padula (DPS)

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# **Central Hudson Gas & Electric**



# **Residential Energy Exchange**



# Reforming the Energy Vision

# Demonstration Project Implementation Plan 2018 Q1 Status Update

Regarding Case 14-M-0101, Case 14-E-0318

April 30, 2018

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# Executive Summary

This report serves as the status update for Central Hudson's Reforming the Energy Vision (REV) Demonstration Project, CenHub. This report is being filed in response to Case 14-E-0318, Joint Proposal Order Approving Rate Plan dated June 17, 2015 and the Case 14-M-0101, Reforming the Energy Vision Demonstration Project Assessment Report dated November 10, 2015. This document provides the first quarter ("Q1") of 2018 progress, next steps, roles, responsibilities, governance, work plan, budget and reporting going forward.

CenHub strives to deliver the following benefits:

- Creation of a home energy advisory platform providing insight into energy usage for all residential customers and accessibility to energy efficiency programs such as rebates.
- Introduction of new channels and cross promotion for customers to participate in energy and cost savings programs
- Increased awareness and customer choice associated with program enrollment and the purchase of products and services
- Customer convenience
- Lower 3<sup>rd</sup> party customer acquisition and transaction costs
- Evaluation of potential new revenue streams
- Educational tools to assist customers to more effectively manage their energy bills

Central Hudson believes that limited consumer engagement related to household energy use can be increased through improvement of five (5) primary factors:

- A) Awareness
  - CenHub employs a multi-channel marketing strategy to inform customers of options, discounts, program eligibility and educational tools.
- B) Availability of information
  - CenHub provides energy usage information in multiple formats to speak to all types of customers. Specific customer information and program information is paired to display more personalized information to inform the customers and inspire action.
- C) Customer effort or lack of convenience
  - CenHub enables instant rebates, actionable tips and multiple self-service tools to reduce effort and improve usability.
- D) Understanding the value of products and services
  - In each issue, the CenHub Insider includes an energy IQ question, information on a distinct featured product, information on program rebates, pictures and howto's.
- E) Trust in available solutions
  - CenHub is a compilation of business processes and strong partnerships to ensure data accuracy and integrity, customer support along each step of a customer's journey, and program integration to ensure incentives and fees are accurate.

Central Hudson is working to meet the growing expectations of our customers. Based on the interactions between consumers and other industries, there are trends that can be leveraged within CenHub that align with current customer expectations.

#### Figure 1: Customer Experience Industry Trends



To facilitate CenHub, Central Hudson has embarked on a multi-release roll out strategy:

- A. CenHub My Account, CenHub Insights and CenHub Store Launch (Complete)
- B. Migration to Web Experience Management and Identity Management (Complete)
- C. Insights+ Service Offering (Complete)
- D. Optimization and Enhancement of Offerings (Ongoing)
  - a. Expansion of the product categories and brands (ongoing)
  - b. Rebates as a Service on nest.com (Complete)
  - c. Correlation of billed amounts and usage through the Insights graphs (Complete)
  - d. Visual tools to differentiate original TOU and new VTOU peak and off-peak hours (Complete)
  - e. Visual tools to differentiate usage from net generation (Complete)
  - f. Personalized product offers based on eligibility (In progress)
- E. Energy Action Plan (In progress)

# Section 1: Demonstration Design Progress

## A) Phases

Central Hudson completed the second Program Year of the CenHub Demonstration Project as of March 31, 2018.

#### **Ongoing Optimization and Enhancement Offerings**

- Customer Engagement
  - We launched a partnership with Sealed in January for their Home Advance Program. Central Hudson receives a revenue share for all completed Home Advance improvement projects.
  - We are in the process of contract negotiations with multiple companies to launch real-time customer feedback and monitoring technologies on the website. These technologies will allow us to assess the response time to web related customer issues and allow customers to provide feedback about our web pages. Based on the response rate and information gathered we plan to use the feedback to influence our web and program design going forward to improve the overall customer experience and drive more customer engagement.

#### • Functionality Enhancements –

- We successfully completed UAT for personalization of Store offerings. Once live the Store will include information that dynamically adjusts once the customer logins in to display offers they are eligible for or are already participating in that include Insights+ such as:
  - TOU with Insights+ bundled offer at a reduced price
  - CenHub Peak Perks whole home generator program
  - Insights+
  - Smart Home Rate
- We are in the design phase of a new service called "Your Energy Action Plan". This phase will include modifications to the existing Home Profile wizard tool to result in the creation of a personalized list of recommended actions for the customer to take to achieve their energy goals. Customers can choose what is most important to them (i.e. cost, energy savings, and carbon reduction) and takes into account their usage profile, home characteristics, past product purchases on CenHub Store and participation in Central Hudson programs, and eligibility for other Central Hudson programs. Customers without an online account will be able to create an action plan and print or email it to themselves. Those with online accounts can save the information and track their progress throughout the year. This functionality is expected to be launched in Q2 2018
- Web Experience Consistency –

 We are performing UAT for upgrades to the Single Sign On architecture for the test and production sites in conjunction with our partner Simple Energy. These improvements are expected to be launched in Q2 2018.

#### Planned Tasks for Q2, 2018

- 1. Mass Marketing of the VTOU rate
- 2. Launch Smart Home Rate program
- 3. Mass Marketing of Smart Home Rate program
- 4. Enable enrollment in a TOU/Insights+ bundle at reduced subscription pricing

Table 1 details the functionality assigned to each Phase with the green highlighted areas indicated those that have been achieved to date.

Phase	1. Portal &	2. Web/Mobile/Social	3. Insights+	4.Ongoing
	Marketplace	Strategy	Launch	Optimization and
	Launch	Enhancements		Enhancement of
				Offerings
Milestone (Criteria Met to Move to Next Phase)	Successful Integration and Delivery of Portal & Marketplace: • Successful data transfer • Successful rebate application	Successful Migration to Web Experience Management: • Successful content and data transfer	Successful Integration and Enrollment: • Successful enrollment process • Successful data transfer	<ul> <li>Revenue Realization &amp; Increased</li> <li>Engagement:</li> <li>Acquisition of new products and services</li> <li>Enrollments in VTOU rate</li> </ul>
Key Elements	<ul> <li>Integration into existing 'My Account' portal</li> <li>End-to-end testing</li> <li>Admin and Support staff training</li> <li>Program marketing campaign</li> <li>Go-Live</li> </ul>	<ul> <li>Modernize Login, New User Registration, Forgot Password and CenHub My Account landing page</li> <li>Enable segmentation capability for targeted marketing and cross promotion of programs based on customer attributes</li> </ul>	<ul> <li>Integrate enrollment into Peak Perks program</li> <li>Integrate enrollment process into Marketplace</li> <li>Program marketing campaign</li> <li>Procure meter inventory</li> <li>Establish meter change process</li> </ul>	<ul> <li>Integrate Peak Perks portal and enrollment process</li> <li>Evaluate 3rd party and ESCO relationship leads for new offerings</li> <li>Investigate C&amp;I offerings</li> </ul>
Product & Service Categories	<ul><li>Thermostats</li><li>Smart plugs</li></ul>	Improvements to     account security	<ul> <li>Interval data and drill down</li> </ul>	<ul> <li>Commercial Programs</li> </ul>

