

Participating Contractor Manual

April 2015

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Home Upgrade

Energy Upgrade California®



theenergynetwork

residents taking action to save energy

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HOME UPGRADE OVERVIEW

Energy Upgrade California® Home Upgrade provides assistance and incentives for home improvement projects that can reduce energy use and make homes more comfortable. This statewide program is managed locally by utilities and regional energy networks and directed by the California Public Utilities Commission in collaboration with the California Energy Commission. Funding comes from utility customers under the auspices of the California Public Utilities Commission. Incentives are offered on a first-come, first-served basis and are effective until funding is expended or the program is discontinued. Programs may be modified or terminated without prior notice.

This Participating Contractor Manual focuses on The Energy Network's implementation of the Home Upgrade offering.

The Energy Network implements Home Upgrade to homeowners of single-family detached homes in Los Angeles County who are customers of **both** Southern California Edison (SCE) and Southern California Gas Company (SoCalGas®).

Home Upgrade as offered by The Energy Network offers **up to \$3,000** in rebates and incentives for homeowners who want to make their homes more comfortable and energy efficient. The rebates and incentives are offered on a first-come, first-served basis, while funding is available. Contractors must use the Contractor Portal to reserve funding for their customer's home upgrade.

For more information please visit <http://tenres.com/homeupgrade>.

If you have any additional questions, please call (877) 785-2237 or email homeupgrade@theenergynetwork.com.

THE ENERGY NETWORK

The Energy Network:

- Local government organization
- Created by the California Public Utilities Commission
- Provides resources and assistance to homeowners, businesses and public agencies planning energy efficiency upgrades
- Serving Southern California

Services Include:

- Community education and outreach
- Rebate and incentive offerings
- Attractive financing terms
- Tools to help identify contractors with energy efficiency training
- Other resources that help homeowners take the next step toward saving energy



Although our organization provides resources for many communities, The Energy Network implements Home Upgrade **only in Los Angeles County**. (See next page for Home Upgrade service area map.)

HOMEOWNER ELIGIBILITY

In order for homeowners to qualify for Home Upgrade offered by The Energy Network, they must meet **ALL** of the following requirements:

- The home must be located in Los Angeles County.
- The home must be a detached single-family residence.
- The homeowner must receive utility service from **both** SCE and SoCalGas.
- The homeowner must not have participated previously in a similar incentive through SCE/SoCalGas at this service address.



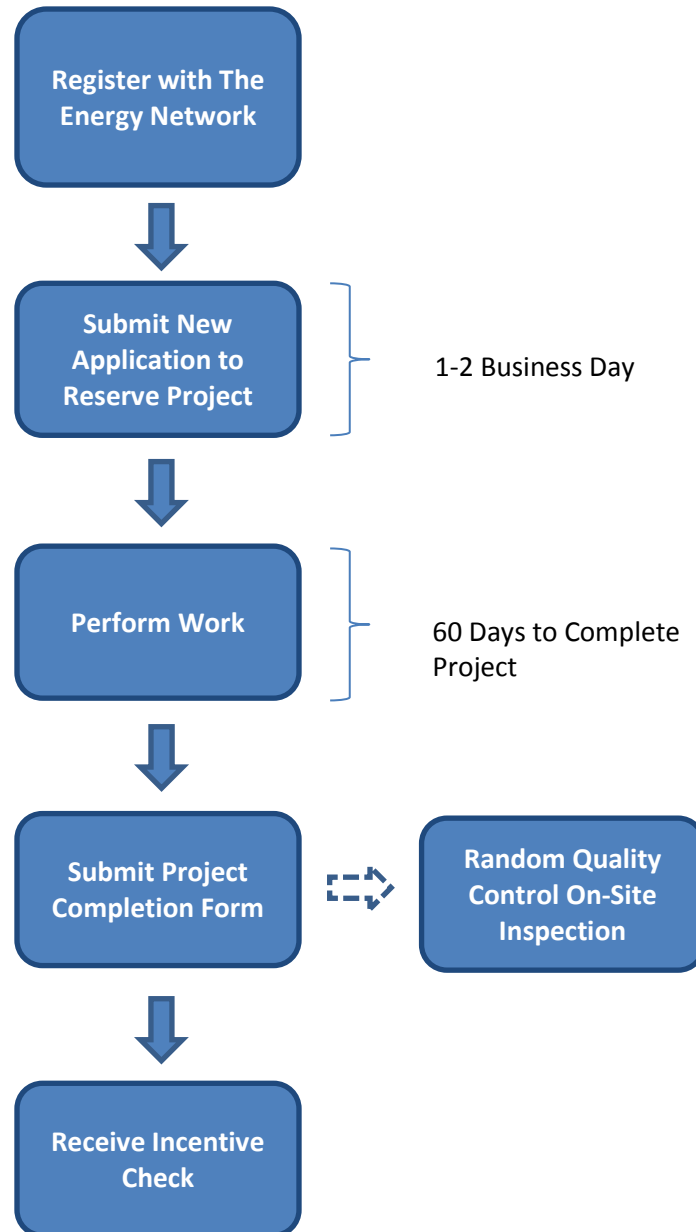
REQUIREMENTS AND CONDITIONS

To participate in Home Upgrade, the following requirements must be met:

- A Home Upgrade Participating Contractor must perform the work.
- Install a total of three or more measures.
- **Carbon Monoxide Detector:** A minimum of one carbon monoxide (CO) detector must be present or installed on each floor.
- **Combustion Safety Testing:** A certified Building Performance Institute Building Analyst (BPI BA) must certify that pre- and post-installation Combustion Appliance Safety (CAS) and Combustion Appliance Zone (CAZ) tests are performed and pass. The Participating Contractor can perform the tests if they have a BPI BA on staff or the contractor can subcontract the testing to a third-party BPI BA professional.

REGISTRATION AND APPLICATION PROCESS

The following is an overview of the Home Upgrade process. Details for each of these steps are explained in the sections below.



REGISTER WITH THE ENERGY NETWORK

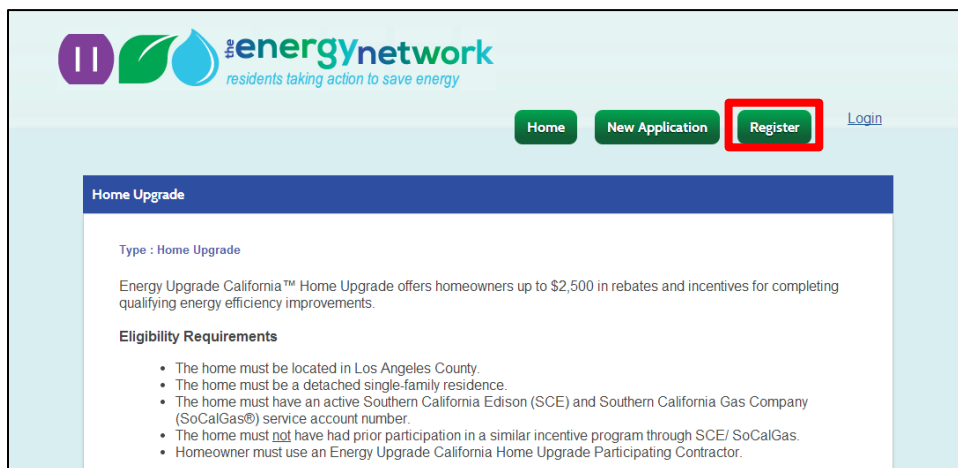
In order to offer the financial incentives of Home Upgrade offered by The Energy Network, a contractor must be a registered Home Upgrade Participating Contractor. To qualify, a contractor must have one of the following credentials:

- SCE/SCG Home Upgrade Contractor
- The Energy Network Home Upgrade Contractor

To register to become an Energy Network Home Upgrade Contractor, call (877) 785-2237 or email homeupgrade@bki.com. An account manager will reach out to you and guide you through the steps in becoming a Participating Contractor.

REGISTER AT THE CONTRACTOR PORTAL

- Go to <http://tenres.com/contractorportal>.
- Click “Register” to go to the account registration page.



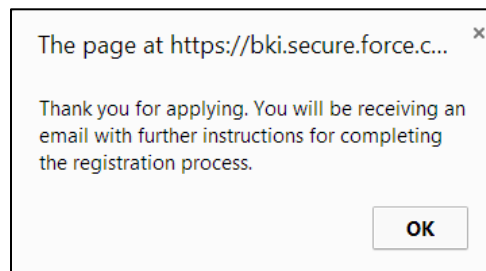
- Enter the following information in the corresponding fields:
 - Company Name
 - License Number
 - Street Address
 - City
 - State / Province
 - Country
 - First Name of Primary Contact
 - Last Name of Primary Contact
 - Email Address of Primary Contact

- The primary contact should be an individual who is principally responsible for coordinating all Home Upgrade projects.
- The email address is where Home Upgrade sends project updates; it should be an address that is checked regularly or multiple people have access to. There can only be one account per company.



The registration form is displayed within a window. On the left side of the window is an illustration of two hands holding a green globe. To the right of the illustration are ten text input fields, each preceded by a label. The labels are: 'Company Name:', 'License Number:', 'Street:', 'City:', 'State/Province:', 'Zip/Postal Code:', 'First Name of Primary Contact:', 'Last Name of Primary Contact:', 'Email Address of Primary Contact:', and 'Phone:'. At the bottom of the form are two buttons labeled 'Apply' and 'Cancel'.

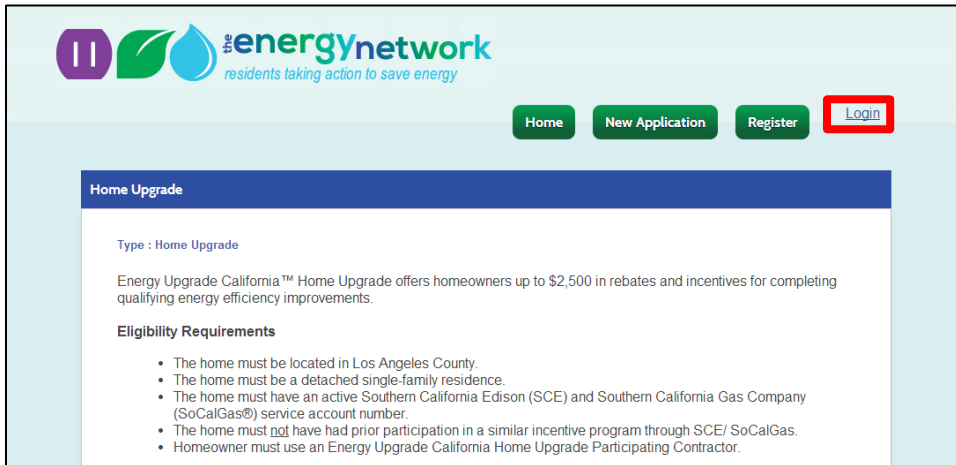
- Click “Apply.”
 - A pop-up will confirm the application has been submitted. Click “OK” to be redirected to the main login page.



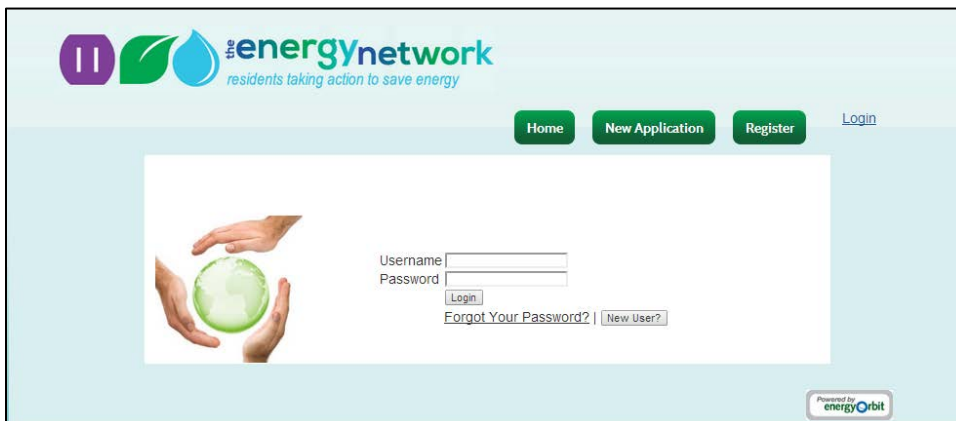
- Program administrators will verify contractor eligibility.
 - Once approved, contractor will receive a confirmation email with a temporary password.
 - Contractors will be instructed to change their temporary password after logging in to the portal for the first time.

