



Comments on the Energy And GHG Emissions Reduction Auditing Services RFP Template

By
Senior Stewards Acting for the Environment

Purpose of These Comments

A template for a Request for Proposal for an Energy and GHG emissions audit has been developed and posted on the SSAFE website. The emphasis of the proposed audit is upon identification of measures that individually, or in combination, can reduce carbon usage in a cost effective manner.

These comments are meant to clarify or expand upon certain meanings, to warn of possible pitfalls, and to illustrate the range of ways in which the RFP may be used.

The Document is a Template

The document is a template for an RFP. It is intended to be useful in most situations, but your particular situation undoubtedly will require it to be modified. Depending on your situation, considerable thought and revision may be necessary to suit your circumstances. Some such situations are discussed further in this document below.

SPECIFIC GUIDELINES

Community Profile

This section should be amended as necessary to describe your particular campus.

Project Goals

The carbon reduction goals of the template are those currently considered necessary by the scientific community to constrain climate warming to 1.5 C. Some communities have adopted them. However, the goals may be modified to reflect the energy realities of older more fossil fuel dependent communities versus younger more efficient, less fossil fuel dependent communities, and to reflect the political realities of your community.

Project Overview and Objectives

If you do plan to pursue some kind of building certification program clarify what role the auditor will play in such an effort.



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Project Team

To be amended based on how you expect your project to be organized with appropriate names and positions.

Project Period

Normally you would propose a start date, and a duration if you have a clear understanding of the time required. Alternatively you may ask the auditor to propose a duration, which of course might be a factor in evaluation of proposals.

Scope of Work

This section might require considerable thought and revision, depending on the nature of your project. The audit is like a microscope whose power of magnification and level of focus can be adjusted to suit your needs – for a campus, for several buildings, or for a single building. It is recommended that you provide a short description of your project here. (Two fictional examples of such a description are provided at the end of this document.)

There are different possibilities.

- A. It is possible that you are just beginning an analysis of your campus. Your objective is to look at the campus as a whole to identify major interventions that will reduce carbon on your campus, most likely over a fairly long period of time. Such an audit could evaluate different overall strategies, for instance emphasis on building by building energy savings vs. energy sourcing (large scale solar or geo-exchange). Some gross assumptions will probably be necessary.

If your focus is campus-wide it will **not** be worthwhile to require the identification of detailed interventions (example “increase the night setback for AHU #6” by 3 degrees). This kind of detail will be hard (expensive) to get for a large campus, and may easily become moot, irrelevant, or out of date depending on what kind of “big decisions” are made.

- B. It may be that you have already made large-scale strategic decisions about your campus, or are simply not prepared to tackle the campus as a whole. Possibly you have specific project(s) that you think can be accomplished in the not too distant future. In this case you will want your audit to cover a certain building, or group of buildings, and include considerable detail and specific recommendations for the building(s) covered.

The Scope of Work topic includes a numbered list of services to be provided; comments are offered below on some of them.

3.2 Make sure that 24 months of utility bills are actually available. The bills will be essential for most audits; you should be clear at the outset how these will be obtained and by whom.



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4.0 You may omit this item if you have provided a complete description above. Provide additional detail if necessary here.

5.1 Even if the audit covers only some of your buildings the base case should identify current usage in those buildings as a percentage of total campus usage.

5.3 It is strongly advised that Energy Star Portfolio Manager, SIMAP, or similar standardized tools be part of the audit. They can be implemented by different parties – the community’s facilities department, the auditor, even by residents. You should make clear whether something is already in use, and if not who is going to generate it.

7. It is recommended that you give careful thought to which systems you want the auditor to look at in detail. If your audit is at the campus level you may not need or want a detailed assessment of, for instance, system controls. For a building level audit you would. The auditor is entitled to know what level of detail you are asking of them for your particular audit.

