



Local Governments Empowering Our Communities

Home Electrification Webinar

March 13, 2021



Agenda

- 1. Home Performance Improvements**
Andy Lentz, BayREN
- 2. Reducing Your Carbon Footprint**
Andy Lentz, BayREN
- 3. Rebates, Financing Options and Complementary Programs**
Tonya Veitch, County of Santa Clara



Home Performance Improvements

Andy Lentz
BayREN Home+



How Well Do You Know Your Home?

Improper
Insulation

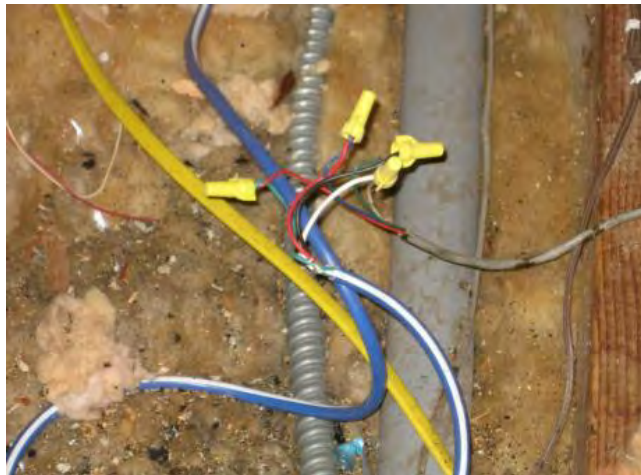


Pest Infestation



Exposed Wiring

Fire Hazards



Leaky Ducts



The Whole-House Approach

PROBLEMS

Moisture in Attic
or Crawl Space

Drafty Rooms

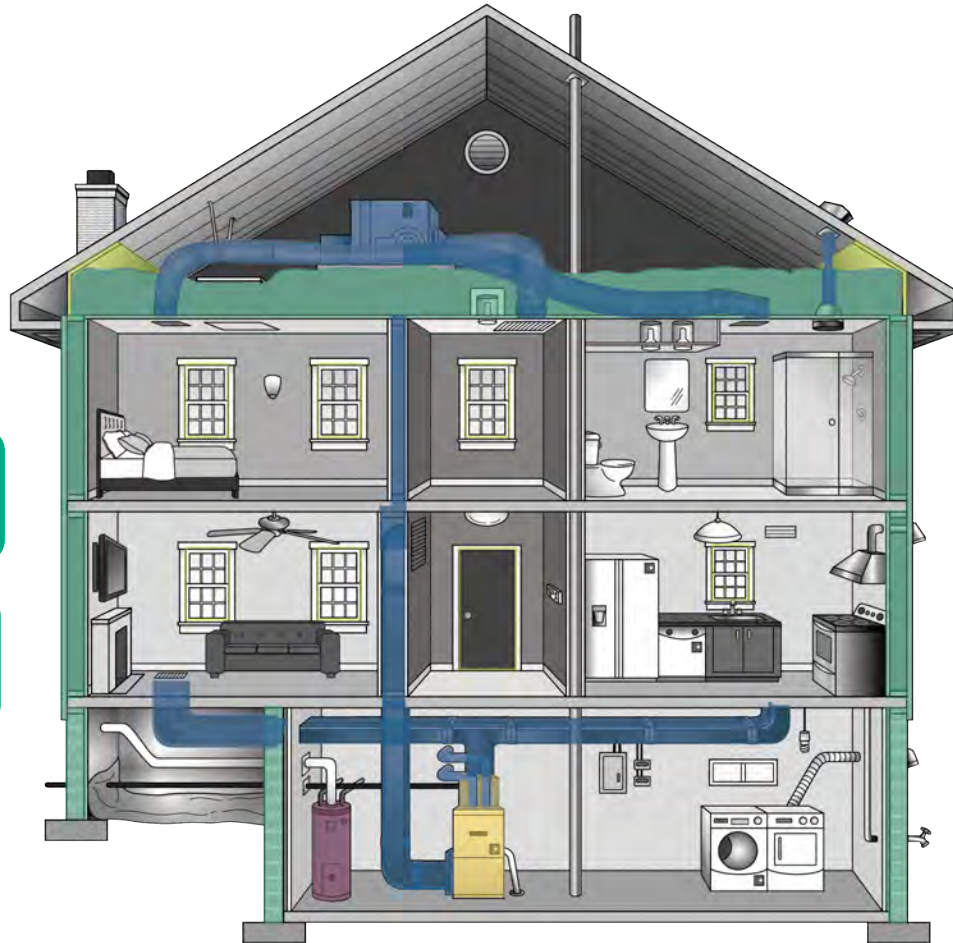
Hot/Cold Rooms

Excessive Dust

