The following questions are examples for which CEC staff is seeking information related to the

whole-house program.

1) What home energy rating and labeling services and programs currently exist?

A: HERS II and DOE Home Energy Score whole home ratings, Energy Star and various Green Labeling programs (such as Green Point Rated and Pearl Certification, LEED, NGBS, etc.).

a. Which existing programs are the most developed or have completed the largest

number of ratings?

A: DOE's Energy Star, Home Energy Score and GreenPoint Rated green labeling in California

b. Which existing programs successfully promote consumer awareness and

education on the monetary and or environmental benefits of energy efficiency?

A: All of the above labeled programs promote consumer awareness in some way, but GreenPoint Rated and Pearl currently tie the rating to valuation and asset rating. Home Energy Score can associate with the Green Building Registry and can be tied to asset value through the MLS.

c. Which existing programs promote energy-efficient construction practices?

A: All promote EE construction practice in many ways.

d. Which existing programs increase compliance with building standards?

A: Green Point rated is tied to Title 24 part 6 and of the energy efficiency standards and produce a GP1R.

e. Which existing programs are recognized by appraising and lending communities,

and may result in higher real estate values?

A: It's important to note, that the appraisal industry unless trained may only recognize labels tied to the Appraisal Institutes Green Addendum. But it's important to note that any trained appraiser may utilize any of the current labels to demonstrate value. What matters is the education of the appraiser, not recognition by an appraisal body.

2) What asset rating tools and software can be used to generate home energy ratings

and labels?

A: All existing current labels can be used; it depends on the education of the individual demonstrating the asset.

a. What dwelling types can these tools assess – single family, low-rise multifamily,

high-rise multifamily, mixed-use buildings?

A: All of the above building types can be assessed.

b. Are these tools capable of assessing performance, assets (independent of

performance), or both?

A: Primarily assets. Performance would need to be determined based on modeling. Any tools utilizing the BPI 2400 standards or accepted modeling software by the CEC could be utilized to assess performance.

c. What inputs are required to generate home energy ratings?

A: The same inputs accepted to model and generate HERS 2 and DOE Home Energy Score ratings, the exception being those that implement the new BPI 2400 standards would suffice, (SnuggPro, etc.).

d. What assumptions and/or boundaries are assumed by these tools?

A: Same as above in 2c, those used by current accepted CEC modeling software.

e. What calculations or algorithms are used to generate the ratings?

A: Same as above in 2d.

3

3) What are the most important elements to creating a successful home energy rating

and labeling program?

A: Create greater consumer awareness and remove costly and time-consuming barriers to entry.

4) How specific and accurate do home energy ratings need to be?

A: They should have a high degree of accuracy if consumer confidence and accurate asset determination is to exist, and greater adoption is to flourish.

5) What metrics/units are most important to include on home energy ratings (e.g. energy

bill costs ($), energy (kWh, Therm, BTU), energy use intensity (KBTU/ft²-year),

greenhouse gas emissions (CO_2e)? Should these units be normalized by floor area?

A: These are all important, and I would add that a measurable health metric and fire safety rating would be a value add for consumers and the real estate industry in California.

6) What are known or possible barriers to providing reasonable estimates of potential

utility bill savings, and reliable recommendations on cost-effective measures to

improve the energy efficiency of homes? Are there examples of existing programs that

have overcome these barriers?

A: Getting accurate consumption data is one of the largest barriers. currently existing labels do a poor job of collecting this data accurately. The HERS EEM evaluation does an interesting job predicting savings, but its accuracy needs further study.

7) There are many different rating scale systems that could be used (e.g., 1 through 10,

1 through 100, grades A, B, C, etc.). Should a scaling system be considered? If so,

what scale and labeling system should California's home energy rating and labeling

services learn from and why?

A: I believe keeping it simple is best. Home Energy Score's 1-10 is a good example of simple and easy to understand.

8) How can California's home energy rating and labeling services rate both newly

constructed dwellings as well as additions and alterations to existing dwellings on the

same rating scale?

A: Similarly, to the current HERS rating system tied to Title 24.

9) How can the CEC encourage adoption and use of a voluntary home energy rating and

labeling services?

A: Consistent messaging to related professionals to share with consumers, like real estate agents and lenders. California Ad Campaign like Energy Upgrade California efforts in the past.

10) How can the CEC ensure the benefits of home energy rating and labeling services are

equitably distributed to California's low-income and disadvantaged communities?

A: Working closely with CBO's and groups like NAREB in traditionally neglected communities.

11) Should California's home energy rating and labeling services provide a process for

accepting other third-party rating systems to be recognized by the CEC? How could

this be technically achieved considering programmatic differences?

A: No, having one simple rating tool approved by the CEC, would cut down on consumer confusion.

12) What role(s) should field professionals or assessors have to support California's home

energy rating and labeling services?

A: They should be the primary agents. Although, if you want wider adoption. A self-assessment rating may be investigated, and currently there are some interesting models in the CA marketplace.

a. Is there a need to certify these individuals or entities? If so, what knowledge and

skills do these professionals need to possess?

A: If it's determined that a "Rater" would conduct the process, then there needs to be certification and modeling training. If a self-assessment tool is utilized, then no.

b. Who should certify these individuals and entities? Should these individuals and

entities be regulated?

A: The CEC.

c. How can the CEC ensure there is an adequate and well-qualified workforce to

provide statewide coverage of home energy rating and labeling services?

A: Work with Workforce Development Agencies and Community Colleges and Secondary Schools to educate large groups individuals from multiple demographics statewide. Most Californians have good access to community colleges. To stand up a program like this and to ensure an adequate well-qualified workforce, working with these organizations would be the most cost effective and far-reaching opportunity to create program success.

13) What level of quality assurance is warranted for voluntary home energy rating and

labeling services in California?

A: similar process to Energy Star QA/QC would work for a program like this. It would ensure accuracy and accountability leading to a high degree of consumer confidence.

14) What is an acceptable cost for completing home energy rating and labeling services in

California?

A: Under $250.

15) What other valuable information should be included as part of California's home

energy rating and labeling services?

A: Energy savings potential, asset rating, resiliency and a health metrics may offer the most valuable information for consumers.

16) What organizations or stakeholder groups should be made aware and invited to

participate in the home energy rating and labeling proceeding?

A: Representatives stakeholders or groups from the following: A diverse group from CBO's , workforce development agencies, real estate professional groups, Community College representatives, an equitable statewide group of community members, current energy auditors and green raters, energy efficiency industry educators and members from respected research and development centers such as LBL, would be good choices to be invited to participate in a home energy rating proceeding.