10. and 11. ERM (GHG emission reduction measures) are the heart of the audit. It is important that you call for ERM that are appropriate to the inquiry you are making. If your audit is a broad look at an entire campus, the ERM should include major system changes, replacement of combustion equipment, general recommendations for envelope upgrades, major utility distribution changes, potential solar or geo-exchange energy sourcing, etc.

But if your audit is for a single building or a defined group of buildings the ERM should be specific and in considerable detail.

It is important that your auditor identify all ERM (within the audit scope) that reduce carbon, **not just those that will save money.** The switch from natural gas, oil, or propane to electrically based systems may or may not reduce utility bills. But a net-zero or near net-zero condition will require that such a switch be made. Hence **all** potential ERM that can reduce carbon must be identified.

It should be recognized that some ERM could result in the stranding of equipment which is currently functioning well (i.e. replacement of gas boilers with heat pumps). This of course can complicate decision making and timing. Nevertheless it is recommended that such ERM be identified for consideration.

It is also important that the auditor recommend **packages** of ERM; a simple listing of all ERM will not suffice. This is because sometimes stand-alone ERM may not be worth doing; ERM usually work best when implemented together to reduce carbon, energy use, and/or utility bills. For instance, it usually makes logistical and economic sense to upgrade a building envelope along with replacing mechanical equipment - even though improved energy efficiency from an envelope upgrade may be only a marginal contributor to reducing GHG emissions. Different packages of ERM may also lead to different overall strategies.

13. Sometimes determining the adequacy of the electrical service can be expensive and difficult. Ultimately it is likely to be necessary if you hope to switch away from carbon fuels. But



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you may wish to defer this task until the audit has begun to identify an overall direction for the project.

Deliverables

No comments.

Proposal Requirements

No comments.

Project Budget

Be aware that required details about expected hours, billing rates, etc. are intended to be an aid in evaluating proposals. The auditor's contractual duty is to provide the required deliverables. Spending any particular number of hours does not satisfy the contract. You may wish to clarify this.

Clarify whether measurements, e.g. "blower door", are to be organized, managed, reported on, and paid for by the auditor, or by the community.

EXACT FORM OF CONTRACT

If you have a preferred form of contract as part of your community's administrative processes, then it should be specified in your RFP. Alternatively the contractor may have a preferred form they use. Knowing which form will be used can be helpful to both parties in avoiding misunderstandings.

Proposal Submission and Award Schedule

No comments.

References

No comments.

Summary of Campus Buildings

As noted this table needs to be adapted and organized to suit your campus and project. If, for any reason, you list, for information only, campus buildings that are **NOT** part of the audit this must be made clear.

Attachment 1 (Additional Facility Information)

The items in the attachment must be modified to suit your campus and project. Make sure the things you list are actually available promptly in a common easily accessible format.



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Project Descriptions

Two examples of project descriptions to be provided under Scope of Work. These are intended as illustrations of what such descriptions might include.

For a detailed audit of particular buildings you might say something like:

“Provide services for an audit of the Pokart and Scoular apartment buildings, and the 50 original cottages. (The audit for the latter shall be based on a sample of six of the 50 cottages.) These buildings comprise 46% of our total campus area and house 80% of our independent living homes.

The audit shall be an estimated energy and greenhouse gas (GHG) reduction audit for Scopes 1 and 2 as defined by the GHG Protocol. This scope of work is compatible with an ASHRAE Standard 211 Level 2 energy audit, with the addition of GHG CO₂ equivalent measurements or calculations. The audit shall provide detailed recommendations for ERMs (Energy Reduction Measures) for these buildings.”

For a campus-wide audit you might say something like:

“Provide services for a campus wide audit of the entire Burling Brook campus. The overall purpose of this initial audit is to identify what major changes in building envelopes and mechanical systems will be necessary to achieve the goals described above, and an idea of the costs. The emphasis is to be on systems rather than details so that overall decisions about a carbon reduction strategy can be made. It is envisioned that subsequent detailed audits of individual buildings will follow this initial effort once an overall direction has been determined.

Rough estimates of potential energy savings and GHG reduction shall be provided as well as rough estimates of cost.”