#### Table 1: Project Phases

<ul> <li>LED lightbulbs</li> <li>Green Button Download</li> <li>Improved rebates design to accelerate time to market of new products and services</li> </ul>	<ul> <li>through modernized password and username practices</li> <li>Establish a framework that will allow for a more consistent and standardized website experience in the future</li> <li>Introduced overlay of billing information on the "My Usage"</li> </ul>	capability • Visual distinction between peak and off peak interval data for TOU customers	<ul> <li>TDR products including installation and registration services</li> <li>Program cross promotion</li> <li>Bundle VTOU rate</li> <li>Bundle load disaggregation methods</li> </ul>
	graph		

## B) Hypotheses

In order to measure the success of CenHub, Central Hudson has defined five (5) hypotheses to test throughout the life of the project. These hypotheses are targeted at understanding Central Hudson's residential customers. They span the elements of customer engagement, customer behavior, and customer preference. Understanding the customer ensures alignment of business offerings and introduction of business models that benefit the customer through increased choice and control.

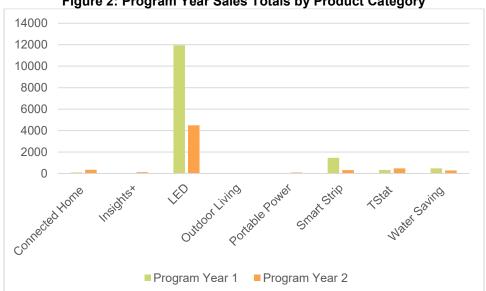
Test Statement	Hypothesis	Q1 2018 Results
Test StatementCustomers may be more engaged in their energy usage and energy management if they have:1. Greater awareness of available products and services that are	<ul> <li>Hypothesis</li> <li>If Central Hudson utilizes a Multi -Channel marketing campaign, specifically inclusive of email and social media to market CenHub to residential customers</li> <li>then Central Hudson will increase the number of Digitally Engaged Residential Customers<sup>1</sup> to 60% of the residential customer base within 12</li> </ul>	Q1 2018 Results <ul> <li>Current enrollment rate in CenHub My Account – 46%</li> </ul> The Action Items within Table 8 detail the steps we are taking to try to improve upon this metric and drive more enrollment activity.
relevant to them 2. The opportunity to interact with applicable tools through a fun, educational and engaging online experience.	<ul> <li>wonths of the April 1, 2016 Phase 1 Go Live Date.</li> <li>If Central Hudson utilizes gamification, reminders and relevant savings opportunities to encourage and prompt customers to complete the digital home energy profile</li> <li>then 5% of the Digitally Engaged Residential Customers will complete the home energy</li> </ul>	<ul> <li>Current Home profile completion rate – 8%</li> <li>We anticipate that the introduction of the 'Your Energy Action Plan' will further increase Home Profile completion rates.</li> </ul>

#### **Table 2: Test Statements**

<sup>3</sup> Defined within Section B "Test Population" as customers that are currently My Account users and CenHub users following the Go Live Date

Customers may become engaged in the purchase of energy products and services they value through: 1. An information driven, guided e- commerce experience. 2. A social online experience that inspires competition and community action 3. The availability of instant rebates and	<ul> <li>profile within 12 months of the April 1, 2016 Phase 1 Go Live Date.</li> <li>If Central Hudson develops an engaging platform that informs customers about their energy use, provides actionable energy savings tips linked to available products and services, and reinforces behaviors through gamification and social interaction</li> <li>then on average Digitally Engaged Residential Customers will become more energy efficient than their digitally unengaged counterparts</li> <li>If Central Hudson provides CenHub users with energy usage information and targeted actionable savings tips linked to products and services available on CenHub</li> <li>then we expect to achieve 8,000 product purchases within the first 12 months of the April 1, 2016 Phase 1 Go Live Date.</li> <li>Then we expect to achieve 8,000 product purchases in year two April 1, 2017 – April 1, 2018</li> </ul>	<ul> <li>Product sales for Program Year 1 – 14,640</li> <li>Product sales for Program Year 2 – 7,249</li> <li>The Action Items within Table 8 detail the steps we are taking to try to improve upon this metric and increase sales conversion rates.</li> </ul>
rewards programs We believe Central Hudson will successfully implement a new business model leveraging our expertise and partnerships to create new revenue streams and that there are service providers willing to work with Central Hudson to deliver choice and value to our customers. Customers may be willing to pay for Advanced Data Services.	<ul> <li>If Central Hudson provides CenHub customers with energy usage information and actionable savings tips linked to products and services available on CenHub</li> <li>then CenHub will generate approximately \$40,000 of Platform Service Revenues (PSRs) for Central Hudson within the first 12 months of the April 1, 2016 Phase 1 Go Live Date.</li> <li>If we offer an Insights+ package featuring an intuitive and engaging user experience and utilize multi-channel and targeted marketing</li> <li>then 1,000 customers will subscribe to the Advanced Data Services package within 12 months of the September 30, 2016 Phase 2 Go Live Date.</li> </ul>	<ul> <li>Post-tax PSR's for Program Year 1 - \$30,273</li> <li>Post-tax PSR's for Program Year 2 - \$11,632</li> <li>The Action Items within Table 8 detail the steps we are taking to try to improve upon this metric and increase revenues.</li> <li>Total Insights+ Enrollments - 137</li> <li>Peak Perks M&amp;V enrolled population - 64</li> <li>Insights+ enrolled residential population - 83</li> <li>The Action Items within Table 8 detail the steps we are taking to try to improve upon this metric and increase participation.</li> </ul>

		We are also finding that the Insights+ meters are satisfying evolving business needs that were not predicted at the initial conception of the program such as M&V for the Peak Perks program and VDER. These opportunities result in reduced overall cost for the program and increase the availability of the platform features for no incremental cost to the customer.
Advanced Data Services may influence customers' behavior.	<ul> <li>If Central Hudson directly markets to Insights+ subscribers and provides insights and tips regarding management of their energy usage and cross-promotes programs such as Targeted Demand Response</li> <li>then customers with Insights+ subscriptions will make 10% more product purchases per customer than the 'Digitally Engaged Residential Customer' within the first 12 months of subscription enrollment (measured on a rolling 12 month avg. beginning 12 months after the September 30, 2016 Phase 2 Go Live Date.)</li> <li>25% of Advanced Data Services subscribers will elect a non-standard rate offering such as our existing Time of Use rate within 2 years of the September 30, 2016 Phase 2 Go Live Date.</li> </ul>	Now that we have a larger Insights+ population we are currently working with our business intelligence team to capture data to begin reporting on these metrics.





