

## Chevrolet Campus Clean Energy Campaign



### FAQ: Typical Campus User Questions

**How do we determine whether the projects are eligible for carbon funding?** Central eligibility steps are outlined on this web site. The downloadable excel template and project development document contain sections in which applicability conditions are reviewed and the performance specification that a project would need to meet are outlined (for LEED certified buildings (NC and EB) or for campus-wide projects. Questions can be addressed to Second Nature ([bpasinella@secondnature.org](mailto:bpasinella@secondnature.org)).

#### **How to get buy-in from your campus?**

Every campus has its own processes through which decisions are made. Leading campuses have found that a process typically engages sustainability officers/committees, facilities experts, faculty champions and senior administrators in a consultative decision making process. Establishing early on whether a project is likely to be eligible, by completing the excel templates, and estimating the likely reductions in tons CO<sub>2</sub> then enables campus leaders to evaluate the value of the carbon funding in comparison to the capital/operating costs they face. Consultation with Second Nature ([bpasinella@secondnature.org](mailto:bpasinella@secondnature.org)) can also help campuses move through the project development process.

#### **Do projects ultimately need to be certified and how does this work?**

Yes, the projects that carbon credit purchasers typically invest in will need to be certified by the Verified Carbon Standard (VCS). Typically, each project would undergo a project validation and the resulting GHG reductions would be verified afterwards through one of VCS's accredited certifying agents.

#### **What are project start dates?**

Project start dates for a LEED building is determined under Verified Carbon Standard rules for this methodology which (per VCS Standard v3.5) stipulate that such projects may not have a start date earlier than four years prior to the date the project is validated, provided that the validation takes place within two years of a new methodology's publication date. Thus project start dates, assuming validation takes place within two years of the VCS methodology's publication date, can commence four years prior to the project validation date.

#### **Frequent LEED-related questions:**

*Note: frequently asked campus-wide project user questions are found on the GBIG Campus Wide page*

#### **Why does a project need to clarify which version of LEED certification has been used?**

Each version of LEED certification has been based upon different standards, such as building codes, and so each has a distinct performance benchmark against which a project should be measured.

#### **Which project locations are eligible?**

This program is currently offered to U.S. based institutions only and the EPA Target Finder tool evaluates the GHG impacts from buildings based upon their zip code locations.

#### **Is the program open to LEED certification categories other than New Construction or Existing Buildings O+M?**

At this time the carbon methodology is limited to NC and EB only.

### **Why does project certification require my building's sector?**

This determines eligibility under Verified Carbon Standard rules for this methodology and informs what standards and factors a project should be measured against. The building's sector is also used to ensure that the appropriate category is selected when using the EPA Target Finder tool; these are specified in the VCS methodology's LEED module carefully. Some entries in the EPA TF drop down menu (for "primary use") may appear to be a good fit for a given building but may not be applicable under the methodology rules: careful screening is needed.

*LEED Certified Building*  
Higher Education building

*EPA TF Category to be Used*  
Office

If the Higher Ed building comprises a following building type, more specific EPA TF categories apply, specifically:

Residence hall/dorm	Residence hall/dormitory
Medical Office	Medical Office
Hospital	Hospital (general medical & surgical)
Hotel	Hotel
Worship facility	Worship facility
Data center	Data center
Higher Education Lab	Office
K-12 School	

### **What's the difference between Campus LEED Certified Building carbon methodology category EB-A and EB-B?**

EB-A is used for projects that achieve a minimum of 20% improvement in EUI within a single year. Consistent with LEED's credit 67, EB-A buildings must not have been eligible for LEED certification in the year before the first project year (year 0); thus the 20% improvement in EUI must be measured based on a project year 0 that was not eligible for LEED certification. This is currently established for most buildings as have a performance below ES 69; for laboratories, (where Energy Star ratings are not available), this is determined via the guidance in LEED's credit 67.

EB-B measures a building's ongoing performance improvements using Energy Star performance metrics, establishing eligibility if the building delivers an ES 86 score or better.