LOG IN TO THE CONTRACTOR PORTAL

- Go to <http://tenres.com/contractorportal>.
- Click “Login” on the top right hand corner to go to the login page.

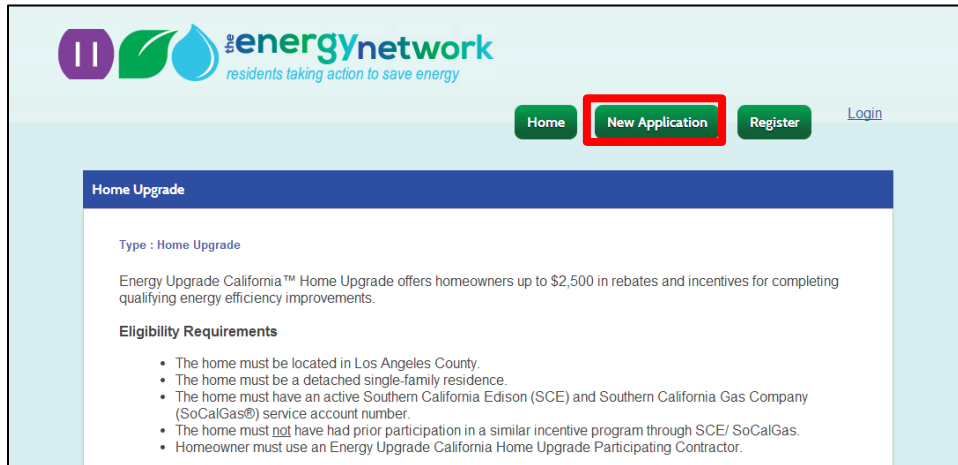


- Use the registered email as the “Username” and enter password.
 - Click “Login.”

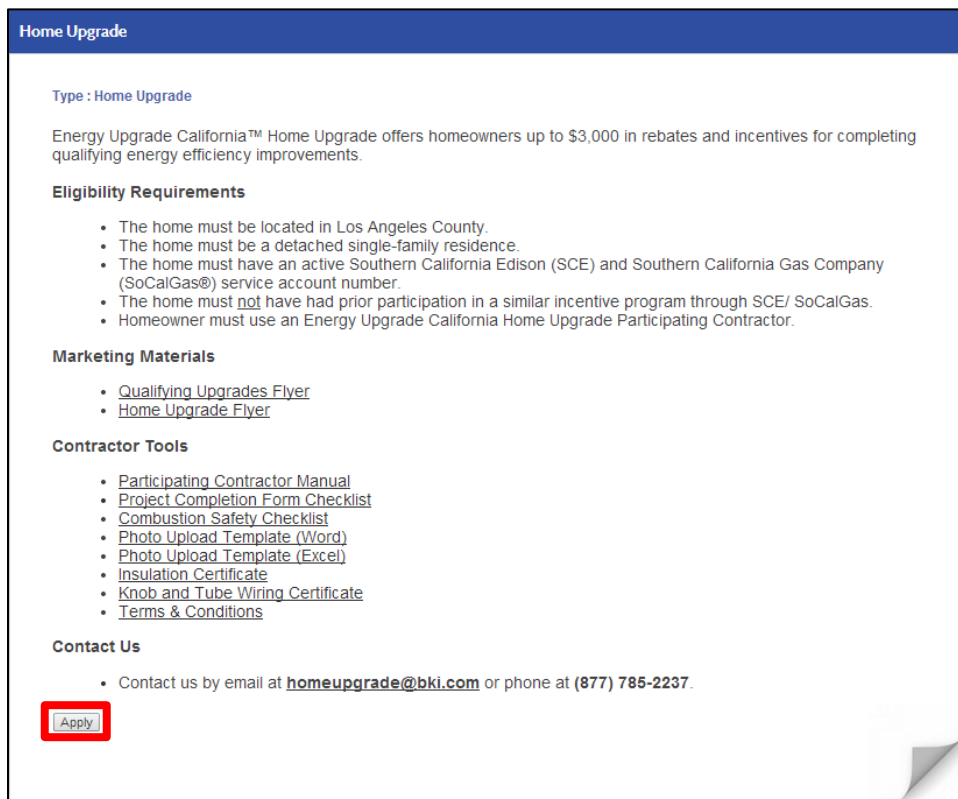


SUBMIT NEW APPLICATION TO RESERVE PROJECT

- Log in to the Contractor Portal.
- Click “New Application” to submit a new project.



- Click “Apply” link under Home Upgrade section.



- Click “Create New Customer Account.”

The screenshot shows the Energy Network website header with the logo and navigation links: Home, New Application, Register, and Logout. Below the header is a blue bar with the text 'New Rebate Application/Project'. Underneath this bar are two radio buttons: 'Verify Existing Customer Account Information' and 'Create New Customer Account'. The 'Create New Customer Account' button is highlighted with a red rectangular box.

- Enter the following information in the corresponding fields to create an account:

- Account Name
- SoCalGas Account #
- Southern California Edison (SCE) Service Account #
- Service Account Street Number
- Service Account Street Name
- Service Account City
- Service Account Zip
- Service Account State
- SoCalGas Account Holder First Name
- SoCalGas Account Holder Last Name
- SCE Account Holder First Name
- SCE Account Holder Last Name
- Service Account Holder Email
- Service Account Holder Phone

The screenshot shows the 'Create Customer Account' form. It has a blue header bar with the text 'Create Customer Account'. Below the header, the form is divided into two sections: 'Account Information' and 'Contact Information'. Each section has a blue header bar with its respective title. The 'Account Information' section contains the following fields: Account Name, SoCalGas Service Account #, Southern California Edison (SCE) Service Account #, Service Account Street Number, Service Account Street Name, Service Account City, Service Account Zip, Service Account State (with 'CA' pre-filled), SoCalGas Account Holder First Name, and SoCalGas Account Holder Last Name. The 'Contact Information' section contains the following fields: SCE Account Holder First Name, SCE Account Holder Last Name, Service Account Holder Email, and Service Account Holder Phone. At the bottom right of the form is a button labeled 'Create Account & Contact'.

IMPORTANT: The utility service account number and name must exactly match the homeowner's utility bills. If the information provided is incorrect, the contractor will be notified by program administrators to provide the correct information. Funds for your project cannot be reserved until the information has been verified.

Contractor must also provide a valid email and phone number for the homeowner. Do not provide an invalid email and phone number. The application will not be approved until the correct information is received.

- Click "Create Account & Contact" to create the account. A notification will appear if the account was created successfully or if there was an error.

The screenshot shows a web form titled "New Rebate Application/Project". At the top, a yellow banner displays the message "Account has been created successfully." Below this, there are two radio buttons: "Verify Existing Customer Account Information" and "Create New Customer Account", with the latter being selected. Under the "Create New Customer Account" section, there is a "Create Customer Account" sub-section. This section contains two columns of input fields. The first column, under the heading "Account Information", includes fields for Account Name (John Doe), SoCalGas Service Account # (XXXXXXXXXXXX), Southern California Edison (SCE) Service Account # (XXXXXXXXXXXX), Service Account Street Number (123), Service Account Street Name (Street Name), Service Account City (City), Service Account Zip (55555), Service Account State (CA), SoCalGas Account Holder First Name (John), and SoCalGas Account Holder Last Name (Doe). The second column, under the heading "Contact Information", includes fields for SCE Account Holder First Name (John), SCE Account Holder Last Name (Doe), Service Account Holder Email (john@web.com), and Service Account Holder Phone (833/657200). A red box highlights the "Service Account Holder Phone" field, and another red box at the bottom right of the form displays the message "Account and Contact has been created successfully."

- Select Incentive Payment Recipient.
 - The rebate is not taxable to the customer. If the contractor receives the incentive, it will be taxable.

The screenshot shows a web form titled "Select Incentive Payment Recipient". It contains a single input field labeled "Incentive Payment Recipient (Check Payee)" with a dropdown menu set to "--None--".

- Select “Customer” as the Primary Contact.

▼ Select Primary Contact (and update information, if necessary)

Primary Contact Customer ▼

- “Primary Contact Mobile” is optional. Click “Apply” to proceed to the next step.

▼ Select Primary Contact (and update information, if necessary)

Primary Contact Customer ▼

Select Contact Doe, John (123 Street Name) ▼

Primary Contact Name (LAST,FIRST) Doe, John

Primary Contact Email john@web.com

Primary Contact Mobile

Apply Cancel

- Select Base Measures by checking the box to the left of the measure name and entering the quantity to the right.

Base Measures

<input type="checkbox"/> Whole Building Air Sealing (15% or More Leakage Reduction)	<input type="text" value="1.0"/>	\$250.00/unit
<hr/>		
<input type="checkbox"/> Whole Building Air Sealing (30% or More Leakage Reduction)	<input type="text" value="1.0"/>	\$450.00/unit
<hr/>		
<input type="checkbox"/> Attic Insulation and Attic Plane Sealing (R-38)	<input type="text" value="1.0"/>	\$550.00/unit
<hr/>		
<input type="checkbox"/> Attic Insulation and Attic Plane Sealing (R-44)	<input type="text" value="1.0"/>	\$650.00/unit
<hr/>		
<input type="checkbox"/> Duct Sealing or Replacement (seal to 10%)	<input type="text" value="1.0"/>	\$250.00/unit
<hr/>		
<input type="checkbox"/> Duct Sealing or Replacement (seal to 6%)	<input type="text" value="1.0"/>	\$650.00/unit
<hr/>		

- If applicable, select the base measure bonus.

Bonus Measures		
<input type="checkbox"/> 2nd Base Measure Bonus	<input type="text" value="1.0"/>	\$150.00/unit
<hr/>		
<input type="checkbox"/> 3rd Base Measure Bonus	<input type="text" value="1.0"/>	\$200.00/unit

- Select Flex Measures by checking the box to the left of the measure name and entering the quantity to the right. Click “Next” to proceed to the next step.

Flex Measures		
<input type="checkbox"/> Duct Insulation	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> Air Conditioner (15 SEER)	<input type="text" value="1.0"/>	\$750.00/unit
<hr/>		
<input type="checkbox"/> Furnace (92% AFUE)	<input type="text" value="1.0"/>	\$600.00/unit
<hr/>		
<input type="checkbox"/> Furnace (95% AFUE)	<input type="text" value="1.0"/>	\$700.00/unit
<hr/>		
<input type="checkbox"/> Wall Furnace	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> Windows	<input type="text" value="1.0"/>	\$700.00/unit
<hr/>		
<input type="checkbox"/> Wall Insulation	<input type="text" value="1.0"/>	\$500.00/unit
<hr/>		
<input type="checkbox"/> Floor Insulation	<input type="text" value="1.0"/>	\$550.00/unit
<hr/>		
<input type="checkbox"/> Gas Storage Water Heater (EF Greater Than 0.67)	<input type="text" value="1.0"/>	\$350.00/unit
<hr/>		
<input type="checkbox"/> Gas Storage Water Heater (EF Greater Than 0.70)	<input type="text" value="1.0"/>	\$450.00/unit
<hr/>		
<input type="checkbox"/> Gas Tankless Water Heater (EF Greater Than 0.82)	<input type="text" value="1.0"/>	\$900.00/unit
<hr/>		
<input type="checkbox"/> Electric Storage Water Heater (EF Greater Than 2.00)	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		

- Enter the following information in the corresponding fields:
- Year Built
 - Number of Stories/Floors
 - Ceiling Height (ft.)
 - Conditioned Floor Area (ft.²)
 - How did your customer hear about the program?

Site Information	
Question or Requirement	Response
Year Built *	<input type="text"/>
Number of Stories/Floors *	<input type="text"/>
Ceiling Height *	<input type="text"/>
Conditioned Floor Area *	<input type="text"/>
How did your customer hear about the program? *	--None-- ▾

- Upload “Homeowner Signed Terms and Conditions.”

Step 3 of 4 - Attach Documents	
Home Owner Signed Terms and Conditions *	<input type="button" value="Choose File"/> No file chosen

➤ Check “I Accept” to agree to the Contractor Terms and Conditions.