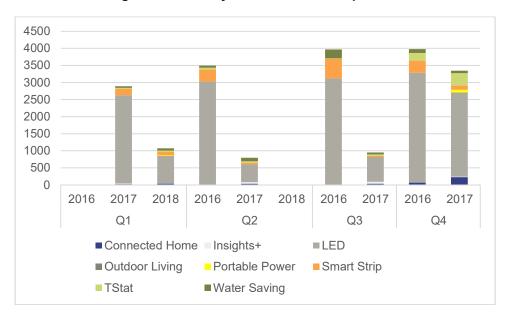


Figure 3: Quarterly Sales Results Comparison

Program Year 2 sales mimicked the shape of Program Year 1 sales, however the quantities are significantly lower in Program Year 2 despite our marketing and outreach efforts. Central Hudson customers continue to purchase convenient, low priced products. Higher priced items such as Smart thermostats and connected home products are engaging a small subset of Central Hudson customers. In Q4 2017, we introduced a new product category called "Portable Power". These products were added to introduce more variety, lower sale prices and lifestyle/convenience options. Central Hudson will continue to work with Simple Energy in closely monitoring sales volumes in order to continuously introduce products of interest and varied price points in order to increase conversion rates.

## C) Population

Central Hudson's customer base is very diverse and falls into various categories of digital engagement. A segment of Central Hudson's customers are highly active with digital outlets, such as on-line shopping, social media, and banking. Central Hudson saw a significant increase in downloads when it first launched its mobile app and outage map. The Company is actively communicating with its customers via Facebook and Twitter and there is the potential to delight our customers through more digital channels. Therefore the Company aims to increase the number of digitally engaged customers through the evolution of CenHub and better understand the drivers behind their engagement.

Central Hudson is analyzing the residential customer population in an attempt to understand what online behaviors are prevalent among varying customer segments. Through preliminary analysis, customers can be defined according to the Test Populations defined in Table 3 and can be further categorized according to Figure 4. Figure 4 includes a "snap shot" illustration of customer account longevity and CenHub penetration. This information is valuable because it

highlights the importance of engaging new customers sooner and the need to use different methods to engage long standing account holders. The team continues to dive deeper into this data to enhance our overall marketing strategy.

Table 3: Test Population					
Test Population Description	Selection Method	Population Size (as Reported on Dec 10, 2015)	Q1 2018 Population Size		
<ul><li>Residential PV Customers</li><li>to be analyzed within Channel and Segment Tests</li></ul>	Identification / Selection Method: • Net Meter installation record	3,741	7,461		
<ul> <li>Digitally Engaged Residential Customers</li> <li>to be analyzed within Test Statement #1</li> <li>to be analyzed within Test Statement #5</li> <li>to be analyzed within Channel and Segment Tests</li> </ul>	Identification / Selection Method: Current My Account users Opt-in to enrollment in CenHub following project go live	136,000 <sup>2</sup> , all existing My Account users will be automatically enrolled in CenHub	120,306		
<ul> <li>Digitally Unengaged Residential Customer</li> <li>to be analyzed within Test Statement #1</li> <li>to be analyzed within Channel and Segment Tests</li> </ul>	Identification / Selection Method: 1. Paper bill recipient 2. non-My Account user	107,000 <sup>4</sup>	143,191		
<ul> <li>Existing customer transferring service(s) / 'Moves'</li> <li>to be analyzed within Channel and Segment Tests</li> </ul>	<ul> <li>Identification / Selection Method:</li> <li>Existing customer – transferring service</li> </ul>	65,400	56,315		
<ul> <li>New Residential Customer</li> <li>requesting service</li> <li>to be analyzed within Channel and Segment Tests</li> </ul>	<ul> <li>Identification / Selection Method:</li> <li>New Service Application submitted</li> </ul>	As Required	20,073		
<ul><li>Home Energy Report Recipient</li><li>to be analyzed within Channel and Segment Tests</li></ul>	Treatment Group listing	103,000	103,000		
Insights+ Subscriber • to be analyzed within Test Statement #5 • to be analyzed within Channel	Identification / Selection Method: <ul> <li>Voluntarily Subscribes</li> <li>Pays the Associate</li> <li>Subscription fee</li> </ul>	N/A	83		

**Table 3: Test Population** 

<sup>2</sup> Upon detailed review and implementation of Phase 1 Central Hudson identified that inactive accounts were being counted in the initial enrollment totals

and Segment Tests			
Comverge Target • Peak Perks M&V	<ul><li>Identification / Selection Method:</li><li>Peak Perks customer</li></ul>	62	64

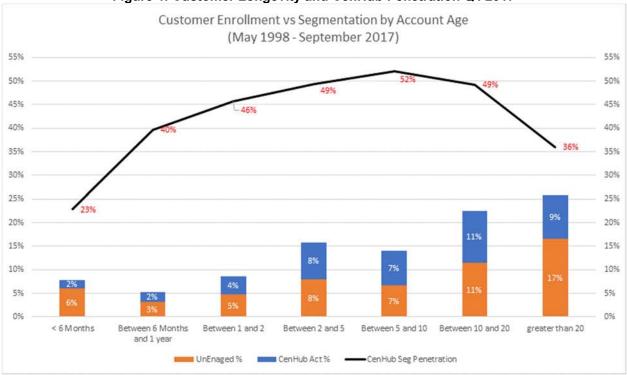
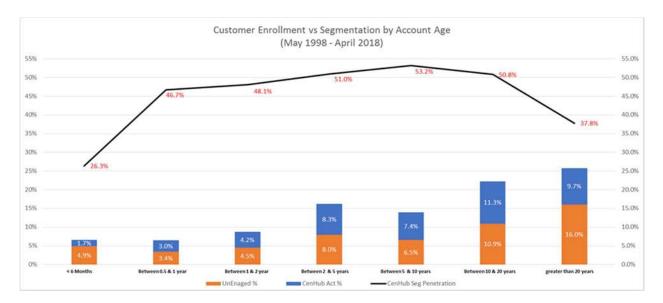


