

Oracle Utilities Opower Embeddable Widgets

Client Integration Guide

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Introduction

Widgets modularize functionality and content, allowing for a responsive layout, configuration capabilities, and the ability to embed directly within a web page that is hosted by a utility.

Most widgets can be embedded directly on a webpage for a website, including the Oracle Utilities Opower web portal or a utility website. This allows widgets to be placed alongside other content.

Requirements

- Oracle Utilities requires that utilities use Service Provider-initiated Single Sign-On (SSO) to support web portal deployments that include embeddable widgets. Requirements to configure SSO are outlined in the *Oracle Utilities Opower SSO Configuration Guide*.
- For Oracle Utilities Opower products which are hosted on multiple pages, you must complete the embedding process described in this document for each embeddable component. For more information, see "Design Considerations" on page 3.
- Widgets can add query parameters to the URL of the pages on which they are embedded. For example, the Ways to Save widgets pass relevant tip information in the query parameters when customers interact with the widgets. Ensure that your infrastructure does not block or remove these widget-specific query parameters. Query string parameters are automatically detected and passed to the embedded widgets, which means the parameters do not need to be passed in the embedded script tag.

Design Considerations

When considering the placement of widgets within pages on your website, it is important to note that Oracle Utilities Opower products only support certain layouts. Widgets are built on a standard 12-column CSS grid with two main breakpoints. The default grid breakpoints are at 640 pixels and 1024 pixels. While this is standard across all widgets, each widget may employ its own additional breakpoints, if required. For example, Bill Forecast does not adhere to these default breakpoints (see "Bill Forecast" on page 8). Breakpoints are not configurable and your website design should account for widget breakpoints.

Note: Widgets that are placed in areas under 640 pixels, such as a website sidebar, render in a mobile view even on a desktop screen by default. A minimum width of 320 pixels is required for devices to display widgets.

Note: You can embed more than one widget on a single web site page. Contact your Service Delivery Manager for widget placement guidance.

Features that consist of widgets available for embedding include:

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Account Center

The Account Center allows customers to view and change information about their utility account, their alert preferences, and the communications they receive from the utility.

Account Center consists of the two widget components described below, or a single widget for utilities that implement single sign-on (SSO) authentication. If both widgets are required, it is recommended to embed the Account Center components on the same page, which provides customers with a single page for all account center tasks.

Communications and Alerts

Customers can create, edit, and remove the recipients for their utility account. A recipient includes a name and other applicable contact information such as email address, a phone number for SMS messages, and a phone number for voice messages. A customer can then select the recipients that receive particular communications and alerts.

COMMUNICATIONS & ALERTS | LOGIN DETAILS

Set your communication and alert preferences

Communication and alert recipients

Create and edit contact details for recipients of your utility account's communications and alerts.

▼ John Doe (primary)	EDIT	
EMAIL: @test.com	SMS: [redacted]	VOICE MESSAGE: [redacted]
▶ Jane Smith	REMOVE	EDIT

+ Create new recipient

Login Details

For utilities that do not implement SSO authentication, customers can update the email address and password used to access the Digital Self Service - Energy Management Web Portal. If SSO authentication is implemented, this widget is not included as part of Account Center.

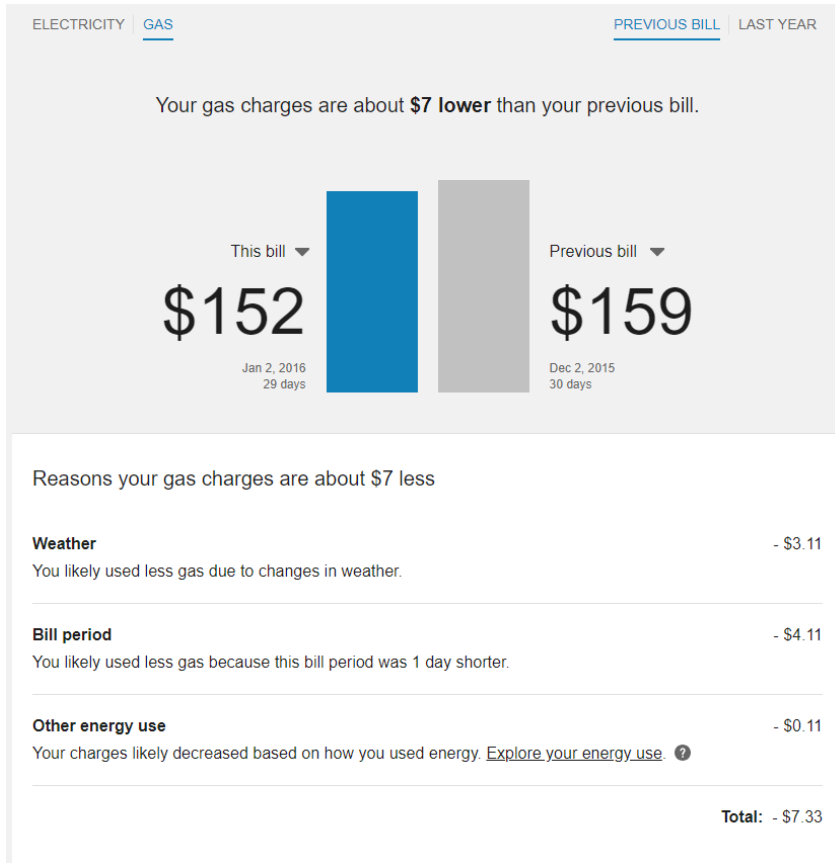
COMMUNICATIONS & ALERTS | [LOGIN DETAILS](#)

Update your login details

LOGIN EMAIL	john.doe@test.com	EDIT
PASSWORD	*****	EDIT

Bill Comparison

The Bill Comparison allows customers to compare their current bill to their previous bill and to the corresponding bill from the same time period the previous year. This widget is well-suited for embedding in sections that use the full width of the page.