### **Why does project certification ask for EUI and what are the % improvement figures used for NC and EB-A?**

Energy Use Intensity (EUI) is a basis for evaluating a building's improved performance using BTU/sq ft as a metric.

For NC, the percent improvement over code that a project achieves during its design is measured in terms of EUI metrics alone – not cost metrics: a building's LEED documentation contains both the percent improvement in EUI over code and a percentage cost savings figure so projects should be careful to select the correct metric.

For EB-A, the EUI metric is a percentage change in EUI within a one-year period, between project year 1 and the prior year (project year 0). This figure is again found in the LEED documentation under pilot credit 67. It can also be derived from the EUI figures sourced from the EPA Target Finder tool when the building's energy data are entered for project years 0 and 1.

### **What's the minimum number of measures required by a LEED building to meet the applicability conditions under 4.2?**

To qualify, buildings must have adopted at least 2 measures (other than the pre-requisites) resulting in a higher efficiency performance from the list of credits LEED established for certification under its Energy and Atmosphere section. Those applicable under EB 2009 are listed in Appendix 2B of the VCS methodology LEED module; similar tables are found for earlier EB LEED certifications in the LEED energy and atmosphere requirements

### **What is a Baseline Year vs. Project Year?**

The baseline year represents a building's historical or modeled energy performance and project year equals a building's actual performance during the project period in a given year after the baseline.

### **Who is the Project Proponent?**

The project proponent is the key person representing a campus carbon project acting as the primary liaison and technical contact for project certification and credit marketing purposes.

### **Why does project certification ask for a building's Sq Ft?**

It is possible for a building to downsize and thereby reduce its energy use resulting in lower emissions. Claiming reductions from simply reducing size rather than specific efforts and activities designed to reduce emissions is not considered additional. The EPA Target Finder tool also evaluates a comparable median ES 50 building's energy and carbon emissions profile based on several factors to ensure comparability including the square footage of the LEED certified building.

### **Why does project certification ask about ownership?**

Carbon credits are considered property that may be transferred between parties. In order to ensure clear title, project certification must establish that the campus has full ownership to the rights to claimed carbon credits before then can be sold. If ownership were not clear, there would be a risk that these same carbon reductions could be double claimed or double counted.

### **Why might a purchaser ask for utility sign-off?**

Similar to the question of ownership, in order to avoid instances where both a carbon project and its serving gas and/or electric utility may claim ownership and credit for the same reduction in emissions stemming from reduced energy use by the project, explicit sign-off from the serving utility may be required to prevent a double-count of an individual reduction.

### **Why does project certification ask about compliance with laws, statutes or other regulatory frameworks?**

For carbon reductions to be considered additional, they need to result from voluntary actions. Reducing emissions in order to be compliant with regulations is not going beyond business as usual.

### **Why does project certification ask if about participation in other GHG programs?**

Along the same lines as the questions around claiming and ownership, potential purchasers need to be aware of instances where a given carbon reduction may have been reported and claimed by another entity.

### **How do I use the EPA TF tool to enter my energy data and get the results I need?**

For NC and EB-B:

*To get results for the ES 50 baseline:*

- Select the appropriate primary use for your building category (see FAQ above) following the module's directions, noting carefully that many EPA options in the drop down menu cannot apply
- Input the building contextual data including the data for the specific building category (that appears in a drop down box in the window once primary use has been selected)
- CLICK the "no energy information to be provided" box in the energy section: do NOT enter the building's energy consumption data
- Proceed to results; read off the Median ES 50 building's GHG emissions data to complete step 1 in the excel template
- Click the download button to get a pdf of the results in a format that can be saved and sent to others
- Return to the EPA TF main data entry page

*To get results for the LEED design building:*

- Using the same building data entered for the ES 50 baseline now uncheck the "no energy data to be supplied" box and enter instead the LEED building's energy data in the drop down sections
- The EPA TF tool will not proceed to results page unless some \$/unit figure is entered into the last column; this does not impact the results needed for project evaluation
- Copy the amounts, units and category of energy inputs selected into the excel template sheet