Condensation on
Windows

Mold & Mildew

Unsafe Carbon
Monoxide Levels



SOLUTIONS

Air sealing

Insulation

Duct sealing



High-efficiency
heating and cooling

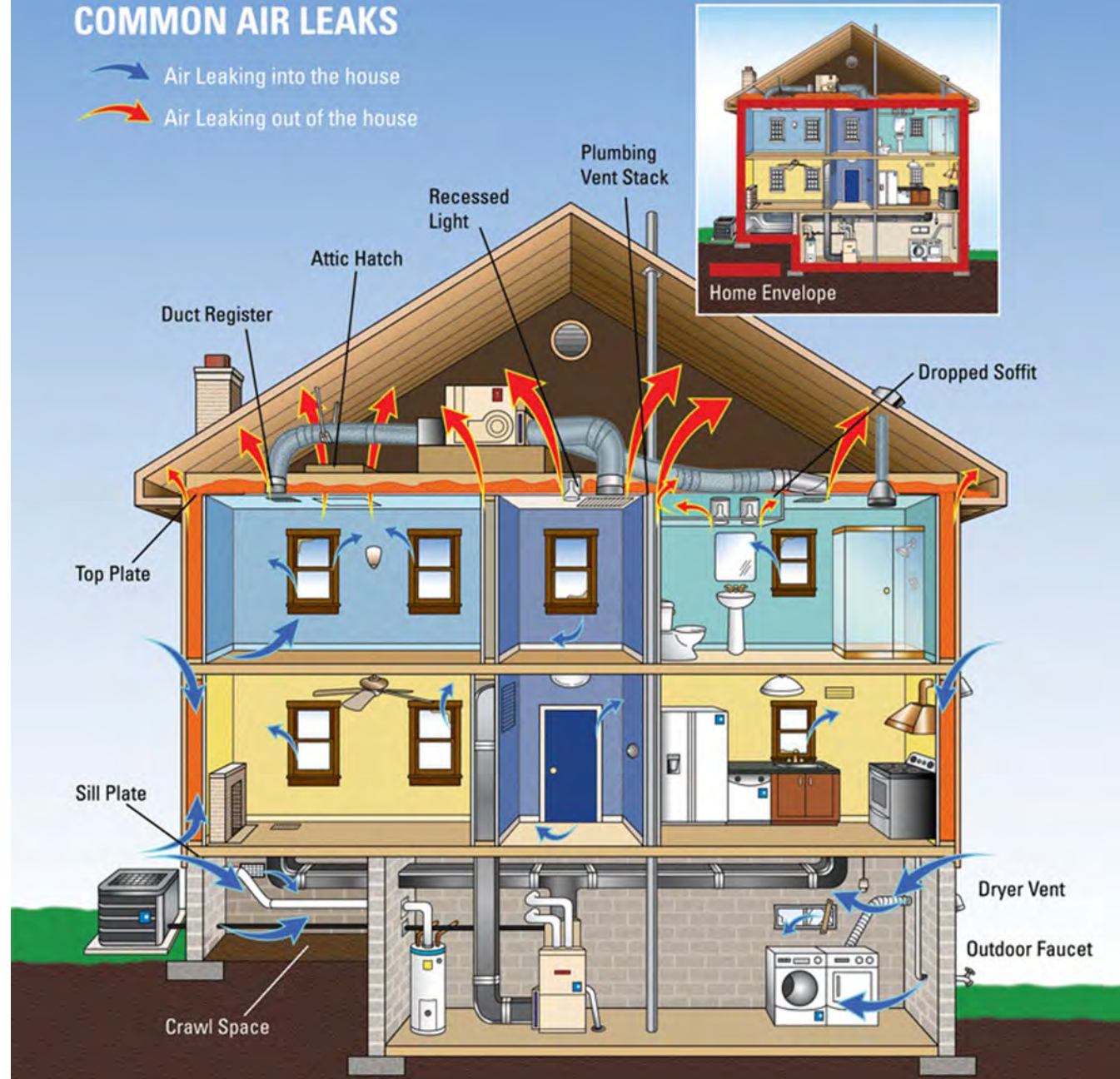
High-efficiency
water heater

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Air Leakage

COMMON AIR LEAKS

-  Air Leaking into the house
-  Air Leaking out of the house

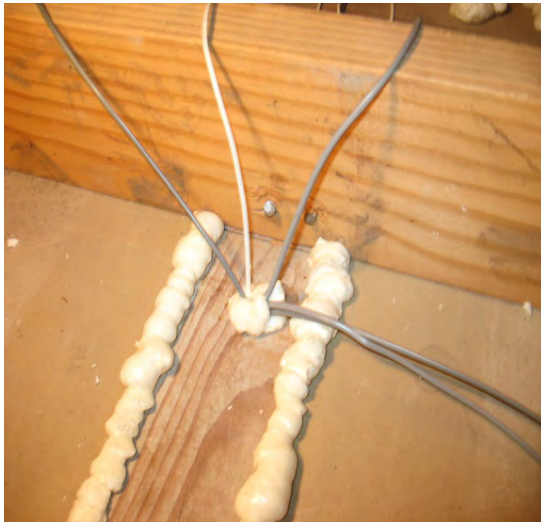


Source: U.S. EPA

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Air Sealing & Insulation

First Sealing



Then Insulation



Air sealing: the “secret sauce”



- A drafty home typically isn't air sealed
- Most homes have the equivalent of an open window in small air leaks
- If you don't seal drafts first, air will flow through the insulation
- A leaky home means poor indoor air quality

Insulation: the “comfort creator”



- Insulation is like a sweater or fleece jacket for your home.
- Insulation is a thermal barrier
- Not all insulation is effectively installed
- Insulation leads to a more comfortable and durable home
- Insulation reduces capacity and size of new mechanical equipment

Ducts





Duct Sealing / Replacement

- Leaky ducts are like a leaky garden hose
- Leaky ducts require cleaning & air bypasses your filter
- Avoid wear and tear on your furnace or air conditioner
- Get comfortable. Conditioned air where you want it, and when you want it