Bill Forecast

The forecast shows residential AMI customers their energy use or cost so far in the billing period, projected total energy use or cost for the period, and typical energy use or cost for the period based on their past energy use. The forecast informs customers before the end of the billing cycle if they are likely to have high energy use or cost compared to the same time period the previous year. Due to its compact size, this widget does not adhere to the default widget breakpoints and minimum pixel widths. It is well-suited for embedding in sections that do not use the full width of the page.

Electricity ▼

\$12

Dec 1 – Dec 31

[More details](#) ▼

✔ That's about **\$32 less** than last year.
You've spent about \$6 so far this bill period.

[HELP LOWER MY BILL](#)

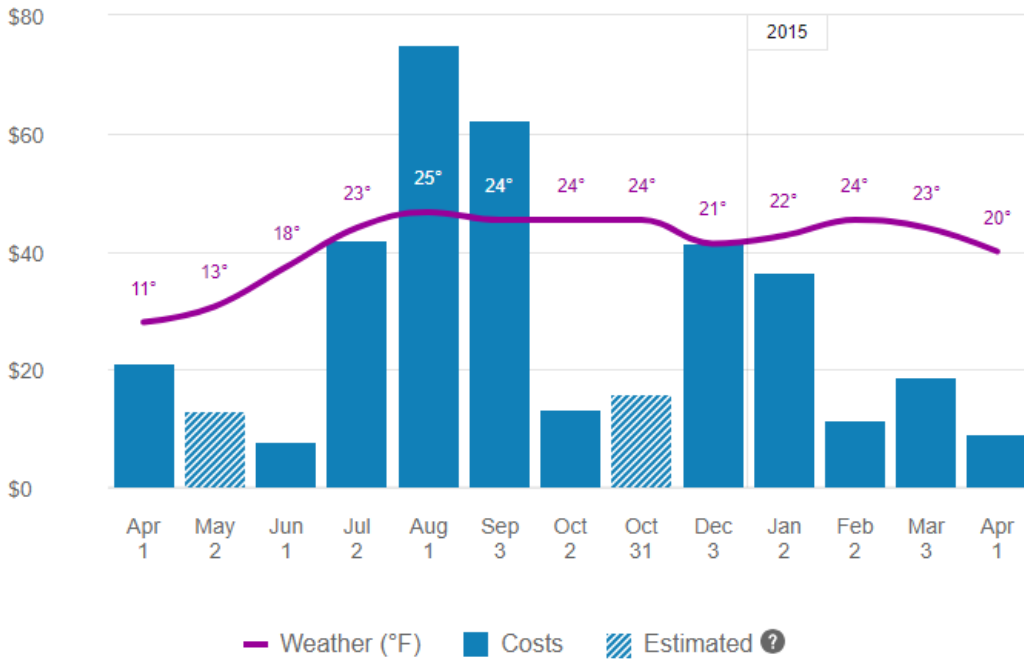
Data Browser

The Data Browser is an interactive tool that allows customers to visualize and explore their energy use trends and costs, and make comparisons to useful benchmarks, such as weather and similar homes. This widget is well-suited for embedding in sections that use the full width of the page. The Green Button can also be included as part of this widget, see "Green Button" on page 10 for more information.

[ENERGY COSTS](#) | [ENERGY USE](#) | [NEIGHBORS](#) | [COMBINED](#) | [ELECTRICITY](#) | [NATURAL GAS](#)

Year view ▼

◀ Apr 2014 - Apr 2015 ▶



— Weather (°F) ■ Costs ▨ Estimated ?

 **Green Button**
Download my data

Green Button

The Green Button allows customers to export their billing data. The experience can be provided as an independent feature, or delivered as part of the Data Browser.

If the Green Button is supplied as part of the Data Browser widget (see "Data Browser" on page 9), only the single, combined widget is required to go through the embedding process. If the Green Button is provided separately, it must go through the embedding process described in this document (see "Embedding a Widget" on page 26).

Download my data

[CLOSE](#)

Time Period

- Export all bill totals
- Export usage for a bill period

Since your last bill: Dec 01, 2010 · ▼

- Export usage for a range of days

From

11/30/2010



To

12/31/2010



Format

- CSV
- XML

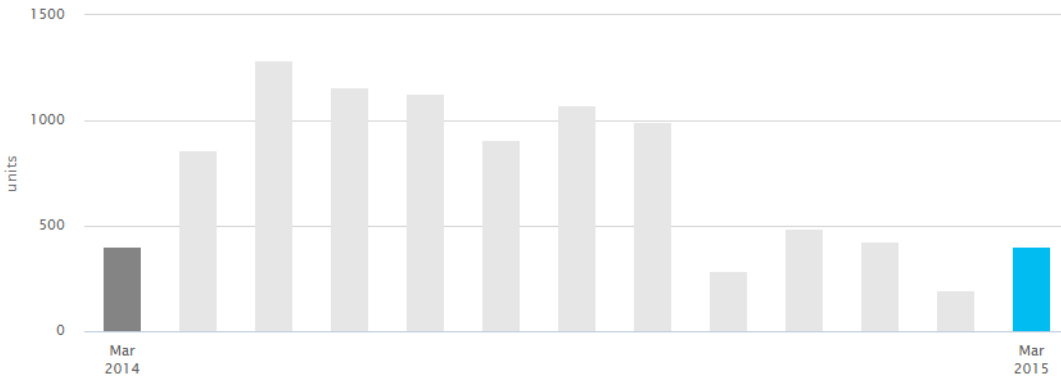
CANCEL

EXPORT

Energy Use Overview

The Energy Use Overview displays the most recent bill period's energy use in comparison to that of a bill from the same bill period for the previous year. Analogies are included to help customers understand their energy use and how it relates to real-world examples.