- Proceed to results, copying into the excel sheet the GHG emissions and Energy star performance data needed from the first “design building” column into the excel template
- Click the download button to get a pdf of the results in a format that can be saved and sent to others

This procedure is repeated for the design energy inputs (from the LEED certification) and again for each project year’s actual energy consumptions: that is the baseline and LEED building results are tabulated each time

For EB-A:

*To get results for the historical baseline:*

- Select the appropriate primary use for your building category (see FAQ above) following the module’s directions, noting carefully that many EPA options in the drop down menu cannot apply
- Input the building contextual data including the data for the specific building category (that appears in a drop down box in the window once primary use has been selected)
- DO NOT CLICK the “no energy information to be provided” box in the energy section
- ENTER the building’s energy data, separately, for each of the baseline years
  - o The EPA TF tool will not proceed to results page unless some \$/unit figure is entered into the last column; this does not impact the results needed for project evaluation
  - o Copy the amounts, units and category of energy inputs selected into the excel template sheet
- Proceed to results; read off the Design building’s GHG emissions data (as generated each time for each baseline year) to complete step 1 in the excel template
- For the last baseline year (project year 0), similarly read off and copy from the design building column a) the SOURCE EUI rating and b) the Energy Star rating and copy these into the excel template; also enter the number of baseline years’ data in the excel template
- Each time, click the download button to get a pdf of the results for each baseline year’s data in a format that can be saved and sent to others
- Each time, return to the EPA TF main data entry page to insert each baseline year’s data on a sequential basis

*To get results for the LEED design building:*

For the design specifications for the building in year 1; and actual results achieved by the building in project year 1, 2, 3 etc:

- Using accurate building data for each project year enter the LEED building’s energy data in the drop down sections
  - o The EPA TF tool will not proceed to results page unless some \$/unit figure is entered into the last column; this does not impact the results needed for project evaluation
  - o Copy the amounts, units and category of energy inputs selected into the excel template sheet
- Proceed to results, copying into the excel sheet the GHG emissions and (for the design specs and project year 1) the EUI performance data needed from the first “design building” column into the excel template
- Click the download button to get a pdf of the results in a format that can be saved and sent to others

### **How is the Project Development Document completed?**

The project development document (PDD) is most easily completed once the excel templates have been compiled. They form a tick box structure for ease of use. The results from the excel template correspond to the data needed to complete the PDD although some further questions must be answered in order to fulfill all the VCS methodology’s requirements. VCS requires that a PDD to be shared with its certifiers in order to validate projects. The completed PDD and accompanying excel template should give validators a good foundation from which to evaluate projects.

### **How is the Monitoring Report completed?**

The Monitoring Report (MR) is most easily completed once the excel templates have been compiled. They form a tick box structure for ease of use. The results from the excel template correspond to the data needed to complete the MR although some further questions must be answered in order to fulfill all the VCS methodology's requirements. VCS requires that a MR to be shared with its certifiers in order to verify (annually or periodically) the actual credits to be issued (and then sold) in a given period. The completed MR and accompanying excel template should give verifiers a good foundation from which to evaluate projects.

### **How to determine your Carbon Sector category.**

Use "1 Energy industries" to include a project that uses renewable and energy efficiency measures.

Use "3 Energy Demand" to include a building that uses demand-side management measures.

### **FAQ: Credible Foundations for This Approach**

#### **Will campus' carbon reductions be double counted?**

No; those campuses which sell reductions will not be able to report these reductions against their own inventories for the years in which they have sold them. Many campuses are looking to sell reductions for a few years in order to advance their clean energy/GHG leadership; as their internal GHG reduction goals approach, they will no longer sell reductions in order to have them count towards their own goals on their own GHG inventories.

So most campuses have been interested to earn carbon revenues for a limited period of time so that, once they are no longer selling their reductions, they can, going forward, count them against their own long-term reduction goals.