Energy Upgrade California™ Home Upgrade Terms and Conditions

I understand that The Energy Network Home Upgrade incentive is available to property owners on a first-come, first-served basis while funds are available or until discontinued by the California Public Utilities Commission (CPUC). This funding will end December 31, 2014 or earlier if all allocated funds are depleted before that date. Project Completion Forms and all supporting documentation must be submitted by midnight November 14, 2014. I understand that a completed Application and Project Completion Form, including a copy of an itemized paid invoice, must be submitted within 60 days of the incentive reservation date for my incentive to be guaranteed. Funds cannot be guaranteed after the 60 day reservation date has passed. Once the application is approved for payment, an incentive check is generally mailed within four to eight weeks to the utility service account address or to the mailing address provided in the application.

I attest that I am a current Home Upgrade Participating Contractor, in good-standing with Southern California Edison and Southern California Gas Company.

I understand the incentive will be reserved once a complete and accurate Application is submitted, received, and approved by the program administrator. At that time the property owner and I will be notified by email and the 60 day reservation will commence. The incentive reservation is valid for the approved scope of work only. I understand that if there is a change in qualifying upgrades, I must notify The Energy Network for written approval to alter the scope of work. Rebates and incentives are not guaranteed for upgrades completed outside the scope of work.

I understand that the incentive amount provided by The Energy Network is NOT GUARANTEED and it may change based on a number of factors including, but not limited to, verification of the measures installed.

I understand that a property owner cannot receive energy efficiency incentives for the same measures or for the replacement of the measure installed from more than one California investor-owned utility or other third party programs offering rebates, financing, and other incentives funded with CPUC Public Goods Charge funds.

I understand that the property owner has the authority to assign their incentive to the Participating Contractor installing the measures in their residence. I understand that under certain circumstances incentives are taxable and will be reported to the IRS unless I am exempt from reporting. I understand that I should consult my tax advisor concerning the taxability of incentives. The Energy Network is not responsible for any taxes that may be imposed as a result of the receipt of this incentive.

I understand incentives cannot exceed the combination of purchase price and installation cost.

The Energy Network will not be liable for any type of damages, whether direct, indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. I waive any and all claims against The Energy Network, its special districts, its officials, officers and employees and will indemnify The Energy Network for any claims arising out of or relating to the installation and/or use of energy efficiency measures referred to in this Application.

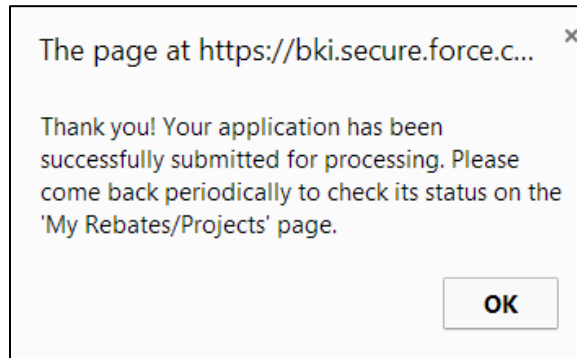
I am responsible for meeting all program requirements and complying with my state/county/city government, property owner and/or homeowners' association requirements (if any) regarding local conditions, restrictions, codes, ordinances, rules and regulations pertaining to all project installations. I further understand that it is my sole responsibility to ensure all incentivized measures are installed in accordance with all manufacturers' specifications.

I understand that the choice of qualifying product(s), choice of manufacturer, merchant, dealer, purchase, installation and ownership/maintenance of the qualifying product(s) referenced in this application are my sole responsibility, and the manufacturer, dealer, supplier of these products is not an agent or representative of The Energy Network.

I understand that The Energy Network is not responsible for items lost, damaged, or destroyed in the mail/transit.

I Accept ☐

- Click “Submit” to submit the application.
 - A pop-up notification will appear confirming the application has been submitted. Click “OK” to be redirected to the database homepage.



- Program administrators will verify the SCE and SoCalGas Account Number and ensure that the measures selected are eligible for Home Upgrade and they had no prior participation in an overlapping SCE/SoCalGas incentive program(s).
 - Program administrators will notify contractor within 2 business days if the application is approved and funds are reserved.
 - The incentive is reserved for 60 days. If contractors require an extension, email homeupgrade@bki.com or call your account manager.
- Contractor may begin work once funds have been reserved. Submit data for Combustion Safety Test-In, Combustion Safety Test-Out, and Project Completion Form when the work has been completed.

PERFORM COMBUSTION SAFETY TEST-IN

A BPI BA must perform a CAS and CAZ test before the contractor begin work. Test failures must be corrected before upgrade work can begin. The Participating Contractor can perform the testing if they have a BPI BA on staff or the work can be subcontracted to a third-party BPI BA professional.

If a third-party BPI BA is subcontracted, contractors should properly vet the capabilities and certification of the individual. BPI certified individuals can be verified [here](#).

It is assumed that if a contractor subcontracts the work, they will provide the BPI BA their login information in order to complete the Combustion Safety Test-In. The contractor can complete the Combustion Safety Test-In form on behalf of the BPI BA professional as long as they received their consent and approval.

- Login to the Contractor Portal.
- Click “Home” to see the list of current projects.
- Click “Submit CAS/CAZ Test In” to begin submission of the Combustion Safety Test-In.

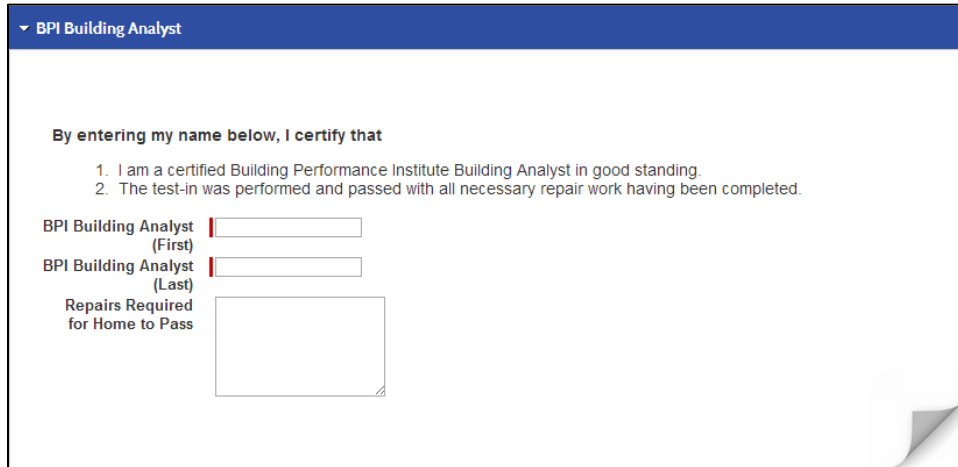
Energy Upgrade California™ Home Upgrade: Contractor Portal
 You can view the status of your current projects on this page. You can also use the links below to start a new project, provide combustion safety testing results, or submit your Project Completion Form. Feel free to call us at (877) 785-2237 with any questions.

When you are getting ready to submit a project, please have the homeowner name, address, and service account numbers (both SCE and SoCalGas®) handy. What phase of the project would you like to submit today?

My Account | **My Rebates/Projects**

Current and Past Projects and Applications					
Rebate Application/Project	Location	Initiated	Rebate Amount	Status	Action
SCHU1111 (123 Street Name)	123 Street Name, City, CA 55555	02/13/2014	\$0.00	SC2. Reservation Complete	Submit CAS/CAZ Test In Submit CAS/CAZ Test Out Submit Project Completion Form

- Enter the following information in the corresponding fields to complete the Combustion Safety Test-In.
 - BPI Building Analyst First and Last Name
 - Repairs Required for Home to Pass



▼ BPI Building Analyst

By entering my name below, I certify that

1. I am a certified Building Performance Institute Building Analyst in good standing.
2. The test-in was performed and passed with all necessary repair work having been completed.

BPI Building Analyst (First)

BPI Building Analyst (Last)

Repairs Required for Home to Pass

- Date of Test-In



▼ Test In

Date of Test-In [4/22/2014]

- Correct any test failures.
- Begin upgrade work.
 - Remember to take photos for the required Supporting Documentation and record data for all the work that is being done.

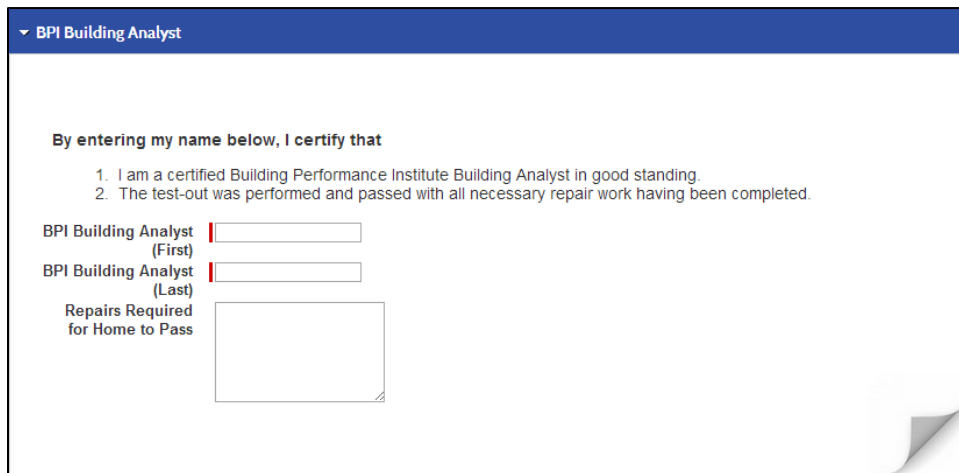
PERFORM COMBUSTION SAFETY TEST-OUT

A BPI BA must perform a CAS and CAZ test after work has been completed by the contractor. Test failures must be corrected before the project can be approved for payment. The Participating Contractor can perform the tests if they have a BPI BA on staff or the work can be subcontracted to a third-party BPI BA professional.

If a third-party BPI BA is subcontracted, contractors should properly vet the capabilities and certification of the individual. BPI certified individuals can be verified [here](#).

It is assumed that if a contractor subcontracts the work, they will provide the BPI BA their login information in order to complete the Combustion Safety Test-Out. The contractor can complete the Combustion Safety Test-Out form on behalf of the BPI BA professional as long as they received their consent and approval.

- Login to the Contractor Portal.
- Click “Home” to see a list of your current projects.
- Click “Submit CAS/CAZ Test Out” to begin submission of the Combustion Safety Test-Out.
- Enter the following information in the corresponding fields to complete the Combustion Safety Test-Out.
 - BPI Building Analyst First and Last Name
 - Repairs Required for Home to Pass



▼ BPI Building Analyst

By entering my name below, I certify that

1. I am a certified Building Performance Institute Building Analyst in good standing.
2. The test-out was performed and passed with all necessary repair work having been completed.

BPI Building Analyst (First)

BPI Building Analyst (Last)

Repairs Required for Home to Pass

- Date of Test-Out



▼ Test-Out

Date of Test-Out [4/22/2014]

SUBMIT PROJECT COMPLETION FORM

The final step of completing a project submission is the Project Completion Form. This step includes uploading all the required photos, invoices, and test-in/test-out data. The data required depends on the measures installed. See below for all the fields that need to be completed for each measure.

- Login to the Contractor Portal.
- Click “Home” to see a list of current projects.
- Click “Submit Project Completion Form” to begin submission of the Project Completion Form.

Energy Upgrade California™ Home Upgrade: Contractor Portal
 residents taking action to save energy

[Home](#) [New Application](#) [Register](#) [Logout](#)

Energy Upgrade California™ Home Upgrade: Contractor Portal
 You can view the status of your current projects on this page. You can also use the links below to start a new project, provide combustion safety testing results, or submit your Project Completion Form. Feel free to call us at (877) 785-2237 with any questions.

When you are getting ready to submit a project, please have the homeowner name, address, and service account numbers (both SCE and SoCalGas®) handy. What phase of the project would you like to submit today?