Reducing Your Carbon Footprint



Photo credit: A. O. Smith

Conventional Water Heaters and Furnaces



Electrification



Photo credit: A. O. Smith

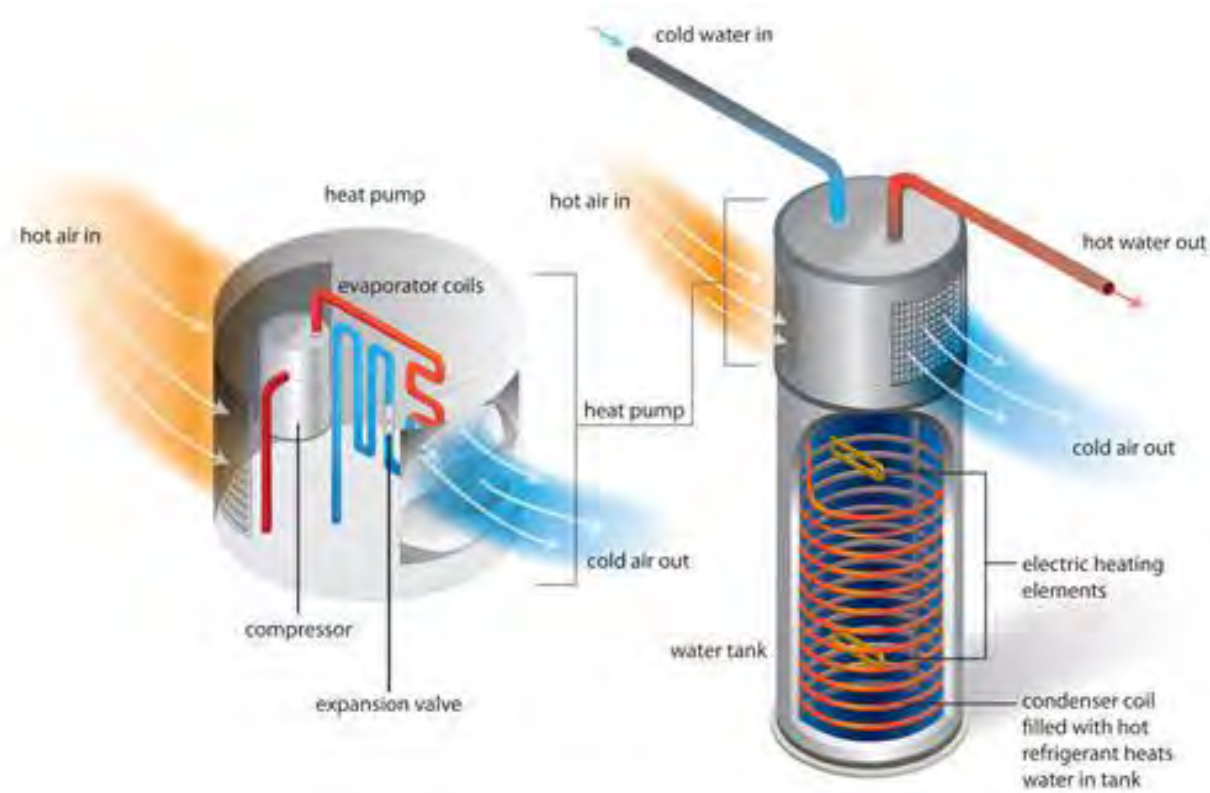


Heating and Cooling Flexibility



Source: EnergySTAR

Heat Pump Water Heaters – 3-4x More Efficient!



Source: EnergySTAR



BayREN Home+

Tonya Veitch

County of Santa Clara





Who We Are

- Bay Area Regional Energy Network
- Collaboration of the 9 Bay Area Counties
- Funded by ratepayer dollars, overseen by the CPUC
- Energy efficiency programs including Single Family, Multifamily, Financing, Codes & Standards & Small Business