#### **Wouldn't campuses' electricity-based reductions be double counted by their utility suppliers?**

Not if projects secure "sign off" from their utilities that the associated carbon reductions will not be double-claimed by the utility for the duration of the sale of the carbon.

#### **Why are these projects' carbon reductions additional and credible?**

Each project has been certified as additional by the independent Verified Carbon Standard (VCS) against a new methodology which Climate Neutral Business Network developed for Chevrolet, in concert with a broad spectrum of stakeholders – and which was approved and accredited by the VCS. This means that the projects' carbon reductions are considered "beyond business as usual": each project must undergo an evaluation to validate that they meet the additionality and other credible foundation that the VCS methodology requires. Under the new VCS Campus Clean Energy methodology, this means that the energy/GHG performance which the campus has delivered must either be amongst the top 15% of its peers, on a campus-wide comparison basis with its Carnegie class peers, or is among the top 50% of LEED certified buildings on US campuses today. This approach to defining additionality is defined by VCS as a standardized or performance methodology—because "beyond business as usual" is defined in terms of delivering an outstanding level of energy/GHG performance in a campus' category. This also means that we can be confident that the campus' performance, in terms of clean energy efficiency and carbon reductions, is exemplary.

#### **What is the purpose of the carbon funding for campuses?**

The carbon funding enables campuses to further deepen their clean energy efficiency and carbon reduction leadership – to continue to excel in the level of performance that they achieve.

#### **Why did Chevrolet develop the new Campus Clean Energy Efficiency Methodology?**

Chevrolet's Advisors recommended that Chevrolet develop a new methodology that would enable campuses to draw upon a new source of funding – carbon credits from the carbon market – in ways that would help them invest in clean energy efficient technologies that might otherwise be out of reach to attain a leadership level of GHG performance. Campuses have in the past set carbon neutral goals and purchased carbon reductions; but this sends campus' own funds off to another institution to make GHG reductions there. Chevrolet wanted to create an avenue through which campuses could

themselves receive carbon monies to bring the benefits of these GHG reductions home to their own campus sites and communities.

### **Why are these “performance” approaches to certification so different?**

In contrast to technology-based credits, performance methodologies don't micromanage what it takes to deliver aggressive emission reduction performance outcomes, which can vary by region and context. Rather it leaves it to the geniuses on campus and in the building community (who are legion) to figure out that part of the equation.

To determine additionality, these methodologies set a benchmark to define an outstanding level of performance – based on the most demanding peer historical performance data. Actors who deliver beyond this very demanding level merit carbon funding to support and deepen leading edge emission reduction investments. These methodologies leverage the “intel” and insights from leading colleges, builders and operations managers, incentivizing a “race to the top”, and providing a beacon for others in their community to follow suit.

### **How does this work in practice for campuses?**

Here's how the new approach works for colleges, based on an example using campus-wide reductions; similar performance thresholds have also been defined for LEED certified buildings.

First, the new Campus Clean Energy methodology sets a benchmark performance based upon the top 15% of all 600+ ACUPCC schools in terms of scope 1 stationary emissions reduction. This turns out to be an average annual emission reduction of about 5% per year. Schools that fall into this category, and also have reduced annually their combined stationary 1 and scope 2 electricity-based emissions, are eligible to sell credits associated with any incremental emission reduction initiatives.

Investments by institutions this aggressive already are, almost by definition, additional. These schools have a demonstrated track record of pushing well beyond business as usual, so incremental projects supported by the universities represent net carbon reductions below any reasonable baseline.

Ball State University in Indiana was one of the first colleges to partner with Chevrolet under the new methodology. The school is investing in a campus-wide geothermal system. It will be one of the largest systems a college has yet installed in the country, earning the university stationary 1 annual reductions of 6% or more. By tapping carbon revenues, depending on the final carbon price, Ball State will be able to access 5-25% contribution on the incremental capital investment to put this “groundbreaking” geothermal system in place.