✔ This March, you used **about the same amount** of energy as last March.



EXPLORE IN DETAIL

Highest Energy Use Days

The Highest Energy Use Days calendar highlights the top five days of the month in which a customer used the most energy, allowing them to identify patterns in their energy use.

HIGHEST DAYS THIS MAY

On average, you used the most energy on Tuesdays

Tip: Think about how you use energy on Tuesdays. Where can you use less?

SEE MORE DETAILS

May 2016

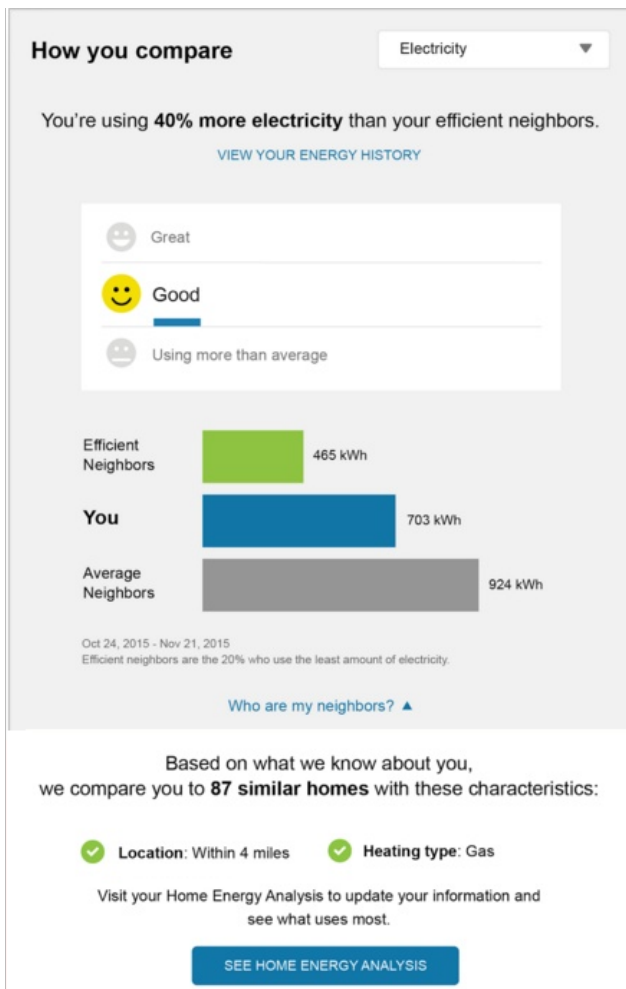
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

● Top 5 energy use days

Neighbor Comparison

The Neighbor Comparison compares the customer (“You”) to two groups: “Efficient Neighbors” and “Average Neighbors.” The results are displayed in a horizontal bar graph. An evaluative section on the right indicates whether the customer falls in one of three states: “Great,” “Good,” or “Using more than average.” A brief message indicates how the customer compares to their efficient neighbors. “Efficient Neighbors” are defined as the most efficient 20% of the customer’s neighbors. An informational section below the bar graph provides details about the module information.

If the customer has multiple energy types, they can view the comparison for natural gas, electricity, or energy. The energy comparison combines natural gas and electricity using a price-weighted energy index.

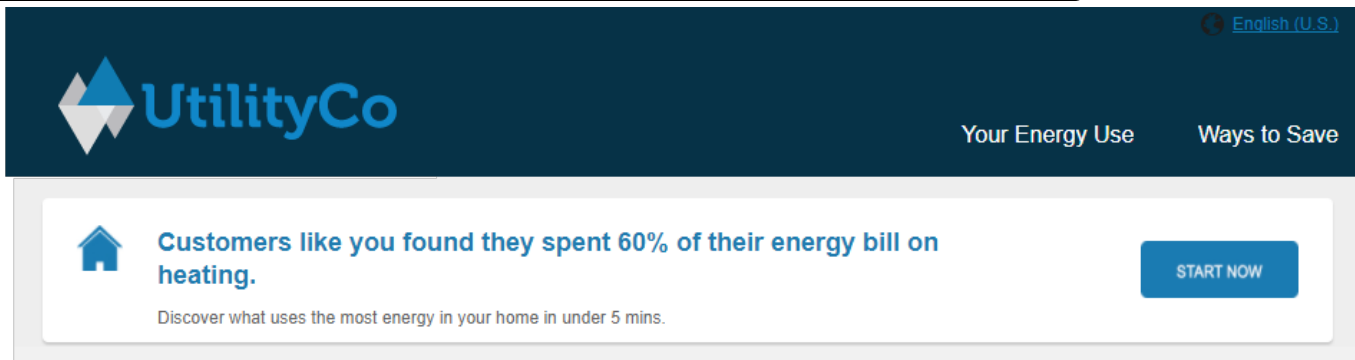


Targeted Marketing

Targeted Marketing enables utilities to display web banners to various customer groups on any page of the web portal. Banners are used to promote utility-specific programs and promotions, deliver notifications and tips, and suggest the best next web action for a customer to take.

Targeted Marketing can be embedded on multiple pages where the banners are to appear. The embedding process described in this document must be completed for each applicable page (see "Embedding a Widget" on page 26).

Note: Targeted Marketing banners are targeted to specific customers. If a customer is not in an applicable group the banner is hidden from view. This dynamic display must be considered when embedding Targeted Marketing.



The screenshot shows a dark blue header for UtilityCo. On the right side of the header, there is a globe icon and the text "English (U.S.)". Below the header, there are two navigation links: "Your Energy Use" and "Ways to Save". The main content area features a white banner with a house icon on the left. The text in the banner reads: "Customers like you found they spent 60% of their energy bill on heating." Below this text is a smaller line: "Discover what uses the most energy in your home in under 5 mins." On the right side of the banner, there is a blue button with the text "START NOW".