Figure 4: Customer Longevity and CenHub Penetration Q4 2017

Figure 5: Customer Longevity and CenHub Penetration Q1 2018



In Q1 2018 we created a targeted marketing campaign to engage homeowners who had owned their home for less than 2 years and those that owned for more than 2 years. The campaign consisted of surveys to non CenHub account holders to better understand the reasons why they have not created an online account with us and listed some of the benefits of having an online account. As can be seen in the comparison between Figure 4 and Figure 5, from Q4 2017 to Q1 2018 we saw a sizable increase in the CenHub enrollments in the less than 1 year segments and modest increases in all other segments. In Q2

2018 we will be launching a direct mail campaign marketing our dollar lightbulb deals to test if we can increase enrollment rates even further.

### D) Scenarios

CenHub is composed of a set of features and functionalities that align directly with the hypothesis to be tested. This alignment ensures clarity and prioritization of scope and program design. Table 4 describes the solutions that will deliver on each hypothesis.

Scenario	Description	Current Functionality and
<ul> <li>If Central Hudson utilizes a Multi - Channel marketing campaign, specifically inclusive of email and social media, to market CenHub to residential customers</li> <li>a. then Central Hudson will increase the number of Digitally Engaged Residential Customers<sup>3</sup> to 60% of Central Hudson's residential customer base within 12 months of the April 1, 2016 Go Live Date.</li> </ul>	Simple Energy continues to successfully send marketing emails and engagement emails. Through our marketing campaigns and website upgrades, we constantly strive to find new avenues to promote sign ups and encourage interactions with CenHub. All customer communications are reviewed by the internal Central Hudson team composed of representatives from Corporate Communications, Marketing, Energy Efficiency and the demo project team. In coordination with the Simple Energy marketing channels Central Hudson has utilized its social media and web platforms to advertise all of the features and benefits of CenHub. As part of the Phase 3 Insights+ Launch, we are working in coordination with Simple Energy, Corporate Communications and Marketing to develop material featuring tutorials of the Insights+ product.	Impact Residential Customer My Account Enrollment Rate : 46% In Q1 we acted on the following marketing campaign topics: • Sealed dedicated eblasts, ad banners and bill inserts. • HVMag.com sponsored CenHub article. • CenHub Survey to non-CenHub MyAccount holders • Central Hudson staff monthly contests We expect customer enrollment will continue to increase as the CenHub features evolve and new marketing strategies are implemented.
If Central Hudson utilizes gamification, reminders and relevant savings opportunities to encourage and prompt customers to complete the digital home energy profile a. then 5% of the Digitally Engaged Residential Customers will complete the home energy profile within 12	New tips are developed weekly on CenHub Insights to keep the content fresh and drive continuous customer engagement. We are currently in the testing phase of adding points programs for registering for My Account and enrolling in eBills and automatic payments. These programs will offer higher points values and determine how effective the gamification component is at incenting customers to act. Central Hudson and Simple Energy are revisiting the points system to identify ways to increase engagement in the rewards program while not exceeding the	Gamified Experience Engagement Levels: Program Year 2 Statistics: a. Tip Completions: 52,494 a. Badges Earned: 29,505 b. Home Profile Completions: 3,466 d. Logins: 120,758 Program Year 1 Statistics: a. Tip Completions: 41,331 c. Badges Earned: 42,278

#### Table 4: Test Scenarios

<sup>6</sup> Defined within Section B "Test Population" as customers that are currently My Account users and CenHub users following the Go Live Date

	rewards budget	
months of operations (4/1/16 – 4/1/17).	rewards budget. In coordination with Simple Energy Marketing channels, Central Hudson launched a test case for points redemption. To better understand if customers are susceptible to loss aversion, a series of emails were sent out to customers prompting them to redeem their points by March 31 <sup>st</sup> or else they would expire. This campaign resulted in an over 30% conversion rate which is far above the cross industry benchmark of 20% for loyalty program expiration campaigns. The Energy Insights pages offer multiple avenues to receive energy saving tips such as the "Virtual Home" on the tips tab and on the "Overview" screen. The "Overview" screen also provides a usage graph for the most recent usage period compared to similar households and efficient households. The "My Usage" screen allows overlay of the current usage trend with the previous year's history, the usage pattern of like or efficient households and the weather.	<ul> <li>d. Home Profile Completions: 5,791</li> <li>d. Logins: 106,281</li> <li>Overall, engagement with the gamification components have grown in program Year 2.</li> <li>The Average number of tips completed per month per account has increased.</li> <li>Average number of accounts that have logged to CenHub in each month has increased</li> <li>We have changed the default landing page of CenHub insights to the My usage page instead of the Overview page to increase traffic to this page as we have added more features to this section of the website such a billing overlay. This enhancement gives the customer billing information that directly correlates to their usage.</li> </ul>
unengaged counterparts If Central Hudson provides CenHub users with energy usage information and targeted actionable savings tips linked to products and services available on CenHub a. then we expect to achieve 8,000 product purchases within the first 12 months of operation of the CenHub (4/3/16 - 4/3/17)	The CenHub Store is available for anyone interested in purchasing energy efficient products. Only Central Hudson CenHub My Account holders will be able to access the instant rebates at checkout.	In comparison to Q1 2017, Q1 2018 the average order value and average quantity per transaction has increased however, total quantity and number of transactions has decreased. We continue to add new products quarterly and have extended the \$1bulb promotions.
If Central Hudson provides CenHub users with energy usage information and actionable savings tips linked to products and services available on CenHub a. then CenHub will generate approximately \$40,000 of Platform Service Revenues (PSRs) for Central Hudson	Central Hudson and Simple Energy have co-invested in the marketing strategy for CenHub in order to maximize customer touch points and drive product sales from the CenHub Store. Both companies also share equally in the net profit of CenHub Store sales. Fully embedding the Simple Energy sites into the CenHub My Account experience also makes shopping simple and seamless for the customer.	For Q1 2018 we have generated \$6,950 as compared to \$7,408 in Q1 2017. Customers continue to be most engaged with the lowest cost products that have minimal profit margins.