BayREN.org





Online Home
Evaluation & Free
Energy Efficiency Kit

Energy Advising

BayREN
Home+

Cash Rebates

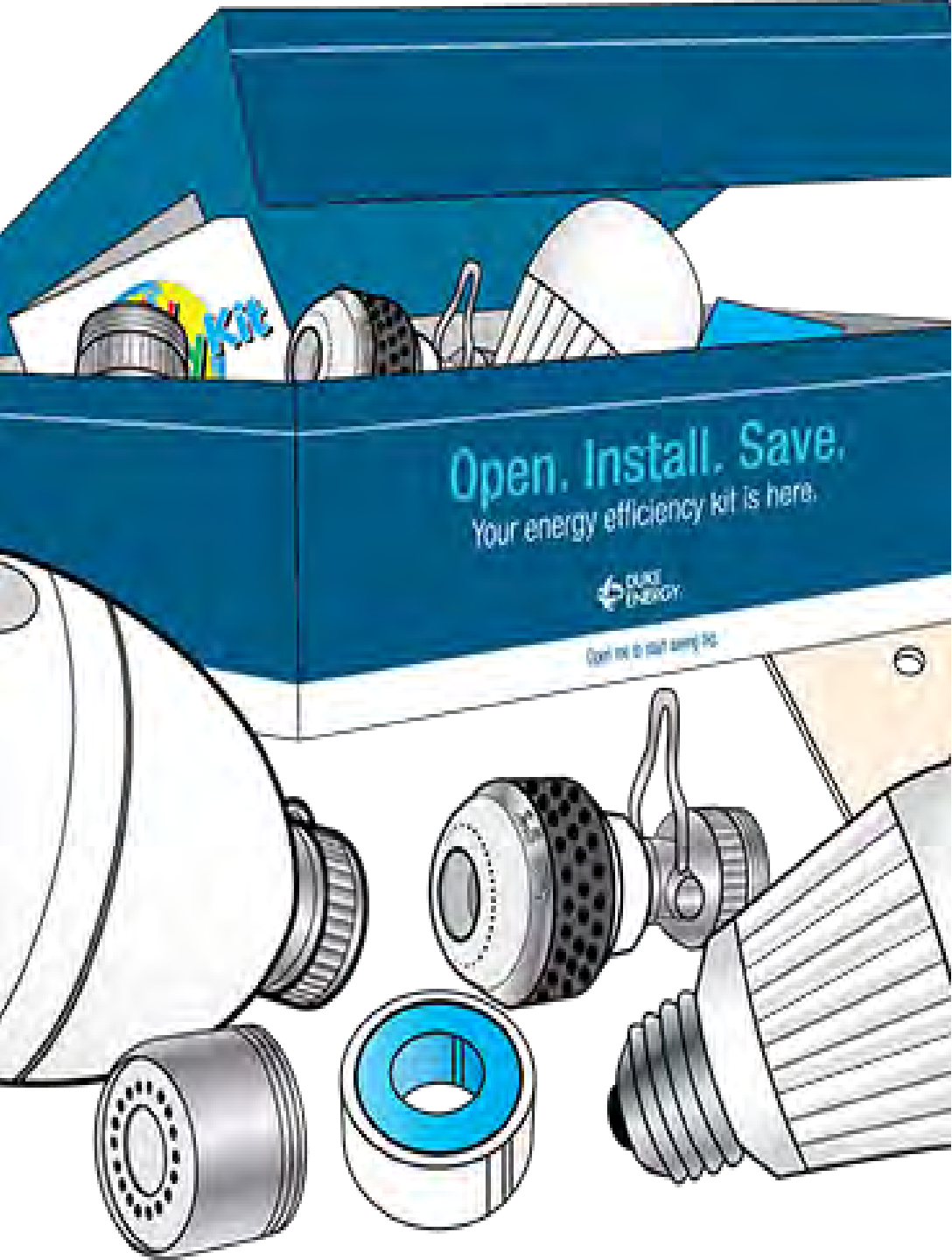
Qualified
Participating
Contractors

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Program Eligibility

- Single Family home in the Bay Area built in 2016 or earlier
 - Can include townhomes, condos
- Must be a PG&E, SVCE or SJCE rate payer
- Use a participating contractor or rater



Online Home Evaluation & Free Energy Efficiency (EE) Kit

- Take a short online home evaluation (10 minutes)
- Receive custom recommendations
- Share your energy data
- Select your free EE kit package for at-home delivery

www.BayRENresidential.org

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Energy Advising

- Unbiased expert, well versed in energy efficiency
- Analysis and explanation of energy usage data
- Development of Energy Efficiency Action Plans
- Estimate or bid reviews
- Ongoing support and guidance
- One-stop shop

(866) 878-6008
www.BayRENresidential.org

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Participating Contractors



Specially trained in building performance



Vetted through program requirements



Those not meeting program guidelines and best practices are removed



Handle all the paperwork



Quality control checks



Safety testing required

Rebates



“A la carte” rebates

- Step 1: Visit [BayRENresidential.org](https://www.BayRENresidential.org) or speak to a Home Energy Advisor
 - Register for an EE Kit
 - View Measures List
- Step 2: Select measures for installation
- Step 3: Work with a Participating Contractor and install measure(s)
- Step 4: Participating Contractor submits necessary information and rebate is sent to designated payee

Sample Projects

Measure	2021 Rebate (1500 sq ft home)
Attic Insulation \geq R44	\$1,000
Duct Replacement \leq 5%	\$800
High Efficiency Heat Pump \geq 17 SEER / 9.4 HSPF	\$1,000
Combine one or more Building Shell measures with a Heating or Cooling measure	\$500
CAS Test-Out Incentive	\$150
Total Rebate	\$3,450