Home Energy Analysis

The Home Energy Analysis contains a visual, interactive tool that prompts customers to answer simple questions about their home attributes and energy habits. This information is used to provide customers with a better understanding of how they use energy.

The widget provides the following user experiences for customers before and after completing the survey.

Note: Customers who select to start the survey are redirected to an Oracle Utilities Opower-hosted page. When the customer completes the survey, the customer is redirected back to the site that hosts the survey results.

Pre Survey

For customers who have not yet started the survey, the Home Energy Analysis displays information about the survey and provides the first question to begin the analysis. This messaging can include information on the estimated time it would take to complete the survey, as well as the benefits of completing the analysis.

Note: If a customer starts but does not complete the survey, progress information and a link to complete the survey is displayed. This experience is provided through the embeddable widget and redirects customers to the Oracle Utilities Opower-hosted page.

The screenshot shows a survey titled "Analyze your energy use" with the subtitle "Tell us a bit about your home—it takes less than five minutes". The main question is "Do you rent your home?", with "Yes" and "No" buttons. Below the question are three benefit icons: a laptop for "Tell us about your home", a pie chart for "See what uses most", and an envelope for "Lower your bill".

Analyze your energy use
Tell us a bit about your home—it takes less than five minutes

Do you rent your home?

Yes No

Tell us about your home
Answer some questions about your home to complete your home profile.

See what uses most
Learn how much you spend on heating, cooling, hot water, and more.

Lower your bill
Find ways to make your home more efficient and cut back on energy costs.

As an alternative, customers can embed the Home Energy Analysis experience that is also available as part of the Smart Dashboard. The pre survey experience is shown below.

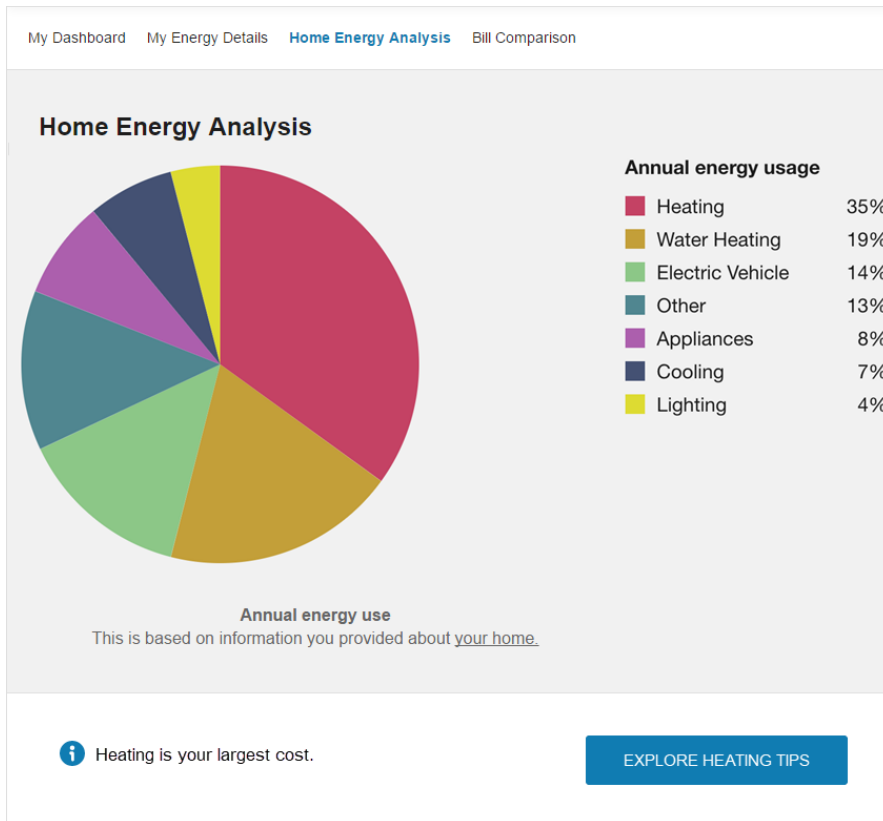
The screenshot shows a survey titled "See how you use energy" with the subtitle "Learn how much you spend on heating, water heating, lighting, and more.". A blue button labeled "TAKE THE HOME ENERGY CHECKUP" is on the left, and a pie chart is on the right.

See how you use energy
Learn how much you spend on heating, water heating, lighting, and more.

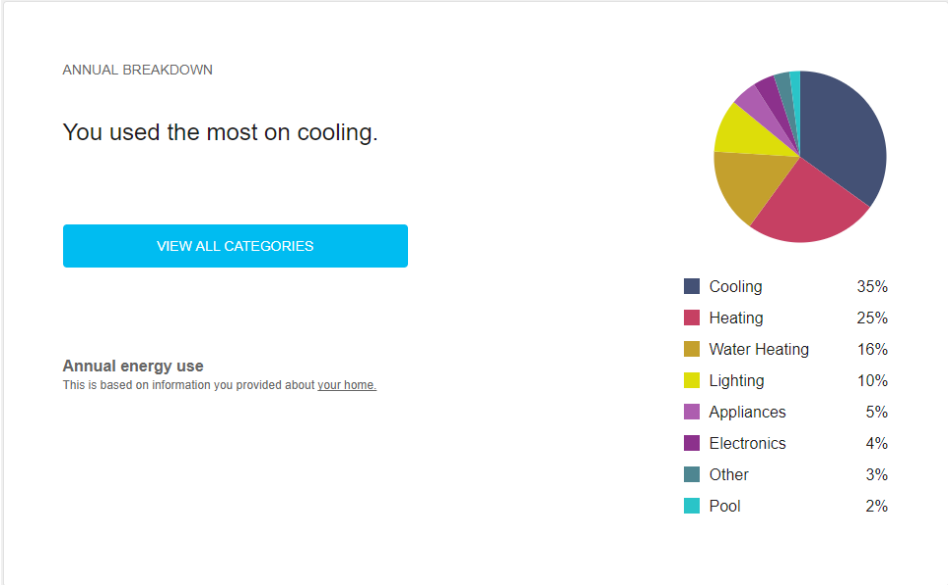
TAKE THE HOME ENERGY CHECKUP

Post Survey

After the customer answers the last question and finishes the survey, the Home Energy Analysis displays their energy use breakdown based on their responses. Customers can select each individual energy use category to see what percentage of their home's energy use it comprises, category-specific tips, and a list of what contributes to energy use for the category.