within the first 12 months of operation (4/3/16 - 4/3/17)		
If we offer an Insights+ package featuring an intuitive and engaging user experience and utilize multi- channel and targeted marketing a. then 1,000 customers will subscribe to the Insights+ package in the first year (6/6/17 – 6/6/18)	Central Hudson will offer customers the ability to enroll in a voluntary, subscription based service offering that introduces enhancements to the current Insights experience. The program includes replacement of the customer's existing house meter with an Insights+ meter and the ability to view hourly usage data on a day behind basis. Central Hudson is also extending an existing partnership to provide M&V capabilities via the meter data to Comverge for the Peak Perks TDM program. For randomly selected customers the Insights+ service will be provided at no cost. We view the partnership extension as a true example of the concept of REV. It fills a functionality gap that existed in the M&V of our NWA initiative, introduces new customer engagement features and introduces no additional cost to the eligible customers.	Insights+ enrollment is available on CenHub Store for qualifying residential customers. Once enrolled, customers receive a series of onboarding emails introducing them to what is available to them with the new service at different stages of the enrollment lifecycle. To date there are 147 customers enrolled in the Insights+ service.
<ul> <li>If Central Hudson directly markets to Insights+ subscribers and provides insights and tips regarding management of their energy usage and cross-promotes programs such as Targeted Demand Response</li> <li>a. then customers with Insights+ subscriptions will make 10% more product purchases per customer than the 'Digitally Engaged Residential Customer' and 25% of enrollment in TOU rates within the first 12 months of subscription enrollment (measured on a rolling 12 month avg. after establishing the initial 12 months of program</li> </ul>	The data available can be paired with TOU rates, demand response programs, or smart home devices to allow the customer to maximize their energy savings and automate their home to the level that they desire and see the results of their actions. Increased visibility of benefits will incent customers to further engage through product purchase and/or enrollment in programs offered both by Central Hudson or other third parties outside of CenHub. Overall, Central Hudson wants to provide customers with the means and ability to have a choice in their energy management, which will drive further engagement.	Not yet implemented. Central Hudson along with existing program partners and alternative providers is in the process of building an effective way to merge the Insights+ package with other offerings as an additional enrollment option for customers on the store.

#### Checkpoints E)

Target Date	Milestone	Target	Project Life Cumulative Actuals	Program Year 1	Program Year 2
4/1/2016	CenHub Phase 1 - Go Live	4/1/2016	4/3/2016	4/3/2016	Complete
7/31/2016	CenHub Phase 2 – Go Live	7/31/16	9/7/16	9/7/2016	Complete
12/31/2016	Capital Expenditures⁴	\$1,200,000	\$1.8M	\$1.8M	Complete
7/1/2018	Annual Maintenance Expense⁵	\$1,100,000	\$1.16 <sup>8</sup>	\$0.98M	\$0.7M
4/1/2017	Enrolled CenHub Customers as % of total Residential Customer Base	60%	N/A	42.3%	46%
4/1/2017	Product Purchases	8,327	N/A	14,640	7,249
9/15/2016	CenHub Phase 3 Insights+ Enrollment - Go Live	9/15/2016	N/A	Release 1 (Comverge M&V) - 3/31/2017 Release 2 (Residential Enrollment) – 6/6/2017	N/A
4/1/2017	% of Enrolled CenHub Customers Completed Home Profile	5%	N/A	5%	8%
4/1/2017	CenHub Platform Service Revenues (pre-tax)	\$97,732	N/A	\$41,942	\$27,647
9/15/2017	Insights+ <sup>6</sup> Cumulative Deferral	\$125,000	\$92,521	\$125,886	\$47,000
9/15/2017	Insights+ Capital Expenditures	\$70,000	\$117,302	\$328,357	Complete
9/15/2017	Insights+ Subscriptions	1,000	N/A	0	147
9/15/2017	Insights+ PSR	\$24,000	N/A	\$0	\$6,916
Status Key On or ex	kceeding target Off ta	arget <=10%	Off tar	get >10%	1

#### **Table 5: Targets and Results**

 <sup>&</sup>lt;sup>4</sup> Cumulative Capital Expenditures includes capital expenditures prior to April 3, 2016
 <sup>5</sup> Cumulative Maintenance Expense includes expenses beginning on April 1, 2017
 <sup>6</sup> Formerly Advanced Data Services

# Section 2: Project Structure & Governance

In Q3 of 2015 Central Hudson created a new division, Energy Transformation & Solutions (ET&S), that includes a team solely dedicated to CenHub as well as teams dedicated to Energy Efficiency, Demand Response, non-wire alternatives, and other demonstration projects in order to more closely collaborate and deliver energy saving tools and programs to customers.

## A) Project Team

To deliver CenHub Central Hudson created a matrixed internal team composed of members from ET&S, Corporate Communications and Marketing, IT and the Call Center. In Q4 2017, Central Hudson continued to expand its existing relationships with the following vendors:

- Simple Energy to create the CenHub Insights and CenHub Store functionality
- Cognizant Technology Solutions to provide project management support and system testing
- Itron to provide hosted meter data management services and to leverage opportunities to cross promote the Targeted Demand Response (TDR) and Dynamic Load Management (DLM) programs

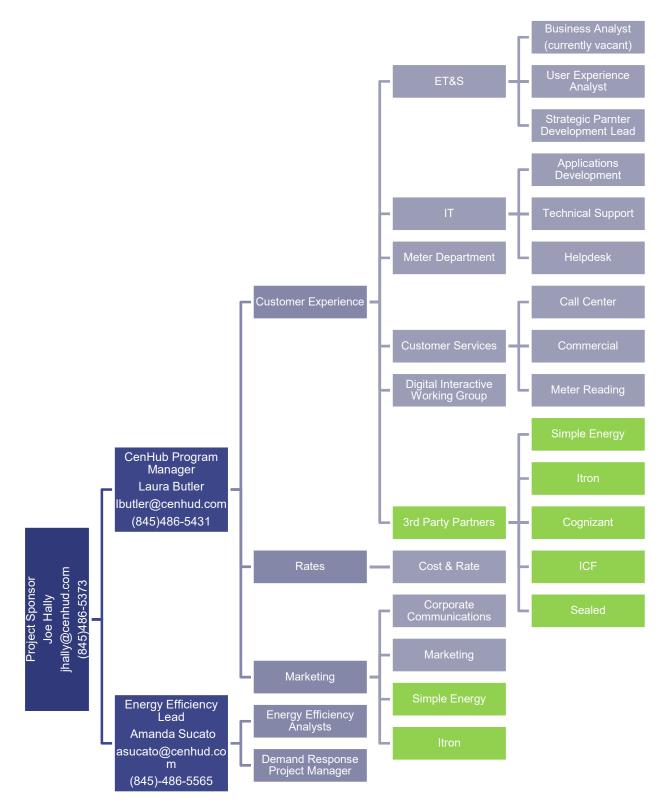
Central Hudson and our partners have truly embraced the REV initiative and continue to evolve CenHub.

