**IECC Cost-Effectiveness Analysis Summary Form**

**Note:** *This form is recommended when cost-effective energy savings are used to substantiate the proposed change.*

* Describe energy measure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Does this proposed change impact energy use relative to the latest published edition of the IECC?

 YES- Commercial YES- Residential NO *(do not need to submit this form if answered no)*

* **Energy Analysis Method**

|  |  |
| --- | --- |
| Software used to estimate energy savingsManual calculations (provide methodology) | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| * **Building configuration analyzed:**

Was a [DOE Prototype Model](https://www.energycodes.gov/prototype-building-models) Used? |  YES- Describe: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ NO- Provide building description.  |
| Deviations from prototype building configuration | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Building conditioned area square footage | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Climate Zones Impacted (check all that apply)Were DOE Representative City(s) used? [DOE Commercial Representative Cities](https://www.energy.gov/eere/buildings/commercial-reference-buildings) [DOE Residential Methodology Table 4.6](https://www.energycodes.gov/sites/default/files/2021-07/residential_methodology_2015.pdf) |  0 1 2 3 4 5 6 7 8  YES NO- Provide location(s) |
| Foundation type (check all that apply) | Basement- ConditionedBasement- UnconditionedCrawlspace- ConditionedCrawlspace- UnconditionedSlab- HeatedSlab- Unheated |
| Roof type (check all that apply) | Attic - UnconditionedAttic- Conditioned Flat RoofOther:\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Space Heating Primary Fuel source (check all that apply) | ElectricNatural GasOther:\_\_\_\_\_\_\_\_\_\_ |
| Water Heating Fuel source analyzed (check all that apply)* **Energy costs used in calculations:**

 Electricity  Natural Gas  Other: \_\_\_\_\_\_\_\_\_ (e.g., oil, propane) | ElectricNatural GasOther:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ($/kWh)\_\_\_\_\_\_\_\_\_\_\_\_\_\_($/Therm)\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |
| * **Energy Results by Zone (complete for all zones impacted)**
 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First- Year Results** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  | **A** | **A** | **B** | **A** | **B** | **C** | **A** | **B** | **C** | **A** | **B** | **A** | **B** |  |  |
| Baseline Energy Use ($) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Baseline Energy Use (BTU) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline Energy Use (kWh) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Savings (BTU) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Energy Savings (kWh) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Energy Savings ($) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Energy Savings Per Ft2 ($) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|  |  |
| --- | --- |
| Energy simulation report | Link or attach  |

Construction Cost Analysis

|  |  |
| --- | --- |
|  |  Cost Source  |
| Material cost/sourceLabor cost/source | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Contractor margin % (Overhead & Profit)Total cost to the building owner | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |
| Detailed cost report | Link or attach  |

Cost-effectiveness (use the committee-approved cost-effectiveness spreadsheet)

|  |  |
| --- | --- |
| Simple payback (Cost to owner/Annual energy savings) | \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Scalar RatioLife cycle cost | \_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Resources:**

IECC Committee Approved Values for determining cost-effectiveness:

 [Commercial](https://www.iccsafe.org/wp-content/uploads/Final-LCC-WG-recommendation-slidedeck-2.pdf)

 [Residential](https://www.iccsafe.org/wp-content/uploads/IECC_res_cost_effectiveness_proposal_final.pdf)

DOE Representative Cities

 [DOE Commercial Representative Cities](https://www.energy.gov/eere/buildings/commercial-reference-buildings)

[DOE Residential Methodology Table 4.6](https://www.energycodes.gov/sites/default/files/2021-07/residential_methodology_2015.pdf)

Gross General Contractor Margin (Source?)

 Commercial

Residential

**Draft landing page**

**SEHPCAC Energy Code Proposal Submission Resource Page**

This page is a resource to assist you in submitting proposals to the IECC focused on enhancing energy efficiency in the energy code. Here, you will find essential resources to guide you, including a summary sheet, cost-effectiveness values, and representative city data provided by the Department of Energy (DOE). Completing the optional summary sheet will offer our committee valuable insights to help evaluate your proposal's cost-effectiveness and overall impact.

**Available Resources**

**1. Proposal Summary Sheet**
To streamline the submission process, we provided a Summary Sheet outlining the main details related to the building model, energy, savings, and the cost-benefit of the efficiency measure being proposed. Completing this form is voluntary, yet highly recommended, as it provides essential information that aids the committee in assessing the effectiveness and feasibility of your proposed changes.

* ICC Cost-Effectiveness Summary Form

**2. Committee-Approved Cost-Effectiveness Values**
Evaluating the financial viability of each proposal is crucial. This document details the committee’s approved values for cost-effectiveness analysis, including standard investment thresholds and expected payback periods. Using these values will align your proposal with the cost-effectiveness criteria established by the committee.

* [Commercial](https://www.iccsafe.org/wp-content/uploads/Final-LCC-WG-recommendation-slidedeck-2.pdf)
* [Residential](https://www.iccsafe.org/wp-content/uploads/IECC_res_cost_effectiveness_proposal_final.pdf)

**3. DOE Representative Cities for Regional Analysis**
To assist with a climate-based analysis, the DOE has identified specific representative cities across various climate zones. Developing a proposal using the cities identified by DOE will help the committee’s ability to compare relative energy savings by climate zone and provide consistency among proposals thereby improving the relevance and applicability of your submission.

* [DOE Commercial Representative Cities](https://www.energy.gov/eere/buildings/commercial-reference-buildings)
* [DOE Residential Methodology Table 4.6](https://www.energycodes.gov/sites/default/files/2021-07/residential_methodology_2015.pdf)