[My Account](#) [My Rebates/Projects](#)

Current and Past Projects and Applications

Rebate Application/Project	Location	Initiated	Rebate Amount	Status	Action
SCHU1108 (224 5th)	224 5th, Los Angeles, CA 90042	02/11/2014	\$2500.00	SC2. Reservation Complete	Submit CAS/CAZ Test In Submit CAS/CAZ Test Out Submit Project Completion Form

- Select the measures that the project was approved for.
- Enter the following information in the corresponding fields to complete the Base Measures:
 - Whole Building Air Sealing (15% or More Leakage Reduction)

☒ Whole Building Air Sealing (15% or More Leakage Reduction) 1.0 \$250.00/unit

Pre-Retrofit Default CFM 50 Blower Door Test Method --None--

Post-Retrofit CFM 50 % Building Leakage Reduction

- Whole Building Air Sealing (30% or More Leakage Reduction)

☒ Whole Building Air Sealing (30% or More Leakage Reduction) 1.0 \$450.00/unit

Pre-Retrofit Default CFM 50 Blower Door Test Method --None--

Post-Retrofit CFM 50 % Building Leakage Reduction

▪ Attic Insulation and Attic Plane Sealing (R-38)

<input checked="" type="checkbox"/> Attic Insulation and Attic Plane Sealing (R-38)		1.0	\$550.00/unit
Attic Insulation Type	--None-- ▼	Attic Insulation Depth (inches)	--None-- ▼
Attic R-Value	--None-- ▼	Attic Area Insulated (SqFt)	

▪ Attic Insulation and Attic Plane Sealing (R-44)

<input checked="" type="checkbox"/> Attic Insulation and Attic Plane Sealing (R-44)		1.0	\$650.00/unit
Attic Insulation Type	--None-- ▼	Attic Insulation Depth (inches)	--None-- ▼
Attic R-Value	--None-- ▼	Attic Area Insulated (SqFt)	

▪ Duct Sealing (seal to 10%)

<input checked="" type="checkbox"/> Duct Sealing or Replacement (seal to 10%)		1.0	\$250.00/unit
Duct Sealing Post-Retrofit CFM 25		Duct Sealing Calculation Method	--None-- ▼
Duct Sealing Cooling System Tonnage		Duct Sealing Heating System Output BTU	
Duct Sealing Total System Airflow		Duct Sealing #2 Post-Retrofit CFM 25	
Duct Sealing #2 Calculation Method	--None-- ▼	Duct Sealing #2 Cooling System Tonnage	
Duct Sealing #2 Heating System BTU		Duct Sealing #2 Leakage	

▪ Duct Sealing (seal to 6%)

<input checked="" type="checkbox"/> Duct Sealing or Replacement (seal to 6%)		1.0	\$650.00/unit
Duct Replacement Post-Retrofit CFM 25		Duct Replacement Calculation Method	--None-- ▼
Duct Replacement Cooling System Tonnage		Duct Replacement Heating Output BTU	
Duct Replacement Total System Airflow		Duct Replacement Leakage %	
Duct Sleeve R-Value (Replacement)	--None-- ▼	Duct Replacement #2 Calculation Method	--None-- ▼
Duct Replacement #2 Post-Retrofit CFM 25		Duct Replacement #2 Heating System BTU	
Duct Replacement #2 Cooling System Tons		Duct Replacement #2 Leakage (%)	
Duct Replacement #2 Total System Airflow			
Duct Sleeve #2 R-Value (DuctReplacement)	--None-- ▼		

➤ Enter the following information in the corresponding fields to complete the Flex Measures:

▪ Duct Insulation

<input checked="" type="checkbox"/> Duct Insulation	1.0	\$400.00/unit
Duct Insulation Type --None-- ▼	Buried Duct Insulation Type --None-- ▼	
Duct Sleeve R-Value (Duct Insulation) --None-- ▼		

▪ Air Conditioner (15 SEER)

<input checked="" type="checkbox"/> Air Conditioner (15 SEER)	1.0	\$750.00/unit
AC System Type --None-- ▼	AC Brand	
AC Model #	AC SEER Rating --None-- ▼	
AC Tonnage --None-- ▼		
AC #2 Brand	AC #2 System Type --None-- ▼	
AC #2 SEER Rating	AC #2 Model Number	
	AC #2 Tonnage	

▪ Furnace (92% AFUE)

<input checked="" type="checkbox"/> Furnace (92% AFUE)	1.0	\$600.00/unit
Furnace Type --None-- ▼	Furnace Brand	
Furnace Model #	Furnace AFUE	
Furnace #2 Type --None-- ▼	Furnace #2 Brand	
Furnace #2 Model #	Furnace #2 AFUE	

▪ Furnace (95% AFUE)

<input checked="" type="checkbox"/> Furnace (95% AFUE)	1.0	\$700.00/unit
Furnace Type --None-- ▼	Furnace Brand	
Furnace Model #	Furnace AFUE	
Furnace #2 Type --None-- ▼	Furnace #2 Brand	
Furnace #2 Model #	Furnace #2 AFUE	

■ Wall Furnace

<input checked="" type="checkbox"/> Wall Furnace	1.0	\$400.00/unit
Furnace Type	--None--	Furnace Brand
Furnace Model #		Furnace AFUE
Furnace #2 Type	--None--	Furnace #2 Brand
Furnace #2 Model #		Furnace #2 AFUE

■ Windows

<input checked="" type="checkbox"/> Windows	1.0	\$700.00/unit
U-Factor		SHGC
Area of Windows Installed		

■ Wall Insulation

<input checked="" type="checkbox"/> Wall Insulation	1.0	\$500.00/unit
Wall Insulation Type	--None--	Wall R-Value
		--None--

■ Floor Insulation

<input checked="" type="checkbox"/> Floor Insulation	1.0	\$550.00/unit
Floor Insulation Type	--None--	Floor Insulation Depth
		(Inches) --None--
Floor R-Value	--None--	

■ Gas Storage Water Heater (EF Greater Than 0.67)

<input checked="" type="checkbox"/> Gas Storage Water Heater (EF Greater Than 0.67)	1.0	\$350.00/unit
Gas Storage Water Heater Brand EF > 0.67		Gas Storage Water Heater Model # EF>.67
Gas Storage Water Heater Gallons EF >.67		Gas Water Heater Energy Factor EF> .67
Gas Storage Water Heater 2 Model# EF>.67		Gas Storage Water Heater 2 Brand EF> .67
Gas Water Heater 2 Energy Factor EF>0.67		Gas Water Heater 2 Gallons EF>.67

- Gas Storage Water Heater (EF Greater Than 0.70)

<input checked="" type="checkbox"/> Gas Storage Water Heater (EF Greater Than 0.70)		<input type="text" value="1.0"/>	\$450.00/unit
Gas Storage Water	<input type="text"/>	Gas Storage Water	<input type="text"/>
Heater Brand EF > 0.67		Heater Model # EF>.67	
Gas Storage Water	<input type="text"/>	Gas Water Heater	<input type="text"/>
Heater Gallons EF >.67		Energy Factor EF>.67	
Gas Storage Water	<input type="text"/>	Gas Storage Water	<input type="text"/>
Heater 2 Brand EF>.67		Heater 2 Brand EF>.67	
Gas Water Heater 2	<input type="text"/>	Gas Water Heater 2	<input type="text"/>
Energy Factor EF>0.67		Gallons EF>.67	

- Gas Tankless Water Heater (EF Greater Than 0.82)

<input checked="" type="checkbox"/> Gas Tankless Water Heater (EF Greater Than 0.82)		<input type="text" value="1.0"/>	\$900.00/unit
Gas On-Demand Water	<input type="text"/>	Gas On-Demand Water	<input type="text"/>
Heater Brand EF > .82		Heater Model# EF>.82	
Gas On-Demand Water	<input type="text"/>		
Heater Energy Factor		Gas On-Demand Water	<input type="text"/>
Gas On-Demand Water	<input type="text"/>	Heater 2 Brand	
Heater 2 Model #		Gas On-Demand Water	<input type="text"/>
		Heater 2EnergyFactor	

- Electric Storage Water Heater (EF Greater Than 2.00)

<input checked="" type="checkbox"/> Electric Storage Water Heater (EF Greater Than 2.00)		<input type="text" value="1.0"/>	\$400.00/unit
Electric Storage Water	<input type="text"/>	Electric Storage Water	<input type="text"/>
Heater Brand		Heater Model #	
Electric Storage Water	<input type="text"/>	Elect. Storage	<input type="text"/>
Heater Gallons		WaterHeater	
Electric Storage Water	<input type="text"/>	EnergyFactor	
Heater #2 Brand		Electric Storage Water	<input type="text"/>
Electric Storage Water	<input type="text"/>	Heater 2 Model #	
Heater 2 Gallons		Electric Water Heater	<input type="text"/>
		2Energy Factor	

➤ Enter the following information in the corresponding fields to complete the Project Information:

- Total Project Cost
- Estimated Job Hours
- Were Permits Required?
- Permit Number
- Number of Thermostatic Control Valves
- Number of Carbon Monoxide Detectors

Step 2 of 4 - Enter Necessary Information

Project Information

Question or Requirement	Response
Total Project Cost *	<input type="text"/>
Estimated Job Hours *	<input type="text"/>
Were Permits Required? *	<input type="button" value="Yes"/> ▼
Permit Number *	<input type="text"/>
Number of Thermostatic Control Valves *	<input type="text"/>
Carbon Monoxide Detectors *	<input type="text"/>

- Attach Supporting Documentation.

Step 3 of 4 - Attach Documents

Project Information

Project Invoice	<input type="button" value="Choose File"/> No file chosen
Photo Documentation	<input type="button" value="Choose File"/> No file chosen
Asbestos Abatement Letter	<input type="button" value="Choose File"/> No file chosen
Wall Insulation Certificate	<input type="button" value="Choose File"/> No file chosen
CF-4R HERS Certificate	<input type="button" value="Choose File"/> No file chosen
Knob and Tube C-10 Certificate	<input type="button" value="Choose File"/> No file chosen
Window Supplier Invoice	<input type="button" value="Choose File"/> No file chosen

Once the Project Completion Form is complete and all the required supporting documents have been uploaded, contractor will receive an email confirming Project Completion Form is under review.

QUALITY CONTROL ON-SITE INSPECTION/QC MENTORING

To ensure quality, a random sample of all the projects submitted by contractors will require a Quality Control (QC) On-Site Inspection. Our QC team will go into the home to verify the work was completed to Home Upgrade standards and that the information submitted by the contractor is accurate. If a project is selected for the random on-site inspection, the contractor will receive a notification email after submitting the Project Completion Form.

For the first Home Upgrade application, every contractor is **REQUIRED** to contact our QC team and schedule a QC Mentoring. Mentoring entails having our inspector present as the contractor is performing the test-out for their first project. This ensures the contractor's test-out procedures are completed in accordance to Home Upgrade standards. Contractors will be notified if mentoring is required once the project's funds are reserved.

To schedule a QC Mentoring, email HomeUpgrade@rhainc.com or call Neal Sistek at (805) 549-9491.

If the contractor's test-out procedures meet Home Upgrade standards during their first mentoring session, the contractor will not need to be mentored again. The rest of the contractor's projects will be included in the pool of projects for random on-site inspections. For training purposes, a contractor may request to be mentored by our QC team for a maximum for five times. However, the mentoring is not a substitute for the random QC On-Site Inspections.

If the contractor performs the test-out incorrectly and does not meet Home Upgrade standards during their first mentoring session, they will be required to schedule another mentoring session for their next Home Upgrade application. The mentoring will continue until the QC team is confident that the contractor has learned the standards of the program and can perform the required tests independently.

RECEIVE INCENTIVE CHECK

In order for the incentive check to be disbursed, contractors must resolve any issues discovered during the inspection and Project Completion Form review.

Program administrators will send an email to the homeowner and contractor as soon as the project has been approved for payment. The incentive check will arrive via United States Postal Service within 4 to 8 weeks of this email. Checks will be sent to the designated payee on the application, either the homeowner or contractor.

QUALIFYING MEASURES

The table below shows the eligible upgrades, technical specifications and rebate amounts for each Home Upgrade measure. Projects must install a total of three or more measures.

For more information or questions, please call (877) 785-2237 or email homeupgrade@bki.com.