In order to ensure ongoing customer satisfaction, operation of the CenHub functionality and success of the new business processes being created by the evolution of CenHub, Central Hudson has taken the following actions in Q1 2018:

- Central Hudson filled the Business Development role focused on increasing revenue and new demo project opportunities.
- Continued to work closely with Customer Services, IT and Marketing in the planning and design of user interface enhancements and program marketing
- Met with potential partners to brainstorm ideas for enhancing Insights+ through data analytics
- Streamlined our internal requirements gathering process methods with help from Compunnel Digital
- Developed requirements documentation for the creation of a set of Energy Efficiency calculators

As of March 31, 2018 the project is being staffed as follows; points of contact are denoted in the dark blue boxes:

Figure 6: Team Members



## B) Roles and Responsibilities

To ensure success and accountability for all tasks, the Program and Project management team members have outlined all project related responsibilities and identified the various levels of ownership for each task. The program objectives and tasks associated with meeting these objectives are captured in various forms starting with a Project Charter, architecture and design diagrams and prototypes, carried through to bi-weekly deliverables, detailed testing instructions, results and bug fix prioritization and ending with a step by step deployment plan for moving the changes to the live system.

Central Hudson Gas & Electric	Description
Project Management	Central Hudson owns overall project delivery and success criteria.
Integration with Central Hudson website and Internal Systems	Central Hudson has integrated Simple Energy's customer engagement portal (CenHub Insights) and marketplace (CenHub Store) into its existing website and mobile site and rebranded as a family of offerings through CenHub.
Testing Across Platforms	Central Hudson creates detailed test plans and scripts for each phase of the project and has performed multiple rounds of functional and user acceptance testing. Bugs are tracked, prioritized and remedied on an agreed upon schedule with project team members and vendors. The go live activities also include a round of validation testing before officially calling the launch complete. The project team utilizes a similar approach for all phases.
Access to Customer Data	Central Hudson is providing weekly and daily data feeds in the agreed upon file format to Simple Energy and Itron to facilitate associated program administration and marketing.
Customer Outreach and Marketing Strategy	Central Hudson is informing the customer base of the upcoming availability and functions of CenHub through a multi-channel marketing strategy developed in concert with internal resources, Simple Energy, Itron, Sealed and ICF.
Energy Efficiency Program Information & Requirements	The ET&S team has been brought together in a collaborative work space that has facilitated frequent and effective information sharing, brainstorming, and decision making. A new support ticketing system and internal FAQs have been made easily accessible to internal teams in order to track any issues and define escalation procedures. All aspects of CenHub are designed with Energy Efficiency targets and available programs in mind.
Metering Solutions	Central Hudson will schedule and perform meter changes for subscribing customers
Data QA/QC	The ETS team works very closely with the internal Business Intelligence team to leverage all available program participation data and relevant customer insights

#### Table 6: Roles & Responsibility Matrix

Sales & Partnership Development	Prospecting partnerships to develop additional customer offers
Partner	Description
Integration with Internal Systems	Simple Energy and Itron continue to provide requirements, information delivery standards, and assistance to support Central Hudson's development of interfaces as we have looked to expand upon the CenHub platform.
	All partners will continue to work together with the Central Hudson team for future releases and ongoing enhancements.
Marketing Strategy (Simple Energy)	Simple Energy and Itron provide expertise, experience, and guidance in order to assist Central Hudson with the development of a Multi-channel marketing strategy.
Insights+ – Data Repository and Management (ITRON)	Itron hosts the Meter Data Management Repository for the duration of the project per contract terms. Itron will provide meter usage data in the agreed upon file format and time interval to facilitate program and partner support.
	Cognizant is continuing to provide overall Project Management for the technical releases of CenHub.
Project Management	Each partner has assigned an Engagement Manager for ongoing relationship support and planning of future functionality as well as a ticketing/reporting mechanism for resolution management.

# C) Governance

Central Hudson tracks progress, alignment to project objectives and performance in comparison to original hypotheses throughout the life of the project according to Table 7.

#### Table 7: Governance Approach

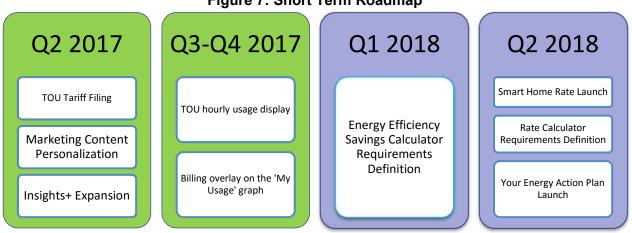
Format	Frequency	Participants
Standups – short in person discussion to identify any blockers or clarify tasks items	As needed based on criticality of project tasks	All project team members
Program short term planning – in person review of all requirements and assignment of tasks to team members	As needed based on criticality of project tasks	ET&S, vendor partners as appropriate
Status report – combination of written documentation and in- person/conference call discussion	Weekly and Bi-Weekly	Core Team, Project and program managers with project sponsor and key stakeholders as needed
Product and sales reviews – combination of written documentation and in- person/conference call discussion	Quarterly	Project team, Simple Energy and Energy Efficiency SMEs

Marketing plan reviews – combination of written documentation and in- person/conference call discussion	Weekly (Central Hudson only) Monthly – all relevant leads	Marketing director, project and program managers, SMEs as needed, project sponsor, vendor leads
Project Update – documented newsletter of the latest progress for high level awareness	Bi-Weekly	Created by the ET&S team and distributed to all relevant stakeholders across Central Hudson and partner vendors
Sponsor Meeting – review scope and schedule, risks, impacts and next steps	As needed	ET&S, Marketing, IT
Data Audit – review all data reports being exchanged between Central Hudson and Simple Energy to build out a data dictionary and identify, prioritize and resolve data discrepancies	Weekly	ET&S, BI, IT and SE

# Section 3: Work Plan & Budget

#### A) **Project Plan**

- a. Schedule
  - I. Figure 5 provides a high level overview of the CenHub short term delivery schedule.