As an alternative, customers can embed the Home Energy Analysis experience that is also available as part of the Smart Dashboard. The post survey experience is shown below.



Survey

The survey, provided through an Oracle Utilities Opower-hosted page, is designed to be easy to understand and simple to complete. Customers should be able to answer all the questions they are asked, even if their answer is to skip the question. Since the survey requires a full page, it is not embeddable within a subset of a page, nor is it available as a pop-up or separate tab.

Ways to Save

Ways to Save presents a personalized selection of energy saving tips. Customers can browse through the available tips to learn how they can save energy.

Ways to Save consists of the three widget components described below. When embedding the Ways to Save components, they must be embedded in separate pages that use the same dimensions for the section of the page that includes the embeddable widgets. This ensures a consistent user experience while navigating between each widget.

Guide List

The Guide List widget displays the landing page for Ways to Save. Tips are organized into behavior-oriented, seasonal, and end-use guides that provide customers with relevant cost savings recommendations.

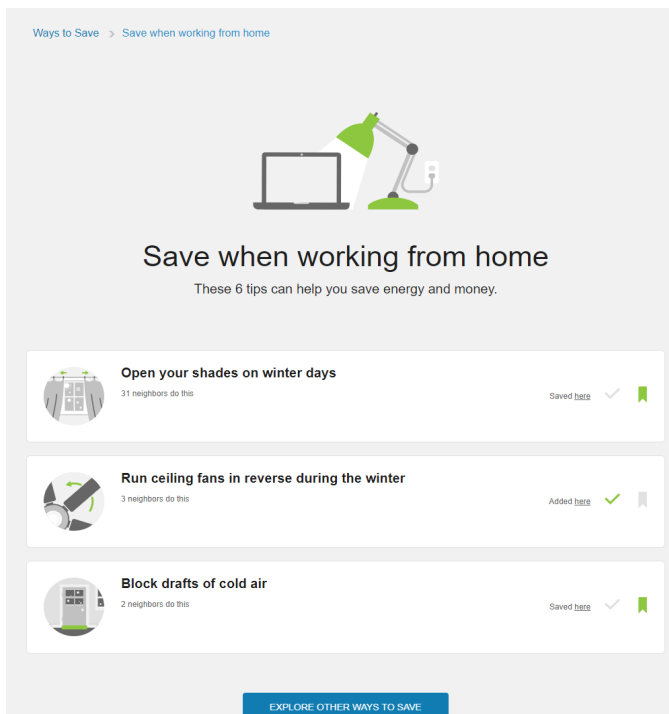
This widget must go through the embedding process described in this document (see "Embedding a Widget" on page 26). When users select a guide they are redirected to the Guide Details widget (see "Guide Details" on page 19), and a `guide-id` parameter is automatically passed in the query string.

The screenshot displays a user interface for a 'Ways to Save' widget. At the top, the title 'How to avoid expensive winter' is shown with a '23 tips' count and a 'LEARN MORE' button. Below this is a grid of six guide cards, each with a title and a tip count: 'Save when working from home' (6 tips), 'How to make your home more comfortable' (13 tips), 'Smart upgrades for your home' (34 tips), 'Ways to save at no cost to you' (16 tips), 'Heating tips to help you save' (25 tips), and 'Smart ways to save on hot water' (12 tips). A 'SHOW ALL' button is positioned below the grid. At the bottom, there are two summary boxes: 'Tips you've saved' (7 tips) and 'Tips you've completed' (10 tips). A footer section titled 'Want better tips?' includes a brief description and a 'START NOW' button.

Guide Details

Customers that select a tip guide are redirected to the Guide Details widget, which presents them with a list of tips for that guide. From this list of tips, customers can review high-level information about each available tip.

This widget must go through the embedding process described in this document (see "Embedding a Widget" on page 26). This page must also be enabled to allow the `guide-id` query parameter to be passed in, so that the correct tip guide can be displayed. When users select a tip they are redirected to the Tip Details widget (see "Tip Details" on page 20), and a `tip-id` parameter is automatically passed in the query string.



Tip Details

Customers that select a tip are redirected to the Tip Details widget, which displays additional details about the tip.

This widget must go through the embedding process described in this document (see "Embedding a Widget" on page 26). This page must also be enabled to allow the `tip-id` query parameter to be passed in, so that the correct tip can be displayed.

The screenshot shows a tip details widget for "Open your shades on winter days". At the top, there is a breadcrumb trail: "Ways to Save > Save when working from home > Open your shades on winter days". Below this is an icon of a house with shades and the title "Open your shades on winter days". To the right of the title are two buttons: "MARK AS DONE" (with a checkmark icon) and "SAVE FOR LATER" (with a flag icon). Below the title, there are three key-value pairs: "Potential savings" (Save up to \$140 per year), "Up-front costs" (None), and "Payback period" (Immediately). To the right of these is a social proof indicator: "31 neighbors do this". Below this is a "Why?" section with a short paragraph: "Taking advantage of winter sunlight can help make a dent in your heating costs. Open blinds during the day to provide natural lighting and capture free heat." Finally, there is a "Things to think about:" section with a bulleted list of tips: "When you let the sun in, remember to lower the thermostat by a few degrees. These two steps combined are what save money and energy.", "South-facing windows have the most potential for heat gain. Keep the drapes up and windows clear in order to let in the most light.", "The sun is most intense from 9 a.m. to 3 p.m., so make sure windows are uncovered during these hours. Close window coverings at night to insulate windows.", "Dense walls and flooring, especially masonry, help by storing solar heat and then releasing it at night.", and "North windows are not the brightest in the house, but they could be the draftiest. The coldest winds come from the north, so insulate windows and doors on this side of the home well."