Measure	2021 Rebate (1500 sq ft home)
Heat Pump Water Heater \geq 3.1 UEF (Electrification) *	\$1,000
CAS Test-Out Incentive	\$150
Total Rebate	\$1,150

Appliance Electrification Measures

Measure	2020 Rebate Amount
<i>Appliance Electrification Measures</i>	
Induction electric range (no hybrid) or cooktop (must replace existing natural gas range or cooktop)	\$300
Heat pump clothes dryer \geq 4.50 Combined Energy Factor (CEF) (must replace existing natural gas clothes dryer and listed as ENERGY STAR Efficient heat pump clothes dryer.	\$300
<i>Note: In order to receive appliance electrification incentives, these measures require the PG&E account holder to submit a rebate application through the customer facing BayREN Home+ Portal and provide photographs of installed equipment and proof of existing natural gas equipment</i>	

Financing options

Which is the best fit for you?



Understanding your Financing Options



CREDIT CARDS

High variable interest rates.
Acceptable for short term.
Quick and easy to qualify.

APPROVED
LENDER



REEL: Residential
Energy Efficiency
Loan Program

REEL

Low fixed rates.
Longer loan terms.
No home equity needed.
No fees.



PACE

Longer loan terms
One annual payment.
Payment transfers at sale.
Can finance solar.



MORTGAGE PRODUCTS

Home Equity Line of Credit,
Energy Efficient Mortgages,
and Rehab Loans.

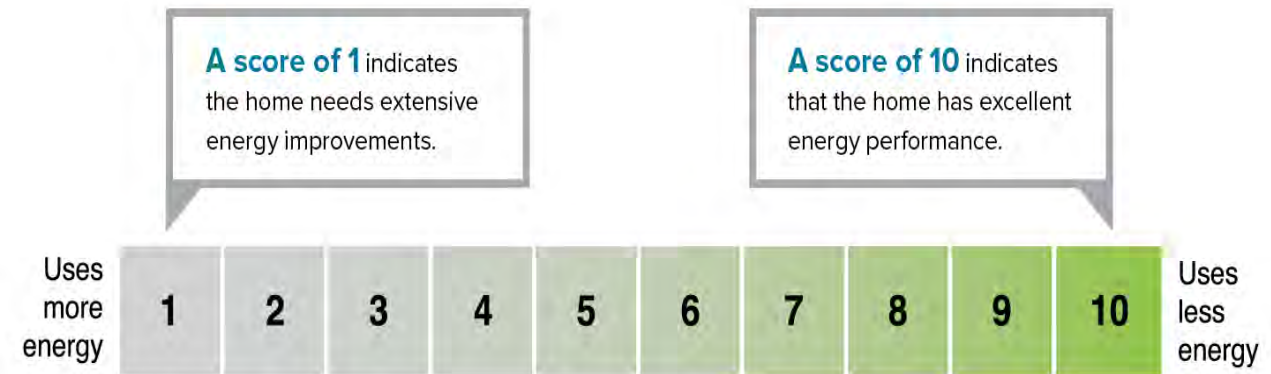
Complementary Programs

More information to help you make decisions!



Home Energy Score

- Department of Energy (DOE) Program
- Compare your home to others on a 1-10 scale
- Receive customized recommendations from a certified Home Energy Score Assessor
- Receive up to \$200 rebate towards your assessment
- Visit BayREN.org/HES to find a qualified Assessor



Green House Calls

Step 1: Fill out an assessment survey online or over the phone.

Step 2: Receive your free kit and install the items

Step 3: Get personalized tips to programs and devices that can help you save even more!

Sign up today and get priority to our program in 2021!

<https://bit.ly/2Zu81Di>

Any further questions?
Please reach out to us at EEKITS@risingsunopp.org
or 510-665-1501



Where do I start?



Call an Advisor
866-878-6008



Find a Contractor
or Assessor



Visit the websites:
BayRENresidential.org
BayREN.org/HES