#### Figure 7: Short Term Roadmap

- b. Marketing Activities
  - The team has expanded beyond traditional marketing channels by leveraging 0 tools such as Google Ad Words
  - In order to better understand the customer segment that does not have a 0 CenHub Account a survey was mailed to those who do not have an email on file and emailed to those customers who do. A main outcome of the survey was that many of those customers prefer to receive regular mail. In response a postcard promoting LED bulbs on the CenHub Store was created to be sent in Q2 2018 in hopes to boost sign-ups and sales.

#### **Financials** B)

Redacted

#### C) **Risks**, Opportunities and Mitigation Strategies

Table 8 details how we are expanding on our successes and creating action plans to improve in the areas where we are projecting to be off target.

#### Table 8: Action Items

Risk / Opportunity	Action Plan
Category	
Opportunity – Brand Recognition	Central Hudson is continuing with the build out of the CenHub product family and incorporating the upcoming Smart Home Rate and Time-Of-Use Rate into the online experience and future marketing plans.
Completion Date: On-going	In preparation for 2018 we built a comprehensive marketing plan that includes outreach and education for our customers as well as internal employees.
Risk – CenHub My Account enrollment	Despite expanding our marketing partnerships and product offerings we have not made a marked increase in CenHub enrollments.
Projected Completion Date: On-going	An internal team has been assigned to investigate the registration and account transfer processes to identify and investigate solutions to remove customer barriers to entry and retention. The team has completed their final recommendation for process improvements and will be submitting a project request to act upon those recommendations.
Opportunity – Gamification utilization	We are analyzing the gamification engagement statistics and marketing campaigns to determine the future path for loyalty programs.
Projected Completion Date: Q4 2017	In Q2 2018 we will be working with Forrester Research and Simple Energy to revamp our loyalty program strategy. We will be using the Energy Action Plan feature as a specific use case for a facilitated team workshop with Forrester to kick off the strategy planning.
Risk – Low PSRs and Slowing Sales	We are in talks with other potential program partners on adding additional products and services to the CenHub Store to increase PSR's and increase sales.
Projected Completion Date: Q4 2017	In Q2 2018 we will be pursuing potential partnerships to introduce residential electric vehicle chargers to the store.
Risk – Support organization preparedness and employee buy-in	In Q1 2018 we successfully completed a proof of concept engagement with Compunnel Digital to learn how to use their Digital Journey Mapping method for adding efficiencies to the requirements gathering process. Since dcompletion of the proof of concept we have embedded this method into all of our design meetings and have seen significant improvements in the timeframe we are able to capture
Projected Completion Date: On-going	requirements (from multiple weeks to days). In addition we launched the first round of employee educational campaigns in Q1 2018 with a live webcast update on CenHub followed by a series of survey events where employees have been able to test out products and share their thoughts and provide feedback on perceived value of CenHub. Participation rates have been higher than expected and we have captured great feedback that we are currently evaluating.
Risk – NYS Meter Approval	The Itron Centron OpenWay residential single-phase meter with Verizon 4G cellular card in not yet approved in New York State. Approval is being sponsored by National Grid. To mitigate this risk the team has worked with Itron and negotiated
Status: Mitigated	pricing of the polyphase OpenWay meter at the residential meter cost for the life of the Insights+ Demo project. Central Hudson continues to explore metering options with Itron for potential future expansion of the program offerings.

Report Attachment 1: Insights+ Incremental O&M Report Attachment 2: CenHub Incremental O&M Report Attachment 3: CenHub Insights Statistics Report Attachment 4: Q1 2018 Traffic and Engagement Report Attachment 5: Q1 2018 CenHub Ecommerce Report Attachments 1 - 2

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## CenHub Insights Weekly Marketing Report

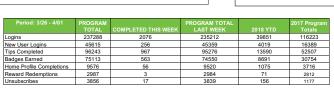
#### **Report Attachment 3**

Comments:

Terminology: CTO: Click-to-open: Unique clicks/ Unique opens, isolates impact of messa who actually opened the email shows raw trend CTR: Click through rate: Unique clicks / Emails delivered, shows raw trend

LAST WEEK				Tips Logic 1: Gas	Tips Logic: Electric	Tips Logic: Electric -	Tips Logic: Electric - Vampire Entertainment		100%	
LAST WEEK	Emails Delivered			(2 sends) 3284	- Swap Lights 31550	Thermostat 990	Entertainment 133			
ts	Opened			482	4518	380	47		80%	
Weekly Insights	(open as a % of o	(haravilat		482	4518	38.4%	35.3%		70%	
su	Clicked (unique)	Joint Group		65	397	95	13			
*	(as a % of delive	red)		2.0%	1.3%	9.6%	9.8%		60%	
Nev	(as a % of opene			13.5%	8.8%	25.0%	27.7%		50%	
	Unsubscribes	·		2	15	0	0		40%	
			Last	week - Messa Tips Logic	ges				30%	- /
	Co	ompetition		week - Messa most efficient	ges home on the bl	ock			20% 10%	29-Jan 6
Last Monday:	3/26/18									Last Week
		1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26
Email 1	Delivered	24284	1257	15414	22037	0	0	3601	13419	3284
	Opened	4631	419	5248	685	0	0	547	4462	482
	Clicked	494	19	420	66	0	0	66	339	65
	Open %	19.1%	33.3%	34.0%	3.1%	NA	NA	15.2%	33.3%	14.7%
	СТО	10.7%	4.5%	8.0%	9.6%	NA	NA	12.1%	7.6%	13.5%
	CTR	2.0%	1.5%	2.7%	0.3%	NA	NA	1.8%	2.5%	2.0%
Email 2	Delivered	0	14785	0	2566	0	0	14036	0	31550
	Opened	0	4736	0	151	0	0	5106	0	4518
	Clicked	0	200	0	14	0	0	310	0	397
	Open %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CTO	NA	4.2%	NA	9.3%	NA	NA	6.1%	NA	8.8%
	CTR	NA	1.4%	NA	0.5%	NA	NA	2.2%	NA	1.3%
Email 3	Delivered	0	0	0	0	0	0	0	0	990
	Opened	0	0	0	0	0	0	0	0	380
	Clicked	0	0	0	0	0	0	0	0	95
	Open %	NA	NA	NA	NA	NA	NA	NA	NA	38.4%
	СТО	NA	NA	NA	NA	NA	NA	NA	NA	25.0%
	CTR	NA	NA	NA	NA	NA	NA	NA	NA	9.6%
Other emails	Delivered Opened	0	0	0	0	0	0	0	0	133 47
(if necessary)	Opened Clicked	0	0	0	0	0	0	0	0	47
	Open %	NA	NA	NA	NA	U NA	NA	NA	NA	35.3%
	Open % CTO	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA	35.3% 27.7%
	CTR	NA	NA	NA	NA	NA	NA	NA	NA	9.8%
	Delivered	24284	16042	15414	24603	0	0	17637	13419	35957
Total		2-7204		5248	836	0	0	5653	4462	5427
Total		4631	5155				0	0000		
Total	Opened	4631 494	5155 219			0	0	376	339	570
Total	Opened Clicked	494	219	420	80	0 #DIV/0!	0 #DIV/01	376 32.1%	339 33.3%	570 15.1%
Total	Opened Clicked Open %	494 19.1%	219 32.1%	420 34.0%	80 3.4%	#DIV/0!	#DIV/0!	32.1%	33.3%	15.1%
Total	Opened Clicked	494	219	420	80					
Total Logins*	Opened Clicked Open % CTO	494 19.1% 10.7%	219 32.1% 4.2%	420 34.0% 8.0%	80 3.4% 9.6%	#DIV/0! N/A	#DIV/0! N/A	32.1% 6.7%	33.3% 7.6%	15.1% 10.5%