Tips Light

Tips Light displays the top three tip guides for the customer's household. These tip guides promote customer interest in tips and lead them to more detailed tip information.

The screenshot shows a widget titled "Recommended summer tips for you". It contains three tip guides, each with a title and a count of tips: "Save when working from home" (6 tips), "How to make your home more comfortable" (13 tips), and "Smart upgrades for your home" (34 tips). At the bottom of the widget is a blue button labeled "SEE MORE TIPS".

Rate Analysis Tool

The Rate Analysis Tool allows customers to see an overview of rate plans they are eligible for, estimated cost information, and details about each rate plan option. Customers can compare rate plans in terms of estimated annual costs and quickly identify their cheapest rate. Further rate analysis is available through additional rate details and the ability to perform what-if scenarios representing energy use choices the customer can make.

The Rate Analysis Tool consists of the two widgets and an optional Rate Simulator described below. When embedding the Rate Analysis Tool widgets, they must be embedded in pages or page sections that use the same dimensions as the embeddable widgets. This ensures a consistent user experience while navigating between each widget.

Rate Comparison

The Rate Comparison widget allows customers to see a comparison of their eligible rate plans. This widget compares the estimated annual costs for each rate plan and highlights the cheapest rate for the customer.

This widget requires must go through the embedding process described in this document (see "Embedding a Widget" on page 26). This page must also be enabled to allow the `utility_account` query parameter to be passed in, so that the correct utility account can be displayed. When users select a rate for more details, they are redirected to the Rate Details widget (see "Rate Details" on page 23), and `utility_account` and `rate_id` parameters are automatically passed in the query string.

These cost estimates do not include generation costs. Generation costs are handled by another provider.

Electricity rate plan comparison

Your lowest cost rate plan
Based on your electricity use history, you could save the most on the Time of Day 3-Apr rate plan.

Your Current Rate	Lowest Cost - Save \$200
Monthly Best for: Homes with low energy use Price highest: Weekdays 4pm - 8pm \$1935 Learn More	Time of Day Best for: Homes with low energy use Price highest: Weekdays 4pm - 8pm \$1605 Learn More

Ready to switch rate plans? Call us at 1-800-UTILITY

Compare all rate plans

Lowest Cost
Time of Day rate plan Best for: Homes with low energy use Price highest: Weekdays 4pm - 8pm \$1605 /year Learn More
Monthly rate plan Best for: Homes with low energy use Price highest: Weekdays 4pm - 8pm \$1605 /year Learn More
Electric Vehicle rate plan Best for: Homes with low energy use Price highest: Weekdays 4pm - 8pm \$1605 /year Learn More

The Electricity use per household and that are provided for illustrative purposes only and are not intended to represent an actual household. All rates are estimates and are subject to change without notice. Actual rates may vary. All rates are estimates and are subject to change without notice. Actual rates may vary. All rates are estimates and are subject to change without notice. Actual rates may vary.

Rate Details

The Rate Details widget allows customers to view additional information on their eligible rate plans to better understand how a rate plan is structured and how their costs may vary throughout a year.

This widget must go through the embedding process described in this document (see "Embedding a Widget" on page 26). This page must also be enabled to allow the `utility_account` and `rate_id` query parameters to be passed in, so that the correct utility account and rate plan can be displayed. When users select to view a rate comparison, they are redirected to the Rate Comparison widget (see "Rate Comparison" on page 22), and an `utility_account` parameter is automatically passed in the query string.

These cost estimates do not include generation costs. Generation costs are handled by another provider.

[Back to all rates](#)

Rate plan

Time of Day 4-9pm (ET/CA)

Estimated cost

\$1605 / year

About this rate plan

On a Time of Day rate plan, the cost of electricity varies depending on the time of day.

On this plan, customers are rewarded for reducing air peak times, when energy is in highest demand. When customers use less air peak times, PG&E has less need to turn on additional power plants and can have less energy demand.

Best for: Households that don't use much in the afternoon

Price highest: Weekdays 4-9pm

Last year, this rate plan would've saved you \$336.

\$1605/year

This rate
Time of Day
(ET/CA)

\$1941/year

Your current rate
monthly

Rate plan breakdown

Energy costs the most at Peak times. To save, shift your use to Off-Peak times.

Hourly rates:

Off-Peak

12pm - 4pm

Peak

4pm - 9pm

To save on SmartRate, use less from 2-7pm on SmartDays.

How SmartRate works: An incentive to a SmartRate, you can a Smart plan 2-7pm on up to 11 full days called SmartDays. How you're awarded: This day will be a SmartDay, you will be awarded by phone, text or email. How you save: When you don't use energy during the first hour with SmartDays, PG&E will automatically reduce the difference. You can cancel at any time.

For our cost estimates, we are assuming there will 11 SmartDays but there could be anywhere from 9-15 throughout the summer.