BASE MEASURES – ELIGIBLE FOR BASE MEASURE BONUS

Upgrade Measure	Technical Specifications	Rebate Amount
Whole Building Air Sealing	≥ 15% leakage reduction from the defaults or test-in CFM 50 result	\$250
	≥ 30% leakage reduction from the defaults or test-in CFM 50 result	\$450
Attic Insulation & Plane Sealing	Insulate ≥ R-38	\$550
	Insulate ≥ R-44	\$650
Duct Sealing	Seal to ≤ 10%	\$250
	Seal to ≤ 6%	\$650

FLEX MEASURES

Upgrade Measure	Technical Specifications	Rebate Amount
Duct Insulation	Insulate \geq R-8	\$400
Central Air Conditioner	\geq 15 SEER	\$750
Central Furnace	\geq 92% AFUE	\$600
	\geq 95% AFUE	\$700
Wall Furnace	Natural gas gravity wall furnace \geq 70% AFUE	\$400
Windows	U-Factor \leq 0.32 & SHGC \leq 0.25	\$700
Wall Insulation	Insulate \geq R-13	\$500
Floor Insulation	Insulate \geq R-19	\$550
Gas Storage Water Heater	Gas Storage Water Heater EF \geq 0.67	\$350
	Gas Storage Water Heater EF \geq 0.70	\$450
Gas Tankless Water Heater	Gas Tankless Water Heater EF \geq 0.82	\$900
Electric Water Heater	Electric Water Heater EF \geq 2.00	\$400

HOME UPGRADE UPDATES

2/17/2014

- Increase Floor Insulation incentive to \$550
- Removed Gas Storage Water Heater ($EF \geq 0.62$)

6/11/2014

- Minimum Furnace efficiency decreased from 95% AFUE to 92% AFUE

8/1/2014

- Duct Replacement has been replaced with Duct Sealing or Replacement (Seal to $\leq 6\%$)
- Added Attic Insulation & Plane Sealing (Insulate $\geq R-44$)
- Added Air Conditioner (≥ 14 SEER & ≥ 12 EER)
- Raised incentive amount of Air Conditioner (≥ 15 SEER & ≥ 12 EER)
- Added Furnace ($\geq 95\%$ AFUE)
- Added Wall Furnace ($\geq 70\%$ AFUE)
- Added Windows (U-Factor ≤ 0.32 and SHGC ≤ 0.25)

10/15/2014

- Removed base measure requirement

4/1/2015:

- Removed Air Conditioner (≥ 14 SEER & ≥ 12 EER)
- Added Gas Storage Water Heater ($EF \geq 0.70$)
- Minimum Electric Water Heater efficiency increased from 0.93 EF to 2.00 EF
- Removed Showerhead, Heating and Cooling, and Duct requirements

BASE MEASURE BONUS

If a homeowner chooses more than one Base Measures, the project will receive a bonus to increase the total incentive. Having two Base Measures in one project will earn their project an extra \$150; three Base Measures in one project will earn their project an additional \$200, totaling \$350.

Number of Base Measures	Bonus Incentive Amount
Two Base Measure Bonus	\$150
Three Base Measure Bonus	\$350

INCENTIVE STRUCTURE

Home Upgrade incentive amount depends on the qualifying energy efficiency upgrades completed, up to \$3,000.

Incentives for Home Upgrade are not considered taxable income for homeowners. However, if a homeowner signs the incentive funding over to a Participating Contractor, that is considered taxable income for the contractor. The contractor will need to submit a W-9 form in order for the program to issue their incentive check.

EXAMPLE 1 OF INCENTIVE STRUCTURE

Base Measure	Duct Sealing ($\leq 6\%$)	\$650
Flex Measures	Duct Insulation ($\geq R-8$)	\$400
	Central Air Conditioner (≥ 15 SEER)	\$750
	Central Furnace ($\geq 95\%$ AFUE)	\$700
Rebate and Incentive Amount		\$2,500

EXAMPLE 2 OF INCENTIVE STRUCTURE

Base Measures	Attic Insulation & Plane Sealing ($\geq R-44$)	\$650
	Whole Building Air Sealing ($\geq 30\%$)	\$450
	Duct Sealing ($\leq 6\%$)	\$650
Base Measure Bonus	<i>Three Base Measure Bonus</i>	\$350
Flex Measure	Duct Insulation ($\geq R-8$)	\$400
Rebate and Incentive Amount		\$2,500

HOME UPGRADE REQUIREMENTS EXPLAINED

The following sections explain the requirements of Home Upgrade and details what is expected from the contractor for each measure. Additional clarifications can also be found in the Frequently Asked Questions.

These are expectations of contractors participating in Home Upgrade; contractors must still comply with local codes and standards.

CARBON MONOXIDE DETECTOR

A Carbon Monoxide (CO) Detector is a device that detects the presence of CO gas in order to prevent carbon monoxide poisoning. **One CO Detector must be installed on every floor of the home.** If there is an existing CO Detector on every floor, the contractor is not required to purchase and install a new one.

If a new CO Detector is purchased, contractors must include it as a line item on the final invoice. If the CO Detector was already present, make a note on the final invoice that a CO Detector did not need to be purchased.

COMBUSTION SAFETY TESTING

Contractors are required to perform a pre- and post-installation Combustion Appliance Safety (CAS) and Combustion Appliance Zone (CAZ) test. A certified Building Performance Institute Building Analyst (BPI BA) must certify that pre- and post-installation Combustion Appliance Safety (CAS) and Combustion Appliance Zone (CAZ) tests are performed and pass. The Participating Contractor can perform the tests if they have a BPI BA on staff or the work can be subcontracted to a third-party BPI BA professional.

All natural gas and propane appliances are subject to full appliance safety testing. All combustion appliances located in conditioned space, unconditioned space, utility room, attached garage, attic, crawlspace, outside storage closet with structural framing connected to the house or in any location that may have a direct effect on the living space are subject to full combustion appliance safety testing.

CAZ depressurization testing applies when combustion appliances are installed in the house, attic, crawlspace, or attached garage. CAZ testing does not apply when appliances are installed outside in an area or enclosure that does not have a direct effect on the living space, or in a detached garage.

Test failures must be corrected before upgrade work can begin and once the work is complete.

If a third-party BPI BA is subcontracted, contractors should properly vet the capabilities and certification of the individual. BPI certified individuals can be verified [here](#).

It is assumed that contractor will provide the BPI BA their login information in order to complete the Combustion Safety Test-In and Combustion Safety Test-Out. The contractor can complete the Combustion Safety forms on behalf of the BPI BA professional as long as they received their consent and approval.

COMBUSTION SAFETY TEST INCENTIVE

Effective April 1, 2014, The Energy Network will offer contractors a \$150 Combustion Safety Test Incentive for each completed project. This incentive is to help cover some of the additional testing contractors have to complete.

This incentive can only be sent to the contractor and is considered taxable income. The program will not send the incentive to any third-party BPI BA professional.

In order to receive the \$150 Combustion Safety Test Incentive, please mail or fax a completed W-9 to The Energy Network.

Include the text “The Energy Network” on all documents sent.

- Fax Number: (314) 983-1303
- Mailing Address: 6 CityPlace Drive, Suite 700
St. Louis, MO 63141

Each Participating Contractor will only need to submit a W-9 form once for all Home Upgrade projects. Once the form is received for a project, it will be kept on file for any subsequent projects.



WHOLE BUILDING AIR SEALING

Whole Building Air Sealing is accomplished by sealing gaps in the building envelope, including those that often occur around penetrations for windows, exterior doors, attic access doors, electrical outlets, plumbing, and light fixtures. A blower door test must be used to determine how much building leakage the contractor was able to reduce.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Whole Building Air Sealing	≥ 15% leakage reduction from the defaults or test-in CFM 50 result	Test-In Manometer photo at CFM 50 if default values are not used	\$250
	≥ 30% leakage reduction from the defaults or test-in CFM 50 result	Test-Out Manometer photo at CFM 50	\$450

BLOWER DOOR TEST

A blower door test is used to measure airflow between building zones and can help physically locate air leakage sites in the building envelope. This test needs to be performed in order to determine the total leakage of the home's building shell.

As a best practice, a blower door test should be performed whenever there has been work on a home's building shell. Measures in Home Upgrade that will affect the building shell are:

- Whole Building Air Sealing
- Attic Insulation & Plane Sealing
- Duct Sealing
- Windows
- Wall Insulation
- Floor Insulation

The QC team will perform a blower door test at homes selected for an On-Site Inspection or QC Mentoring. **The blower door test should be performed during the test-out for all Home Upgrade projects to ensure the home does not require mechanical ventilation. If the QC team finds that a home requires mechanical ventilation, the homeowner/contractor will not receive their incentive until the issue has been resolved.**

If *Whole Building Air Sealing* is selected as a measure for Home Upgrade, a photo of the test-out manometer results at 50 CFM is required as supporting documentation.

WHOLE BUILDING AIR SEALING – DEFAULTS

Pre-retrofit building leakage can be determined by using Home Upgrade’s default values or by performing a pre-retrofit blower door test-in. Refer to the table below for the default values and conditions for a *Whole Building Air Sealing*:

Year of Construction	Default	Test-in	Eligibility
Pre- 1978	8.0 SLA	Not allowed	Per BPI guidelines
1978 to 2001	4.9 SLA	Test-in data is allowed in place of default.	No air sealing allowed when test-in is ≤ 0.35 ACHn.
2002 and later	No default allowed	Test-in data is required.	No air sealing allowed when test-in is ≤ 0.35 ACHn.

- For all homes built before 1978, contractors must use default level of 8.0 SLA and are not allowed to submit a test-in value for building leakage.
- For homes built between 1978 and 2002, use of the default value of 4.9 SLA is optional. Instead of using the default, contractors can perform a blower door test-in to determine the baseline. If the existing home ACHn is ≤ 0.35 , air sealing is not allowed.
- For homes built in 2002 or later, there is no default because the home should not qualify for this measure. However, if the contractor believes the home can qualify, they are required to perform a blower door test-in to determine the baseline. If the existing home ACHn is ≤ 0.35 , air sealing is not allowed.

A photo of the test-in manometer results at 50 CFM must be submitted as supporting documentation if the defaults are not used.

CALCULATING WHOLE BUILDING LEAKAGE REDUCTION

In order to calculate the leakage reduction percentage, contractors must use the following equation:

$$\% \text{ leakage reduction} = 1 - \left(\frac{\text{Test} - \text{Out CFM50}}{\text{Test} - \text{In CFM50}} \right)$$

Test-Out CFM50 comes from the manometer result of the post-retrofit blower door test. *Test-In CFM50* comes from either the pre-retrofit blower door test or the default values. If the default value is used, the contractor must use this equation to determine *Test-In CFM50*:

$$\text{Test} - \text{In CFM50} = \frac{\text{default SLA} \times \text{conditioned floor area}}{3.819}$$

All BPI standards for recommending or requiring mechanical ventilation are to be applied.

BUILDING AIRFLOW STANDARD

Building airflow provides passive ventilation of the building interior, introducing fresh air into the building and removing moisture, carbon dioxide, fumes, etc. The Building Airflow Standard (BAS) determines the minimum natural building air changes per hour (ACH) that will meet air exchange requirements established by ASHRAE. **Home Upgrade uses this calculation to determine if mechanical ventilation needs to be installed.**

BAS is calculated using two methods: *BAS(building)* or *BAS(occupants)*. BAS is the greater value of *BAS(building)* or *BAS(occupants)*.

$$\text{BAS}(\text{building}) = \frac{0.35 \times (\text{conditioned floor area} \times \text{average ceiling height})}{60}$$

$$\text{BAS}(\text{occupants}) = \# \text{ of occupants} \times 15$$

Multiply the BAS with the *N-Factor* to determine *BAS(CFM50)*. For homes in The Energy Network's offering of Home Upgrade, the *N-Factor* is **24.5 for single-story homes** and **19.85 for two-story homes**.

$$\text{BAS}(\text{CFM50}) = \text{BAS} \times \text{N} - \text{Factor}$$

% BAS Calculation: The *Test-Out CFM50* is divided by the *BAS(CFM50)* to determine the ventilation needs of the building.

$$\% \text{ BAS} = \frac{\text{Test} - \text{Out CFM50}}{\text{BAS}(\text{CFM50})}$$

- If test-out CFM50 is $\geq 100\%$ BAS, mechanical ventilation is not necessary.
- If test-out CFM50 is $< 100\%$ BAS and $\geq 70\%$ BAS, mechanical ventilation is recommended.
- If test-out CFM50 is $< 70\%$ BAS, mechanical ventilation must be installed.

ATTIC INSULATION & PLANE SEALING

To qualify for *Attic Insulation & Plane Sealing*, the contractor must seal and insulate 100% of the attic surface area over conditioned space in the home. If there are areas in the attic that are not accessible for sealing and insulating, the homeowner may still qualify. Contact your account manager or email homeupgrade@bki.com to request an exception.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Attic Insulation & Plane Sealing	Insulate \geq R-38		\$550
	Insulate \geq R-44		\$650

The contractor must seal all the open cavities on the attic plane. There is no set leakage reduction target the contractor must meet. Then the contractor must ensure the following conditions are met:

1. Kitchen and bath fan vent(s) connected for outdoor vent termination
2. Barriers must be installed around or over any heat producing devices (HPDs).