	Trends for All Users		
100%		100000	
90% -		90000	
80% -		80000	Delivered
70%		70000	
60%		60000	🗕 🗕 Open %
50%		50000	
40%		40000	сто
30% -		30000	
20%		20000	
10%		10000	CTR
0%	29-Jan 5-Feb 12-Feb 19-Feb 26-Feb 5-Mar 12-Mar 19-Mar 26-Mar	0	

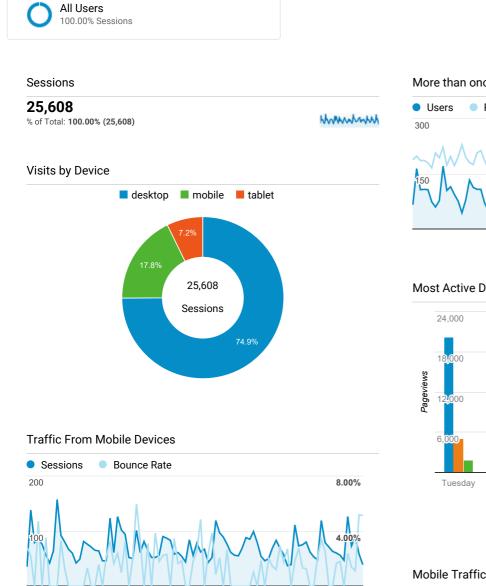


#### Weekly Logins

3.500			Weekly	Logins				_
3,000			$\sim$			~		_
2,000							<u> </u>	_
1,500								Logins*
1,000								-
500								-
0 +	2/12	2/19	2/26	3/5	3/12	3/19	3/26	-

Cen Hub Insights cenhubinsights.com

#### Jan 1, 2018 - Mar 31, 2018



February 2018

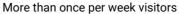
March 2018

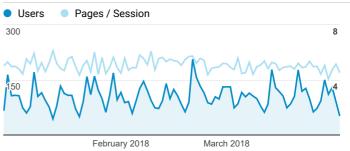
#### More than once per week visitors

Device Category	Users	Avg. Time on Page
desktop	3,804	00:00:28
mobile	894	00:00:24
tablet	388	00:00:33

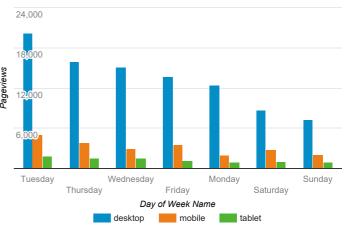
#### Engagement by Device

Device Category	Pages / Session	Avg. Session Duration
mobile	4.94	00:01:32
tablet	4.88	00:01:56
desktop	4.86	00:01:46

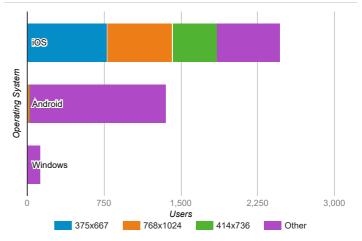




#### Most Active Day of the Week by Device



#### Mobile Traffic Breakdown



where do people enter your site?

Landing Page	Entrances	Pages / Session
/	24,423	4.86
/tips	490	5.33
/sso-error/	313	5.96
/rewards	93	5.57
/#utm_source=MAS-Home-age&utm_medium=site- alert&utm_campaign=Home-Profile	90	7.69
/home-insights/home-profile	29	4.93
/contact_us	27	5.22
/comparisons	21	4.52
/faqs	4	6.75
/not-found	4	6.00

#### Pages People Leave From

Exit Page	Exits	% Exit
/	14,097	30.40%
/tips	5,217	16.49%
/rewards	3,003	15.32%
/insights/usage	762	13.12%
/home-insights/home-profile	554	13.24%
/profile	405	11.35%
/insights	364	12.76%
/challenge/badges	136	10.67%
/comparisons	130	14.18%
/challenge/leaderboards	113	11.73%

#### Most Engaging Traffic Sources

Source / Medium	Sessions	Pages / Session
uauth.cenhud.com / referral	15,269	4.86
cenhud.com / referral	3,723	4.38
Simple Energy EP Email / email	3,069	5.84
cenhubstore.com / referral	1,288	5.97
secure8.i-doxs.net / referral	1,078	3.60
(direct) / (none)	848	3.88
MAS-Home-age / site-alert	105	7.27
google / organic	69	5.58
EPmarketing / paper_report	64	3.05
sealed.typeform.com / referral	20	3.95

#### Mobile Traffic Behaviour

Mobile Device Info	Users	Bounce Rate
Apple iPhone	1,753	1.26%
Apple iPad	712	1.12%
Microsoft Windows RT Tablet	121	2.69%
Samoung SM C020V Calaxy S7	00	1.06%

Samsung Sive 950 V Galaxy S7	09	1.90%
Samsung SM-G955U Galaxy S8+	72	2.88%
(not set)	57	4.44%
Samsung SM-N950U Galaxy Note8	47	0.00%

Report Attachment 4

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Report Attachment 5

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