Illinois Energy Efficiency Stakeholder Advisory Group

2020 SAG Portfolio Planning Process
Proposed Energy Efficiency Ideas Template

Submitter Contact Information

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Energy Efficiency Idea Questions

Please check the boxes below to identify 1) the type of idea; 2) which Illinois utility or utilities will be impacted by the idea; and 3) which EE sector the idea impacts.

Check	Type of Energy Efficiency Idea
	New Measure or New Program Idea
\boxtimes	Proposed Program Approach
	Innovative Idea

Check	Illinois Utility Impacted by Energy Efficiency Idea
\boxtimes	Ameren Illinois
\boxtimes	ComEd
	Nicor Gas
	Peoples Gas & North Shore Gas
	All Illinois Utilities

Check	Energy Efficiency Sector Targeted by Energy Efficiency Idea
	Residential Customers – Single Family (non-income qualified/income eligible)
	Residential Customers – Multifamily (non-income qualified/income eligible)
	Residential Customers – Single Family Income Qualified/Income Eligible
	Residential Customers – Multifamily Income Qualified/Income Eligible
	Small Business Customers (commercial & industrial sector)
	Medium/Large Business Customers (commercial & industrial sector)
	Other (research & development, emerging technologies, market transformation)

Additional Questions

1. **Description of Idea:** Describe the proposed idea, including the purpose of the suggested idea and rationale. Describe whether this is an idea that could be implemented in an existing EE program, or whether the idea involves establishing a new measure or program. Please indicate whether additional research may be required before implementation.

<u>Questions to consider</u>: What issue will this proposed change resolve? Will the proposed change increase participation and result in increased energy savings? Will this reduce costs? Will this increase customer satisfaction? Will this help achieve statutory goals? Will this help increase program penetration?

Electrification is gaining interest. A major part of electrification is the installation of heat pumps. Regardless of whether this is a current direction for Illinois utilities, when gas furnaces are replaced with heat pumps it is essential to account for duct losses if the heat pump efficiency is to be realized. Research has shown that duct losses impact heat pump efficiency more than they do furnace efficiency. The idea proposed here is to develop training for implementers on the impact of duct losses on heat pump performance, and to provide guidance on specifications for duct thermal performance that will deliver savings in Illinois climates. This will result in increased savings and greater customer satisfaction when heat pumps are installed.

2. **Implementation:** How will this idea be delivered to the target market? Describe marketing strategies used to reach the target market and minimize market confusion.

Training can be developed and then marketed to assessors and contractors in cooperation with utilities. Training can conceivably be provided online, and can also be structured to provide CEUs for other certifications.

3. **Background:** Describe where the idea originated from, including whether this idea has been successfully implemented in other jurisdictions. Provide specific background information that will help utilities and SAG participants understand the proposed idea.

<u>Questions to consider</u>: In what jurisdiction has this idea been successfully implemented? Do you have information on eligible customers, participation achieved, and/or savings achieved? Do you have access to reports describing the successful idea / program approach?

The submitter conducted relevant research 20-25 years ago in support of utilities in the Pacific Northwest, and showed the impact that duct losses can have on heat pump performance.

4. **Idea Impact:** Provide additional information on the customer segment that will be targeted with the program idea, including how and why this idea will have a positive impact on customers participating in Illinois EE programs.

<u>Questions to consider</u>: What level of impact will this idea have on current EE programs? How much additional market share do you estimate this change will impact?

The training itself would be targeted at assessors and contractors, but the beneficiaries will be single-family residents. The market share will depend on policies regarding heat pump installations.

5. **Duration:** Is this idea intended to be offered for the duration of the 4-year EE Plan or as a pilot measure or program?

This would be offered for the duration of the 4-year EE plan.

6. **Estimated Budget:** Provide the total estimated budget for each program year (2022 – 2025).

\$20,000/year, total \$80,000.

7. **Estimated Participation:** Provide participation totals for each program year (i.e. number of measures installed, number of customer participants, etc.)

We envision that the training would be provided to all implementers involved with heat pump installations.

Sources

If any sources will be useful to Illinois utilities in reviewing ideas, please either provide links within this template or send attachment(s) to the SAG Facilitator with the Energy Efficiency Idea submittal.

Please see the following link:

https://aceee.org/files/proceedings/1998/data/papers/0118.PDF