Building Energy Saving Ordinance (BESO):
Assessing Energy Use at Time of Sale

SEEC Forum
June 16, 2016
New Approach: Prescriptive to Performance

RECO CECO
• Must install minimum mandatory measures
• Required only when property sold or remodeled

Building Energy Saving Ordinance
• No minimum measures
• Energy audits required
• Energy information reported publicly
• Efficient buildings are exempt from audit provision
• On-ramp to rebates & incentives
BESO Compliance Triggers

Prior to Sale
Houses (1-4 units)

Phase-in Schedule
Large Buildings over 25,000 sf

Whichever Comes First
Small/Med Buildings less than 25,000 sf
## BESO Phase-In

<table>
<thead>
<tr>
<th>Building Size (sq ft)</th>
<th>Due Date</th>
<th>Approximate # of Buildings</th>
<th>Reporting Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large buildings: 50,000 or more</td>
<td>10/1/2016</td>
<td>108</td>
<td>Energy Assessment every 5 years AND ENERGY STAR Performance Report annually</td>
</tr>
<tr>
<td></td>
<td>7/1/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large buildings: 25,000-49,999</td>
<td>10/1/2017</td>
<td>206</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7/1/2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium buildings: 15,000-24,999</td>
<td>10/1/2018</td>
<td>363</td>
<td>Energy Assessment every 8-10 years</td>
</tr>
<tr>
<td></td>
<td>7/1/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium buildings: 5,000-14,999</td>
<td>10/1/2019</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7/1/2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small buildings: Less than 5,000 (excluding 1-4 unit homes)</td>
<td>10/1/2020</td>
<td>3344</td>
<td>Energy Assessment every 10 years</td>
</tr>
<tr>
<td></td>
<td>7/1/2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Time of Sale Compliance Process

**Building Owner**

- BESO Website – Status Lookup
- Application & Filing Fee
- Schedule Assessment

**Included in Closing Documents**

**Registered Assessors**

- Complete Assessment
- QAQC
- Energy Report

**BESO Team**

- Process Fee
- Process Application
- Process Report

**Compliance Document**
Types of Assessments

**Home Energy Score**

![Home Energy Score](image1)

**SnuggPro**

![SnuggPro](image2)

**Optimiser**

![Optimiser](image3)
## Home Energy Score

### Systems

**HVAC System 1**

<table>
<thead>
<tr>
<th>Percent of conditioned floor area served by system</th>
<th>100</th>
</tr>
</thead>
</table>

**Heating**

- **Type**: Central gas furnace
- **Efficiency value**: 79% AFUE

**Duct location**

- **Vented crawlspace**: Yes

**Hot water**

- **Type**: Natural gas storage
- **Efficiency value**: 0.55 EF

**Cooling**

- **Type**: None

**Are the ducts insulated?**

- **Yes**

**Are the ducts sealed?**

- **No**

**Percent in this location**

- **100%**

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For more information on calculation methods, technical terms and units of measure, please visit the Home Energy Score web site. [homeenergyscore.gov](http://homeenergyscore.gov)
Assessment includes referrals to Efficiency Resources

Energy Upgrade California® Home Upgrade

Call: 866-878-6008
BayAreaEnergyUpgrade.org

Home Upgrade Advisor
Customer Feedback

Q13 The Home Energy Score is:

Answered: 44  Skipped: 4

Accurate  Easy to understand  Motivational  Useful

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree
- Don't Know
Home Energy Recommendations Frequency

- Floor Insulation
- Attic Insulation & Air Sealing
- Central Gas Furnace
- Whole Building Air Sealing
- Gas Storage Water Heater
- Duct Repair
- Wall Insulation
- Fireplace Door/Damper
- Gas On-Demand Water Heater
- Natural Gas Wall Heater or Ductless Heat
- Pool Pump
Home Energy Score Distribution by Size

Home Energy Scores

Building Square footage

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.
Spatial Distribution of HES Scores
Why Home Energy Score

• StopWaste as program administrator
  – Training and QA/QC
• Integration with Energy Upgrade CA
• Score included in growing number of MLSs
  – Denver, Aspen Glenwood, Cincinnati, DC, MD
• Fannie Mae HomeStyle® Energy Mortgage loan
  – Finance up to 15% post improvement property value for energy upgrades at 30 year low rate
  – Pay off PACE loans
Measuring Our Success

• Current Successes
  – Increase in EUC participation rates
  – Direct link to Home Upgrade Advisor Program

• Wish list
  – Tracking of conversion rates
Increase Energy Upgrade CA Projects
For More information

Contact
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www.cityofberkeley.info/BESO