### **How does this approach apply to LEED certified buildings?**

The idea of exceeding LEED average performance underpins the second avenue of the new methodology. Eligibility here includes any US-based building on college or school campuses that is LEED certified under “New Construction” or “Existing Building”, AND that achieves at least LEED average performance outcomes. This corresponds to a performance in the top 14% of buildings nationwide. If a building is in that pool, then carbon credits can be marketed:

- for New Construction: Energy Efficiency improvements over code provided beyond LEED average achievements (which are in the 25% over code range)
- for Existing Buildings: Either a 20% energy efficiency improvement within a single year (consistent with LEED's new Credit 67), or an Energy Star performance level of ES 86 (the LEED average) or above

For New Construction, and depending on the carbon price, carbon revenues can finance 5-25% of incremental capital expenditure, (based on LEED's \$3/square foot estimate of the further capital needed to reach LEED certifiable performance levels).

### **How much carbon reduction did Chevrolet purchase?**

Chevrolet purchased carbon reductions from certified clean energy projects whose reductions were achieved during the 2012-14 window. Campuses, once certified, however, could sell credits for up to 10 years through the broader carbon market and are continuing to market their credits on an on-going basis through Second Nature. Chevrolet set aside several million

dollars from its Carbon Reduction Initiative commitment to dedicate to campus-based clean energy project investments.

### **What are the differences between a performance and a project-based methodology?**

The key to a valid carbon credit accounting methodology is the ability to reliably prove 'additionality' that is the effort is reducing carbon beyond business as usual. Most people are familiar with 'project based methodologies' but this approach is problematic when applied to a campus that is utilizing a variety of overlapping measures to achieve carbon reduction. Standardized performance methodologies attempt to provide a simpler approach for these cases.

1. **Project based Methodologies:** For individual technologies (such as a geothermal system installation), the 'additionality' test asks 'does this project face so many barriers that the inclusion of carbon funding can provide the necessary means needed to invest in such a "beyond business as usual" technology?'. If the answer is yes, then it meets the additionality test and carbon credit can be created and verified.
2. **Standardized Performance Methodologies:** For broader institutions (or technologies), the 'additionality' test asks 'is there a credible performance rating -- typically framed as a GHG performance benchmark metric — which can be defined such that if a project/institution's GHG performance exceeds this performance benchmark its leadership would confidently be considered as beyond business as usual?'. Additionality is achieved by analyzing the spectrum of GHG performances that a sector has achieved and determining what an outstanding "beyond business as usual" performance constitutes. Performance curves are developed and a stakeholder consensus developed regarding what performance benchmark level of leadership constitutes beyond business as usual leadership performance. The new Chevrolet methodology analyzed all campuses GHG reduction performance from all the ACUPCC data over the last five years. Passing this simpler "performance benchmark" threshold is therefore then the test that determines whether an institution's performance is additional.

### **Why did Chevrolet develop a performance methodology?**

During its pursuit of carbon credits, Chevrolet found that some of the highest performing actors in terms of voluntary emission reductions were not able to access carbon market dollars to help them perform even better. These included colleges and universities who were pushing towards carbon neutrality under the American College and University President's Climate Commitment (ACUPCC), as well as LEED green builders – but were unable to access these new sources of carbon funding to extend their leadership even further. So Chevrolet asked whether it could enable these actors to tap carbon dollars to support even higher performances on campuses?

So achieve this goal, Chevrolet developed a simplified, peer-reviewed performance methodology for higher education institutions to sell verified carbon credits based on total campus carbon reductions as opposed to traditional project-base methodologies because they:

- Reduce the costs of certifying multiple projects within a single institution.
- Focus on GHG reduction performance outcomes rather than the selection of particular technologies (whose applicability is very context dependent).
- Simplify carbon verification for complex GHG reduction campaigns that involve multiple overlapping approaches
- Do not micromanage choices regarding how to best deliver superior clean energy/GHG performance: this is left to the geniuses on campus!