Heat Producing Devices in the attic include but are not limited to the following:

- Recessed light fixtures
- Exposed fluorescent fixtures
- Doorbell transformers
- Fan motors
- Metal flues / vent pipes
- Masonry chimneys
- Gas and electric appliances (e.g. water heaters and furnaces)
- Abandoned vents
- Any other device that produces heat

Once all of the conditions above are met, the contractor can insulate all the accessible attic surface area to the desired level.

DUCT SEALING

To qualify for *Duct Sealing*, contractors must seal the existing ducts to reduce the total duct leakage to 10% of system airflow or replace the ducts and reduce the total duct leakage to 6% of system airflow.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Duct Sealing	Seal to $\leq 10\%$	Test-Out Manometer photo at CFM 25 or CF-4R HERS Certificate	\$250
	Seal to $\leq 6\%$		\$650

DUCT BLASTER TEST

A duct blaster test is used to determine the leakage of the ducts. There are several ways to calculate duct leakage. Home Upgrade offered by The Energy Network will accept results from a total leakage test or a leakage-to-outside test.

If *Duct Sealing* is selected as a measure for Home Upgrade, a photo of the test-out manometer results at 25 CFM is required as supporting documentation. If the home was inspected by a HERS Rater, a copy of the CF-4R that shows the duct leakage would be accepted in the place of a manometer photo.

A duct blaster test is not permitted if the following conditions are present:

- a. Possible asbestos duct work is present
- a. Any friable asbestos is present
- b. A combustion hazard is present
- c. Any health or safety issue that will impact the occupants is present
- d. Contractors must resolve any issues before proceeding with the duct leakage testing

CALCULATING DUCT LEAKAGE

In order to calculate the duct leakage percentage, contractors must use the following equation:

$$\text{Duct Leakage}(\%) = \frac{\text{CFM25 (duct test)}}{\text{Total System Airflow}}$$

CFM25 (duct test) comes from the manometer result of the post-retrofit duct blaster test. *Total System Airflow* can be measured by using a flow hood/glow grid. A common alternative method is to estimate the *Total System Airflow* using the following *Nominal Cooling/Heating Airflow* equations:

$$\text{Nominal Cooling Airflow (CFM)} = \text{cooling tonnage} \times 400$$

$$\text{Nominal Heating Airflow} = 21.7 \times \text{heating output (kBTU)}$$

DUCT INSULATION

To qualify for *Duct Insulation*, the contractor must insulate 100% of the ducts. If there are ducts that are not accessible, the homeowner may still qualify. Contact your account manager or email homeupgrade@bki.com to request an exception.

Insulating the ducts is accomplished by duct wrap or duct replacement. Duct wrap requires contractors to wrap additional insulation onto the existing ducts. Or the contractor can remove the existing duct system and replace it with new R-8 ducts.

Buried ducts may qualify for duct insulation as long as the ducts are completely covered with attic insulation. If you would like to bury the ducts, contact your account manager or email homeupgrade@bki.com to request an exception.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Duct Insulation	Insulate ≥ R-8		\$400

CENTRAL AIR CONDITIONER

Central Air Conditioner requires a contractor to replace the existing central air conditioner unit with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing central air conditioner. Therefore, homes that have existing window air conditioners, wall air conditioners, or ductless mini splits will not qualify.
- Replacing the existing unit requires switching to a different fuel source (fuel switching).

An electric heat pump installation may qualify as a *Central Air Conditioner*. If you would like to install an electric heat pump, contact your account manager or email homeupgrade@bki.com to request an exception.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Central Air Conditioner	≥ 15 SEER		\$750

CENTRAL FURNACE

Central Furnace requires a contractor to replace the existing central furnace unit with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing central furnace. Homes that have an existing wall furnace will not qualify for the *Central Furnace* measure, but the home does qualify for the *Wall Furnace* measure.
- Replacing the existing unit requires switching to a different fuel source (fuel switching).

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Central Furnace	≥ 92% AFUE		\$600
	≥ 95% AFUE		\$700

WALL FURNACE

Wall Furnace requires a contractor to replace the existing natural gas, gravity wall furnace with a more efficient unit.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Wall Furnace	Natural gas gravity wall furnace ≥ 70% AFUE		\$400

WINDOWS

To qualify for *Windows*, the contractor must replace 100% of windows touching the conditioned space of the home. If this cannot be accomplished, the homeowner may still qualify. Contact your account manager or email homeupgrade@bki.com to request an exception.

Contractor must provide the window supplier invoice as supporting documentation to the program. The invoice must show the size, U-Factor, and SHGC of all the windows installed.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Windows	U-Factor ≤ 0.32 & SHGC ≤ 0.25	Window Supplier Invoice (must show size of each window, U-Factor, and SHGC)	\$700

WALL INSULATION

To qualify for *Wall Insulation*, the contractor must insulate 100% of the outside walls that touch conditioned space in the home. If this cannot be accomplished, the homeowner may still qualify. Contact your account manager or email homeupgrade@bki.com to request an exception.

Contractor must provide a Wall Insulation Certificate as supporting documentation to the program. The insulation certificate certifies that contractor insulated the walls to ≥R-13.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Wall Insulation	Insulate ≥R-13	Wall Insulation Certificate	\$500

FLOOR INSULATION

To qualify for *Floor Insulation*, the contractor must insulate 100% of all accessible floor surface area under conditioned space in the home. If this cannot be accomplished, the homeowner may still qualify. Contact your account manager or email homeupgrade@bki.com to request an exception.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Floor Insulation	Insulate $\geq R-19$		\$550

GAS STORAGE WATER HEATER

Gas Storage Water Heater requires the contractor to replace the existing gas hot water heater with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing gas hot water heater.
- The home currently uses a propane water heater or electric water heater (fuel-switching). If the home has an existing electric water heater, they will qualify for the *Electric Water Heater* measure.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Gas Storage Water Heater	Gas Storage Water Heater EF ≥ 0.67		\$350
	Gas Storage Water Heater EF ≥ 0.70		\$450

GAS TANKLESS WATER HEATER

Gas Tankless Water Heater requires the contractor to replace the existing gas hot water heater with an on-demand (tankless) water heater

The homeowner will not qualify for this measure if:

- The home does not have an existing gas hot water heater.
- The home currently uses a propane water heater or electric water heater (fuel-switching). If the home has an existing electric water heater, they will qualify for the *Electric Water Heater* measure.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Gas Tankless Water Heater	Gas Tankless Water Heater EF \geq 0.82		\$900

ELECTRIC WATER HEATER

Electric Water Heater requires the contractor to replace the existing electric storage water heater with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing electric hot water heater.
- The home currently uses a propane water heater or gas water heater (fuel-switching). If the home has an existing gas water heater, they will qualify for the *Gas Water Heater* measure.

Upgrade Measure	Technical Specifications	Supporting Documentation	Rebate
Electric Water Heater	EF \geq 2.00		\$400

SUPPORTING DOCUMENTATION

The following sections go over all the required documentation that needs to be submitted by the contractor.

REQUIRED SUPPORTING DOCUMENTATION

The following supporting documentation is **REQUIRED** for all Home Upgrade projects:

1. Signed **Homeowner** Energy Upgrade California Home Upgrade Terms and Conditions.
2. Accepted **Participating Contractor** Energy Upgrade California Home Upgrade Terms and Conditions.
3. Itemized invoice
 - a. All measures completed must be listed on the invoice.
 - b. The invoice must include a “paid” statement or a zero balance. Financing agreements between the contractor and homeowner are acceptable, but a notation of this must appear on the invoice.
 - c. If the incentive is signed over to the contractor, the invoice must show a credit to the homeowner for the full amount of the Home Upgrade incentive.

ADDITIONAL SUPPORTING DOCUMENTATION

The following documents are required when applicable:

1. Asbestos abatement letter (when asbestos in the home needs to be removed).
2. Knob and Tube C-10 certificate (when the home has knob and tube wiring that needs to be de-energized).

The following chart depicts the supporting documentation per measure:

Measure	Supporting Documentation Required
Duct Sealing	Test-Out Manometer Photo at CFM 25 or CF-4R HERS Certificate
Whole Building Air Sealing	Test-In Manometer Photo at CFM 50 if default values are not used Test-Out Manometer Photo at CFM 50
Windows	Window Supplier Invoice (must show size of each window, U-Factor, and SHGC)
Wall Insulation	Wall Insulation Certificate

We encourage contractors to take photos of all the work that is performed. Photos are an excellent way to show work was done correctly and to settle disputes between program staff or homeowners.

SUPPORTING DOCUMENTATION SAMPLES

HOMEOWNER ENERGY UPGRADE CALIFORNIA HOME UPGRADE TERMS AND CONDITIONS**Energy Upgrade California™ Home Upgrade Terms and Conditions**

I understand that The Energy Network Home Upgrade incentive is available to homeowners on a first-come, first-served basis while funds are available or until discontinued by the California Public Utilities Commission (CPUC). This Program funding will end December 31, 2014 or earlier if all allocated funds are depleted before that date. Project Completion Forms and all supporting documentation must be submitted by midnight November 14, 2014. I understand that a completed Application and Project Completion Form, including a copy of an itemized paid invoice, must be submitted within sixty days of the incentive reservation date for my incentive to be guaranteed. Funds cannot be guaranteed after the sixty-day reservation date has passed. Once the application is approved for payment, an incentive check is generally mailed within four to eight weeks to the utility service account address or to the mailing address provided in the application.

I am the property owner of a detached, single-family home in Los Angeles County and I am a customer of **both** Southern California Edison (SCE) and Southern California Gas Company (SoCalGas®). If I am not the property owner, I attest that I have obtained the property owner's permission to install the measures listed on this application, for which I am applying for an incentive.

I understand that the installation of the measures must (a) qualify for The Energy Network Home Upgrade incentive, (b) be installed in a residential building which is not currently under construction and which is certified for occupancy and (c) be installed by an Energy Upgrade California (EUC) Participating Contractor.

I understand the incentive will be reserved once the complete and accurate application is submitted and approved by the program administrator. At that time my contractor and I will be notified by email and the 60 day reservation will commence. The incentive reservation is valid for the approved scope of work only. I understand that if there is a change in qualifying upgrades my contractor must reapply and the original application will be cancelled.

I am responsible for meeting all program requirements and complying with my state/county/city government, property owner and/or homeowners' association requirements (if any) in my area regarding local conditions, restrictions, codes, ordinances, rules and regulations pertaining to all installations. I further understand that it is my sole responsibility to ensure all incentivized measures are installed in accordance with all manufacturers' specifications.

I understand that the choice of qualifying product(s), choice of manufacturer, merchant, dealer and/or Participating Contractor, and purchase, installation and ownership/maintenance of the qualifying product(s) referenced in this application are my sole responsibility, and the manufacturer, dealer, supplier or Participating Contractor of these products is not an agent or representative of The Energy Network.

The Energy Network will not be liable for any type of damages, whether direct, indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. I waive any and all claims against The Energy Network, its special districts, its officials, officers and employees and will indemnify The Energy Network for any claims arising out of or relating to the installation and/or use of energy efficiency measures referred to in this Application.

If requested, I will permit The Energy Network and its agents' reasonable admittance to my home to validate installation of the qualifying products either before payment of an incentive and/or after payment of an incentive check. I acknowledge that an incentive will not be mailed if I decline to partake in any mandatory authentication. If an application is selected for authentication, additional time may be necessary before an incentive check is mailed.

I understand that I cannot receive energy efficiency incentives for the same measures or for the replacement of the measure installed from more than one California investor-owned utility or other third party programs offering rebates, financing, and other incentives funded with California Public Utilities Commission (CPUC) Public Goods Charge funds.

I understand incentives cannot exceed the combination of purchase price and installation cost.

I understand that I have the authority to assign my incentive to the Participating Contractor installing the measures in my residence. I understand that if I do assign my incentive to the Participating Contractor that it is my sole responsibility to ensure that all work performed by the contractor is completed to my satisfaction. The Energy Network is not responsible for any taxes that may be imposed as a result of the receipt of this incentive.

I understand that the incentive amount provided by The Energy Network is NOT GUARANTEED and it may change based on a number of factors including, but not limited to, verification of the measures installed.