[SEE DETAILED PRICING](#)

Monthly estimated costs comparison

Your highest bill on this rate plan: \$269

	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Annual Total
Current Rate Standard	\$107	\$97	\$95	\$251	\$229	\$258	\$241	\$117	\$95	\$127	\$106	\$95	\$1,968
Time of Day 4-9pm	\$95	\$84	\$94	\$259	\$200	\$264	\$219	\$121	\$95	\$121	\$110	\$95	\$2,019

[COMPARE YOUR COSTS](#)

Frequently asked questions about rate plans

Why are you recommending rates to me? [Answer](#)

How are you estimating my costs? [Answer](#)

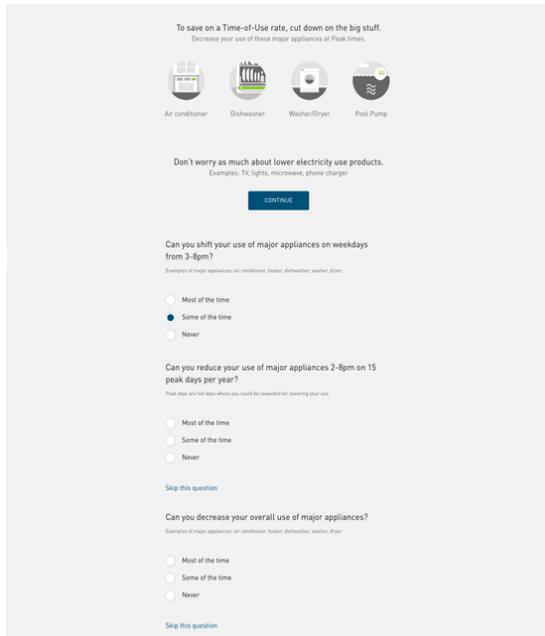
What happens if I switch rate plans, and then I decide to switch back? [Answer](#)

The rate comparisons and that are provided for illustrative purposes only and do not constitute a representation or recommendation by PG&E as to which rate plan is best for you. The rate plan comparison tool is provided for informational purposes only and is not intended to be used as a substitute for professional advice. PG&E does not warrant, represent, or guarantee the accuracy, completeness, or timeliness of the information provided. PG&E does not warrant, represent, or guarantee the accuracy, completeness, or timeliness of the information provided. PG&E does not warrant, represent, or guarantee the accuracy, completeness, or timeliness of the information provided. PG&E does not warrant, represent, or guarantee the accuracy, completeness, or timeliness of the information provided. PG&E does not warrant, represent, or guarantee the accuracy, completeness, or timeliness of the information provided.

Rate Simulator

The Rate Simulator, prompts customers to answer a few short questions about how they might change their energy use. This is geared towards showing customers when other rate plans can provide reduced costs if the customer makes changes to their energy habits.

The Rate Simulator is available as an Oracle Utilities Opower-hosted page. Since the Rate Simulator requires a full page, it is not embeddable within a subset of a page, nor is it available as a pop-up or separate tab.



The screenshot shows a web form titled "To save on a Time-of-Use rate, cut down on the big stuff." with the instruction "Decrease your use of these major appliances at Peak times." Below this are four icons representing major appliances: Air conditioner, Dishwasher, Washer/Dryer, and Pool Pump. A second section says "Don't worry as much about lower electricity use products." with examples like TV, lights, microwaves, and phone chargers, followed by a "CONTINUE" button. The form then asks three questions with radio button options: "Can you shift your use of major appliances on weekdays from 3-8pm?", "Can you reduce your use of major appliances 2-8pm on 15 peak days per year?", and "Can you decrease your overall use of major appliances?". Each question has three options: "Most of the time", "Some of the time", and "Never". There are also "Skip this question" links for the last two questions.

Peak Time Rebates

Peak Time Rebates is an energy-savings initiative aimed at encouraging people to reduce energy during peak event days in the summer or winter seasons, thereby lowering energy demands on a large scale. This is accomplished by offering customers monetary credits towards their next bill when they reduce their energy use during peak events. The Digital Self-Service Peak Time Rebate widget allows customers who are enrolled in Peak Time Rebates to view their historical peak event day rebate and energy saving information in a user-friendly graph.



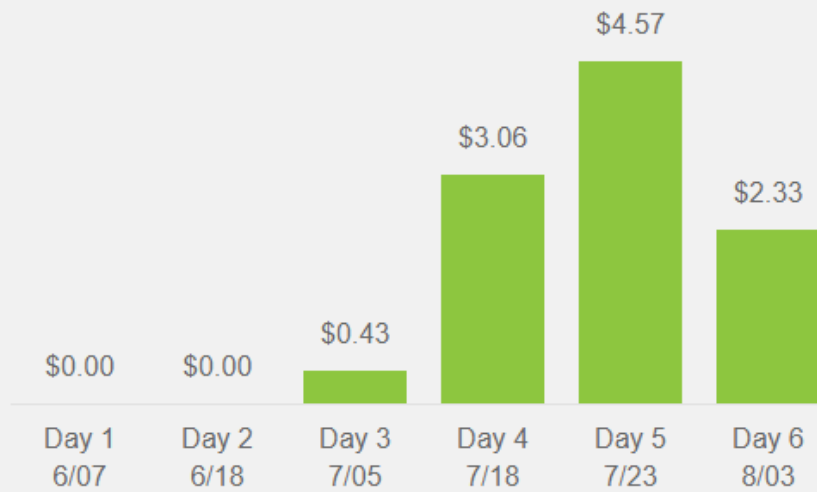
You earn bill credits for using less energy on Energy Savings Days.

- In the summer there are a few Energy Savings Days – hot days when there is more demand on the grid.
- Save during peak hours, **1-7pm**, on Energy Savings Days.
- Earn bill credits for every kWh you save. [Learn more](#)

▲ [HIDE DETAILS](#)

[BILL CREDITS](#) | AVERAGE HOMES

◀ Summer 2017 ▶



Total bill credits

\$ \$10.39

[How is this calculated?](#)

Embedding a Widget

To allow the utility to embed a widget, Oracle Utilities provides JavaScript code which calls the widget. The JavaScript can be placed in the HTML of a web page, wherever required to display it in the desired location on the web page.