I understand that The Energy Network is not responsible for items lost, damaged, or destroyed in the mail/transit.

I certify that I am a Southern California Edison and Southern California Gas Company Service Account Holder. I understand, acknowledge and agree and to the Terms and Conditions listed above.

3				-									
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Southern California Edison Service Account Number

10 digit number starting with the number 3, entered above for convenience

				-										
--	--	--	--	---	--	--	--	--	--	--	--	--	--	--

Southern California Gas Company Service Account Number

11 digit number starting with 0 or 1

Print Service Account Holder Name

Service Account Holder Signature

Date
Month/Day/Year

Print Name of Property Owner
If different than Service Account Holder

Property Owner Signature

Date
Month/Day/Year

Assignment of Incentive Payment to Contractor**Contractor Name:** _____**Contractor Address:** _____

Contractor Phone: _____

I understand and agree that by signing this page, I am authorizing payment of my incentive to the third party named above, and that I will not be receiving the incentive check from The Energy Network. I also understand that my release of the payment to a third party does not exempt me from meeting the terms and conditions of the program or the program requirements outlined in the application package. I authorize this payment release on condition that the third party is a EUC participating contractor and is the installer of the energy efficient measures for which I am requesting an incentive. I further acknowledge that it is my sole responsibility to ensure that all work is completed to my satisfaction.

Print Service Account Name_____
Service Account Holder Signature_____
Date Month/Day/Year

PARTICIPATING CONTRACTOR ENERGY UPGRADE CALIFORNIA HOME UPGRADE TERMS AND CONDITIONS

Energy Upgrade California™ Home Upgrade Terms and Conditions

I understand that The Energy Network Home Upgrade incentive is available to property owners on a first-come, first-served basis while funds are available or until discontinued by the California Public Utilities Commission (CPUC). This funding will end December 31, 2014 or earlier if all allocated funds are depleted before that date. Project Completion Forms and all supporting documentation must be submitted by midnight November 14, 2014. I understand that a completed Application and Project Completion Form, including a copy of an itemized paid invoice, must be submitted within 60 days of the incentive reservation date for my incentive to be guaranteed. Funds cannot be guaranteed after the 60 day reservation date has passed. Once the application is approved for payment, an incentive check is generally mailed within four to eight weeks to the utility service account address or to the mailing address provided in the application.

I attest that I am a current Home Upgrade Participating Contractor, in good-standing with Southern California Edison and Southern California Gas Company.

I understand the incentive will be reserved once a complete and accurate Application is submitted, received, and approved by the program administrator. At that time the property owner and I will be notified by email and the 60 day reservation will commence. The incentive reservation is valid for the approved scope of work only. I understand that if there is a change in qualifying upgrades, I must notify The Energy Network for written approval to alter the scope of work. Rebates and incentives are not guaranteed for upgrades completed outside the scope of work.

I understand that the incentive amount provided by The Energy Network is NOT GUARANTEED and it may change based on a number of factors including, but not limited to, verification of the measures installed.

I understand that a property owner cannot receive energy efficiency incentives for the same measures or for the replacement of the measure installed from more than one California investor-owned utility or other third party programs offering rebates, financing, and other incentives funded with CPUC Public Goods Charge funds.

I understand that the property owner has the authority to assign their incentive to the Participating Contractor installing the measures in their residence. I understand that under certain circumstances incentives are taxable and will be reported to the IRS unless I am exempt from reporting. I understand that I should consult my tax advisor concerning the taxability of incentives. The Energy Network is not responsible for any taxes that may be imposed as a result of the receipt of this incentive.

I understand incentives cannot exceed the combination of purchase price and installation cost.

The Energy Network will not be liable for any type of damages, whether direct, indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. I waive any and all claims against The Energy Network, its special districts, its officials, officers and employees and will indemnify The Energy Network for any claims arising out of or relating to the installation and/or use of energy efficiency measures referred to in this Application.

I am responsible for meeting all program requirements and complying with my state/county/city government, property owner and/or homeowners' association requirements (if any) regarding local conditions, restrictions, codes, ordinances, rules and regulations

pertaining to all project installations. I further understand that it is my sole responsibility to ensure all incentivized measures are installed in accordance with all manufacturers' specifications.

I understand that the choice of qualifying product(s), choice of manufacturer, merchant, dealer, purchase, installation and ownership/maintenance of the qualifying product(s) referenced in this application are my sole responsibility, and the manufacturer, dealer, supplier of these products is not an agent or representative of The Energy Network.

I understand that The Energy Network is not responsible for items lost, damaged, or destroyed in the mail/transit.

I certify that I am a current Home Upgrade Participating Contractor, in good standing with Southern California Edison and Southern California Gas Company. I understand, acknowledge and agree and to the Terms and Conditions listed above.

ITEMIZED INVOICE

FINAL INVOICE

Date: March 25, 2015
Invoice # [100]

[Company Name]
[Street Address]
[City, ST ZIP Code]
[Phone]
Fax [000-000-0000]
[E-mail address]

TO: [Homeowner Name]
[Street Address]
[City, ST ZIP Code]
[Phone]
[E-mail address]

SALESPERSON	JOB	PAYMENT TERMS	DUE DATE
John Doe		Due on Receipt	August 4, 2014

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
X,000	Attic Insulation & Attic Plane Sealing	\$X.00 per ft. ²	\$X,000.00
	<ul style="list-style-type: none"> Loose Fill Cellulose to R-38 		
1	Whole Building Air Sealing	\$X,000.00	X,000.00
	<ul style="list-style-type: none"> 30% Leakage Reduction 		
1	Gas Storage Water Heater	\$X,000.00	X,000.00
	<ul style="list-style-type: none"> Manufacture Name 		
	<ul style="list-style-type: none"> Model # 		
	<ul style="list-style-type: none"> EF = 0.67 		
1	Carbon Monoxide Detector	\$X0.00	\$X0.00
1	Rebate and Incentive from Energy Upgrade California Home Upgrade Offered by The Energy Network – paid to the contractor		-\$1,500.00
Subtotal			\$X,500.00
Sales Tax			\$X00.00
Total			\$X,000.00

PAID IN FULL ON AUGUST 4, 2014
CHECK #X00

THANK YOU FOR YOUR BUSINESS!

ASBESTOS ABATEMENT LETTER

NOTICE OF COMPLETION

APRIL 23, 2013

**XYZ
ABATEMENT
LEAD-MOLD
ASBESTOS**

ATTN:
COMPANY:
ADDRESS:

PHONE:
FAX:

JOB#:

JOBSITE:

On 04/23/13 XYZ Abatement performed removal of asbestos containing material at the aforementioned site as specified on our Proposal/Contract, job #20408 dated 04/19/13.

All work was performed in accordance with Federal, State and Local Regulations.

If you have any questions, or need any further assistance, please contact me.

Sincerely,

John Q. Sample

President
XYZ Abatement

WALL INSULATION CERTIFICATE



Please fill out the following to complete the certificate.

Company Name: _____

Company Address: _____

Customer/Project Name: _____

Project Address: _____

Wall Insulation Information

Material Type: _____

Brand: _____

Minimum Installed Depth (inches): _____

Installed R-Value: _____

I hereby certify that the wall insulation was installed in compliance with Home Upgrade requirements and in accordance with Energy Efficiency Standards for residential buildings.

Signature

Date

<http://action.theenergynetwork.com/pc>



CF-4R HERS CERTIFICATE

California Energy Star Homes Program

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING CF-4R		
Project Address		Builder Name
Builder Contact	Telephone	Plan Number
HERS Rater	Telephone	Sample Group Number
Certifying Signature	Date	Sample House Number
Firm	HERS Provider	
Street Address:	City/State/Zip:	

Copies to: BUILDER, HERS PROVIDER AND BUILDING DEPARTMENT

HERS RATER COMPLIANCE STATEMENTThe house was: ☒ Tested ☒ Approved as part of sample testing, but was not tested

As the HERS rater providing diagnostic testing and field verification, I certify that the house identified on this form complies with all applicable requirements of the "High Quality Insulation Installation and Thermal Bypass Checklist" procedures as specified by the California Energy Star Homes Program and as checked on this form. Note that to PASS and receive compliance credit, NONE of the BOXES below may be checked "No" and the first three boxes also must be checked. Check "NA" only if the item is not part of the design of the building (i.e., single story buildings do not have rim joists or there may be no recessed can lights installed, etc.).

☒ **REQUIREMENTS FOR CALIFORNIA ENERGY STAR HOMES HIGH QUALITY INSULATION INSTALLATION AND THERMAL BYPASS CHECKLIST PROCEDURES**

- ☒ All items (including both insulation quality and thermal bypass checklist) must be checked.
- ☒ For energy savings credit the building is wood frame construction with wall stud cavities, ceilings, and roof assemblies insulated with mineral fiber or cellulose insulation in low-rise residential buildings.
- ☒ Description of insulation, (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's name, material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum inches.
- ☒ Installation Certificate, (CF-6R) signed by the installer certifying that the installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH)

<input checked="" type="checkbox"/> FLOOR			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation in contact with the subfloor. An air barrier installed at any exposed edges of insulation. Cantilevered floor framing completely filled with insulation or insulation shall be in contact with subfloor. (thermal bypass checklist)
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation in contact with the air-barrier (thermal bypass checklist)
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation properly supported to avoid gaps, voids, and compression (thermal bypass checklist)
Yes	No	NA	
<input checked="" type="checkbox"/> WALLS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and front-to-back.
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No gaps
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No voids over 3/4" deep or more than 10% of the batt surface area.
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard to access wall stud cavities such as; corner channels, wall intersections, and behind tub/shower enclosures insulated to proper R-Value. This may have to be done prior to the installation of the exterior sheathing or the stucco lath. Exterior walls surrounding tub/shower enclosures have an air barrier installed on the interior side of the insulation and the cavity is filled with insulation. (thermal bypass checklist)
Yes	No	NA	

*High Quality Insulation Installation and Thermal Barrier Checklist Procedure
January 2006*

KNOB AND TUBE C-10 CERTIFICATE

Notice of Survey by Electrical Contractor

This is verification that the existing knob-and-tube wiring was surveyed at this address:

Number _____ Street _____ City _____ Zip _____

The existing wiring was found to be:

(A) ☐ In good condition with:

- ☐ No evidence of deterioration
- ☐ No improper connections or splices
- ☐ No evidence of improper overcurrent protection

OR

☐ In poor condition and was brought up to acceptable standards

- ☐ by: Installing tamperproof overcurrent protection with
- ☐ fuses Installing new service panel with breakers
- ☐ Other _____

Therefore the attic has been approved for the installation of ceiling insulation.

(B) ☐ In poor condition and not suitable to be brought up to acceptable standards because

- ☐ of: Evidence of deterioration
- ☐ Evidence of improper connection or splices
- ☐ Evidence of improper overcurrent
- ☐ protection Other _____

- ☐ A copy of this certificate will be filed with the local code-enforcement authority if so required.
- ☐ Prior to installation of new overcurrent devices, their effect on usage habits was explained to the occupant(s) and permission to install them was obtained.

Date Contractor Signature

License Number Company Name

NOTICE TO CUSTOMER: This Electrical survey is required before your ceiling can be insulated by the Energy Upgrade California Home Upgrade Program.

You are advised that if tamperproof overcurrent protection devices are installed to protect the wiring system, your electrical usage habits may require modification to avoid nuisance tripping of the fuses. Prior to installing overcurrent protection, the electrical contractor performing this survey is required to explain the difficulties you may experience after the devices are installed.