Prior to performing the steps below, review the "Design Considerations" on page 3 for the widget being embedded. A summarized embedding requirements checklist for each widget is provided below:

Note: You can embed more than one widget on a single web site page. Contact your Service Delivery Manager for widget placement guidance.

Widget	Requirements Checklist
Account Center	<ol style="list-style-type: none"> 1. Communications and Alerts requires one page and URL on the utility site. 2. For utilities that do not implement SSO authentication, Login Details requires one page and URL on the utility site. <p>When embedding both Account Center widgets, it is recommended to embed all components of Account Center on the same page.</p>
Bill Comparison	<ol style="list-style-type: none"> 1. Requires one page and URL on the utility site.
Bill Forecast	<ol style="list-style-type: none"> 1. Requires one page and URL on the utility site.
Data Browser	<ol style="list-style-type: none"> 1. Requires one page and URL on the utility site.
Green Button	<ol style="list-style-type: none"> 1. Can be included as a single embeddable experience with Data Browser. If embedding individually, requires one page and URL on the utility site.
Energy Use Overview	<ol style="list-style-type: none"> 1. Requires one page and URL on the utility site.
Highest Energy Use Day	<ol style="list-style-type: none"> 1. Requires one page and URL on the utility site.

Widget	Requirements Checklist
Neighbor Comparison	1. Requires one page and URL on the utility site.
Targeted Marketing	1. Requires one page and URL on the utility site for each page it is embedded on.
Home Energy Analysis	1. Requires one page and URL on the utility site. Be aware that the survey redirects users to an Oracle Utilities Opower-hosted page.
Ways to Save	<ol style="list-style-type: none"> 1. Guide List requires one page and URL on the utility site. 2. Guide Details requires: <ol style="list-style-type: none"> a. One page and URL on the utility site. b. Enable the page to accept the <code>guide-id</code> query parameter and pass it to the Guide Details widget.. 3. Tip Details requires: <ol style="list-style-type: none"> a. One page and URL on the utility site. b. Enable the page to accept the <code>tip-id</code> query parameter and pass it to the Tip Details widget.
Tips Light	1. Requires one page and URL on the utility site.
Rate Analysis Tool	<ol style="list-style-type: none"> 1. Rate Comparison requires: <ol style="list-style-type: none"> a. One page and URL on the utility site. b. Enable the page to accept the <code>utility_account</code> query parameter and pass it to the Rate Comparison widget. 2. Rate Details requires: <ol style="list-style-type: none"> a. One page and URL on the utility site. b. Enable the page to accept the <code>utility_account</code> and <code>rate_id</code> query parameters and pass them to the Rate Details widget. <p>Be aware that the optional Rate Simulator redirects users to an Oracle Utilities Opower-hosted page.</p>
Peak Time Rebates	1. Requires one page and URL on the utility site.

To embed a widget on a utility web page:

1. Include the required HTML in the location on the page where the widget is to appear. This HTML includes a `<script>` tag that points to the relevant widget. When the utility page renders, the `<script>` tag executes and the widget appears on the page in the DOM where the `<script>` tag is placed. The script tag uses the following format:

```
<script src="https://[HostName].opower.com/ei/x/e/[WidgetName].js" async></script>
```

Where:

- `HostName` is the applicable host information. When embedding on the stage environment, the format is `ei-[ClientCode]-stage`, where `ClientCode` is the client code for the utility. When embedding on the production environment, the format is `[ClientCode]`.
- `WidgetName` is the path to the widget's JavaScript file, which is provided by an Oracle Utilities Opower Delivery Team.

An example of embedding the Bill Comparison widget to the stage tier is shown below:

```
<div>
<script src="https://ei-util-stage.opower.com/ei/x/e/compare-my-bills.js" async></script>
</div>
```

An example of embedding the Bill Comparison widget to the production tier is shown below:

```
<div>
<script src="https://util.opower.com/ei/x/e/compare-my-bills.js" async></script>
</div>
```

2. Append `utilityCustomerId` as a query parameter to the `src` attribute in the `<script>` tag. The `utilityCustomerId` must use the format `[CustomerID]-[PremiseID]`, where `CustomerID` and `PremiseID` match the values from the Oracle Utilities billing file. This value must be hashed with the SHA-256 algorithm and encoded using base16/hex encoding. An example for the production tier is shown below, which assumes a `utilityCustomerId` value of 12345-00012:

```
<script src="https://util.opower.com/ei/x/e/compare-my-bills.js?utilityCustomerId=b5836d01586721af0388c89bd4b3d701425abaf3cd06c42d5defe835df840f94" async></script>
```

3. Append `locale` as a query parameter to the `src` attribute in the `<script>` tag. This is an optional parameter that allows embedded widgets to reflect a locale preference

change by the customer that occurs after the customer has signed in to the Energy Management Web Portal. This parameter does not affect the outbound communication locale preference for a customer. The value for the `locale` parameter must be defined as the locale for the page where the widget is embedded. The example below for the production tier uses a static definition of US English:

```
<script src="https://util.opower.com/ei/x/e/compare-my-bills.js?utilityCustomerId=b5836d01586721af0388c89bd4b3d701425abaf3cd06c42d5defe835df840f94&locale=en_US" async></script>
```

4. The utility must provide a mapping of embedded widgets and all page URLs in which each widget is embedded. Any updates to the locations where the widget is embedded must be communicated to Oracle Utilities Delivery Team in advance of deploying the widget to the new location.

Testing an Embedded Widget

The utility can view the embedded widgets with fixture data by appending `fixtures=true` as a query parameter definition in the `<script>` tag for any widget. Examples are shown below.

Stage Environment

```
<div>
<script src="https://ei-util-stage.opower.com/ei/x/e/compare-my-
bills.js?fixtures=true" async>
</script>
</div>
```

Production Environment

```
<div>
<script src="https://util.opower.com/ei/x/e/compare-my-
bills.js?fixtures=true" async>
</script>
</div>
```