I CERTIFY THAT I HAVE READ AND UNDERSTAND THIS NOTICE:

Date Customer Signature

MANOMETER PHOTOS

BLOWER DOOR MANOMETER



TOTAL DUCT LEAKAGE MANOMETER



COMBUSTION SAFETY TEST CHARTS**UNDILUTED CO ACTION LEVELS**

	If appliance passes Draft and Spillage under WCD or Natural Conditions		If appliance FAILS Draft or Spillage under WCD or Natural Conditions
	PASS (Recommendation for Service)	FAIL (Remediation Required)	FAIL (Remediation Required)
Natural Draft FAU	26 - 275 ppm	Exceeds 275 ppm	Exceeds 25 ppm
Induced Draft FAU	N/A	N/A	N/A
Sealed Combustion FAU	N/A	N/A	N/A
Floor Furnace	26 - 275 ppm	Exceeds 275 ppm	Exceeds 25 ppm
Gravity Furnace	26 - 275 ppm	Exceeds 275 ppm	Exceeds 25 ppm
Vented Room Heater	26 - 125 ppm	Exceeds 125 ppm	Exceeds 25 ppm
Wall Furnace	26 - 125 ppm	Exceeds 125 ppm	Exceeds 25 ppm
Direct Vent	26 - 275 ppm	Exceeds 275 ppm	Exceeds 25 ppm
Domestic Hot Water (Storage w/ Natural Draft)	26 - 125 ppm	Exceeds 125 ppm	Exceeds 25 ppm
Tankless Water Heater (Open Combustion)	26 - 125 ppm	Exceeds 125 ppm	Exceeds 25 ppm
Tankless Water Heater (Sealed Combustion Indoors)	N/A	N/A	N/A

If a unit is under the CO Action Level in the SoCalGas region and it fails worst case draft and/or spillage, it will be recommended for correction and retested under Natural conditions.

UNDILUTED CO ACTION LEVELS FOR ATTENDED APPLIANCES

	PASS (Recommendation for Service)	FAIL (Remediation Required)
Gas Log	N/A	Exceeds: 25 ppm
Cooktop*	N/A	Exceeds: 25 ppm each burner
Oven vented properly*	100 ppm - 225 ppm	Exceeds 225 ppm
Oven not vented properly*	N/A	Exceeds 100 ppm
Gas Dryer	N/A	N/A

* Individual CO readings will be taken for the cook top, oven and broiler with the kitchen exhaust fan(s) off.

If a unit is under the CO Action Level in the SoCalGas region, but is not vented properly, it will be recommended for correction.

APPLIANCE AMBIENT CO ACTION LEVELS

Natural Draft FAU at the Supply Register	Exceeds 1 ppm above zone ambient CO = FAIL (Remediation)
Induced Draft FAU at the Supply Register	
Sealed Combustion FAU at the Supply Register	
Floor Furnace	Exceeds 2 ppm (Recommendation for Service or Repair) Retest for Undiluted CO under Natural Conditions
Gravity Furnace	
Vented Room Heater	
Wall Furnace	
Direct Vent	
Storage Hot Water Heater (Natural Draft)	Exceeds 10 ppm (Recommendation for Service or Repair) Retest for Undiluted CO under Natural Conditions
Tankless Water Heater (Open Combustion)	
Tankless Water Heater (Sealed Combustion)	
Gas Dryer	
Gas Log	N/A

*If a unit is below the CO Action Level in the SoCalGas region and it fails draft and or spillage it will be recommended for correction and retested under Natural conditions.

SOCALGAS ZONE AMBIENT CO ACTION LEVELS

Zone/Room Ambient (other than kitchen)	Exceeds 35 ppm = FAIL (Remediation)
Kitchen Ambient**	Exceeds 9 ppm = FAIL (Remediation)

**The kitchen ambient CO test will be conducted at 6 ft. in the center of the kitchen with oven, broiler, and cooktop burners running individually. No other combustion appliances will be activated. The only exception to this is that a water heater pilot may be on, but main burner shall not be operating.

CAZ DEPRESSURIZATION LIMITS

Venting Condition	Limit (Pascal)
Orphan Natural Draft DHW	-2
Natural Draft Furnace or Boiler Vented with DHW	-3
Natural Draft Furnace, DHW or Boiler	-5
Induced Draft Furnace or Boiler Vented with DHW	-5
Fireplace	-5
Induced Draft Furnace or Boiler Alone	-15
Fan-Assisted DHW alone	-15
Power Vented Furnace	-50
Sealed Combustion Furnace	-50
Sealed Combustion DHW	-50
Fireplace Insert	-50
Direct Vent	-50

ACCEPTABLE DRAFT TEST RANGE

Outside Temperature (°F)	Minimum Draft Pressure Standard (Pa)
<10	-2.5
10-90	$(\text{Outside Temperature}(\text{°F}) \div 40) - 2.75$
>90	-0.5

FREQUENTLY ASKED QUESTIONS**Q: What is Home Upgrade, and who is eligible?**

A: Home Upgrade allows a participant and his/her Participating Contractor to choose a selection of qualifying retrofit measures that make the most sense for the home. Each measure is related to a reduction in electricity and/or gas use. Home Upgrade offers homeowners up to \$3,000 in rebates and incentives for completing qualifying energy efficiency improvements. Home Upgrade offered by The Energy Network is open to homeowners of single-family, detached homes in Los Angeles County who are customers of both Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) customers.

Q: How long will Home Upgrade rebates be available?

A: Reservations for Home Upgrade rebate and incentive funds are accepted on a first-come, first-served basis. We anticipate that the funding will last through late 2015, but that is not guaranteed. As we reach the halfway point in available funds, we will keep contractors up to date on the amount of remaining funds.

Q: What is the difference between Home Upgrade and Advanced Home Upgrade?

A: Home Upgrade offers up to \$3,000 in rebates and incentives to qualified homeowners. Home Upgrade uses a menu-based approach, making it easier to estimate the rebate at the beginning of the project.

The utilities' offering of Advanced Home Upgrade can provide up to \$6,500 in incentives and comes with some additional requirements and variability. There are assessment requirements at the beginning of the project, and incentives are determined outside of a simplified system after the project has been completed based on modeled energy efficiency savings.

We encourage homeowners who would appreciate easy rebate and incentive estimation and are planning to focus on a key set of energy measures to consider Home Upgrade. Homeowners who are interested in pursuing more extensive upgrades and a comprehensive assessment should take advantage of Advanced Home Upgrade.

Q: How much is the incentive?

A: Home Upgrade incentive amount depends on the qualifying energy efficiency upgrades you complete, up to \$3,000. For more information on the values of individual qualifying upgrade measures, please see Qualifying Measures.

Q: Is Home Upgrade available to homeowners other than SCE and SoCalGas customers (i.e. LADWP, Pasadena Water & Power, and Long Beach Gas & Oil)

A: Yes. Home Upgrade is available to these homeowners; however the upgrade measures, technical requirements, rebates and incentive levels may be different. To learn about the other Home Upgrade offerings, please visit the SCE or SoCalGas Energy Upgrade California page.

Q: Is Home Upgrade available for condos, apartments and townhouses?

A: No. Home Upgrade is only available to single-family, detached homes.

Q: Can I submit multiple Home Upgrade applications for one home?

A: Yes. Home Upgrade, as offered by the Energy Network, welcomes contractors to submit multiple Home Upgrade applications for one home. Each application submitted must meet all the requirements of the Home Upgrade program. This includes selecting a minimum of three measures for each application. All homes that apply for multiple applications will be subject to a mandatory field inspection by the Home Upgrade QC Team.

Q: Can I get more than one incentive for replacing multiple HVAC systems?

A: Yes. Multiple HVAC systems will also be accepted. In order for a home to be considered for multiple HVAC applications, the systems must operate independently from each other. Each duct system must be completely separate and be connected to a different heating and cooling unit that is controlled by a separate thermostat. All homes that apply for multiple applications will be subject to a mandatory field inspection by the Home Upgrade QC Team.

Q: Can I combine a Home Upgrade project with an Advanced Home Upgrade project?

A: Projects can go through both Home Upgrade and Advanced Home Upgrade, but they cannot be done at the same time or use the same measures. The contractor can do a Home Upgrade job first, and once the Home Upgrade work is completed, you can choose to do Advanced Home Upgrade. However, contractors cannot claim the measures or energy savings for the measures done in Home Upgrade or vice versa.

Q: Is financing available for Home Upgrade?

A: Home Upgrade projects are eligible for 4.99% financing. For more information call (877) 785-2237 regarding the financing programs.

Q: Who do I contact regarding additional questions about Home Upgrade?

A: Please send your inquiry to homeupgrade@bki.com or call (877) 785-2237 and a program administrator will follow up with you.

Q: What is involved in the QA/QC process?

A: The QA process will involve a complete review of the Application Form submitted to ensure that the house and measures selected qualify for an incentive and that they have not been applied toward another incentive. Additionally, the Project Completion Form will be reviewed along with all supporting documentation submitted. This will also ensure that the measures installed are in line with the requirements. We will conduct random QC field inspections to ensure that the test out results are accurate along with verifying that the measures have been installed to the specifications required.

Q: Why do we need the homeowner's SCE and SoCalGas account numbers? Where can I find them?

A: We need to verify that the SCE and SoCalGas account numbers are valid. The account numbers can be found on the homeowner's utility bills. All SoCalGas account numbers are 11 digits long and SCE account number numbers start with a "3" and are 10 digits long.

Q: Does the homeowner have to submit a W-9 form?

A: No. Although previous programs have required a W-9, the rebates and incentives for Home Upgrade are not considered taxable income for homeowners. However, if a homeowner signs the incentive funding over to a Participating Contractor, that might be considered taxable income to the contractors. Therefore, the W-9 form must be submitted in order for the administrator to issue an incentive check to a Participating Contractor.

Q: Why is there a 60-day reservation period for the incentive funds?

A: This is in place to ensure that funds are available. If your application is accurate and the installed work qualifies, the incentive funds are guaranteed as long as the Project Completion Form and project are submitted within the 60-day period. The incentive funds may be issued after the 60-day period; however, funds cannot be guaranteed at that point. The contractor or homeowner may also request an extension by emailing homeupgrade@bki.com.

Q: What happens if the measures I install differ from those I selected initially on my application?

A: You must inform a program administrator that the measures have changed so that the application can be modified. Program administrators will need to verify the new measures are eligible and that there are still funds remaining for the project.

Q: How will I know if the Application and Project Completion Form have been approved?

A: When you submit the initial application, you will receive an email stating that your application has been received and is under review. If your application is complete and accurate, you will be notified by email that your application has been approved and the funds have been reserved.

After the work is complete and you submit the Project Completion Form, you will receive an email stating that your Project Completion Form has been received and under review. If there is no missing information or required QC, you will receive an email saying that your application has been approved.

Q: When will I receive my incentive check?

A: You will receive your check within 4 to 8 weeks of your Project Completion Form being approved. The incentive check will be mailed via U.S. Postal Service to the designated payee on the Application, either the homeowner or contractor.

Q: Can a completed project be denied an incentive check?

A: Denial of an incentive to a completed project may occur if the post-retrofit conditions for the measures installed do not comply with the Home Upgrade Terms & Conditions which are signed by the utility service account holder and uploaded by the Participating Contractor during the Application process to confirm compliance with Home Upgrade. Measures may be determined outside compliance via an on-site inspection or by information contained within submitted documentation, including specification sheets, photos, test-in results, test-out results, and CAS/CAZ results.

Q: How does a contractor qualify to offer the Home Upgrade offering to clients?

A: Only active Home Upgrade Participating Contractors may offer Home Upgrade to their customers. This includes active contractors with either the SCE/SoCalGas Home Upgrade credential or The Energy Network Home Upgrade credential.

Q: I was an Energy Upgrade California Participating Contractor, but am currently inactive. How do I become active?

A: You can regain your active status with a The Energy Network Home Upgrade credential. To register to become an Energy Network Home Upgrade Contractor, call (877) 785-2237 or email homeupgrade@bki.com. An account manager will reach out to you and guide you through the steps in becoming a Participating Contractor.

Q: What is a Knob and Tube Certificate and why do I need to submit one for the Home Upgrade project?

A: If knob-and-tube materials are present in the home a certificate verifying that the knob-and-tube system is energized or de-energized must be submitted as part of the required project documentation. Additionally, a safety placard needs to be placed at all access points to the attic, crawlspace, or wherever a knob-and-tube is present indicating that knob-and-tube materials are energized or de-energized.

This is a requirement of the California Electrical Code. The idea is to provide for the safety of the contractor, the homeowner, and the QC inspector. Not all contractors and their crews are qualified to determine if a knob-and-tube system is completely de-energized. Contractors spot-checking wiring in the attic is not sufficient. The verification process includes removing the service panel cover to view wire-to-breaker and wire-to-fuse connections. This verification should only be performed by qualified personnel.

If you are not a C-10 contractor, you will need to hire a C-10 contractor to verify whether the knob-and-tube system is energized or de-energized and the C-10 contractor will fill out the certificate that attests to this. If you are a C-10 contractor, you can complete the verification and certificate yourself.

For more information please contact:

(877) 785-2237

homeupgrade@theenergynetwork.com



Home Upgrade

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