LEED V4 and the Green Power Credit
Renewable Choice Energy has been a member of the USGBC since 2003, and has helped over 7,000 LEED projects around the globe achieve the Green Power LEED credits under Energy & Atmosphere.

Since its launch by the U. S. Green Building Council's (USGBC®) launch in 2000, the LEED® green building program has evolved to address new markets and building types, advances in practice and technology, and greater understanding of the environment and human health impacts of the built environment. This evolution continued with the release of the latest version of the rating system, LEED v4. Starting in October 2016, all new projects must register under LEED v4.

This paper outlines the changes to one specific credit in LEED v4, the Green Power Credit, and reviews how these changes are likely to affect both LEED project developers and the renewable energy industry.
The hallmark of LEED is its continuous improvement and development cycle that enables the rating system to increase in scope and stringency as new technologies emerge, the needs of the marketplace expand, and the understanding of building science and environmental priorities deepen.

This year, the USGBC announced that it has now certified more than 29,000 commercial projects and over four billion square feet with an additional 1.85 million square feet certified every day. With this type of explosive growth, a more integrative approach to LEED becomes necessary in order to gain a better understanding of building performance in each impact category.

LEED is a living document. Its evolution is critical to the transformation of the building industry, connecting the market to innovative ways of thinking about the design, construction, and operation of green buildings. The power of LEED is its ability to transform. With LEED 2009, the primary changes were foundational ones, such as rating system content alignment, the development of LEED Online v3 and changes to the professional credentials and certification process. The new version of LEED v4 builds on the changes set forth in LEED 2009, but also focuses on increasing the technical rigor of the rating system, improving the user experience, and providing measurement and performance tools to actually test and verify the performance of LEED certified buildings.

Changes to the LEED Green Power Credits

With no shortage of controversy, three years and six public comment periods later, USGBC members voted to approve LEED v4, clearing the way for its launch at the 2013 Greenbuild conference in Philadelphia. The new version of LEED builds on the changes set forth in LEED 2009, but also focuses on increasing the technical rigor of the rating system, improving user experience, and providing measurement and performance tools to actually test and verify the performance of LEED certified buildings. LEED v4 addresses 21 different market sector adaptations, including hospitality, existing schools, existing retail, and multifamily midrise projects.

The changes from LEED 2009 to LEED v4 were initially met with controversy and concern about sweeping impact. In response, USGBC compromised with an extended transition period from the old rating system to the new. Project teams may register for either LEED v4 or LEED 2009 until October 31, 2016, after which only LEED v4 will remain open. According to USGBC, projects registered under LEED 2009 will be allowed to complete the certification process under that system as long as they do so before it “sunset” in 2021. USGBC has pushed to incentivize LEED
v4 adoption—for example, offer of free certification for the first Platinum LEED v4 projects—and has now successfully attracted projects to the new system with financial incentives, ease of use, and prestige.

In LEED v4, as before, a project can earn credit LEED points for purchasing green power. Depending on which system is used, a project has historically been able to earn from two (LEED NC 2.2) up to six LEED points (LEED EB:O&M). With the new LEED v4 rating system, projects will still be able to achieve the Green Power LEED points, but will arrive there by a different route.

The goal of the Green Power Credit is to support the growth of clean energy, and the purpose of the changes made by the USGBC in this version is to increase this support. There have been complaints in the past that these credits have been viewed as simply an inexpensive LEED point that isn’t doing as much as it could for the green energy industry. These changes hope to address this criticism by increasing the required amount and duration of LEED projects’ commitment to clean energy. Overall, the requirements are more stringent in LEED v4 than they have been in previous versions of the rating system. Let’s review the changes and the probable impacts.

**NEWER RENEWABLE ENERGY PROJECTS**

LEED v4 requires projects to engage in a contract for qualified resources that came online after January 1, 2005, whereas before, LEED projects could source green power from any Green-e® certified renewable energy facility regardless of age. This necessarily limits the supply of available green power, which should lead to higher prices. For the LEED project developer this increases the cost to earn these LEED credits. For renewable energy developers, this change provides added value to the newest projects at the expense of projects over 10 years old.

**LONGER GREEN POWER COMMITMENT**

Under LEED v4 projects must now commit to green power for a minimum of five years (as opposed to two years), to be delivered annually or more frequently. This is designed to give green power developers more long-term demand certainty when building projects.

**TOTAL ENERGY USE VS. ELECTRICITY ONLY**

Another major change in LEED v4 is that projects must now offset the project’s total energy usage—not just electricity—including other sources such as natural gas, propane, or steam. This was already the case for LEED EB:O&M but will now be expanded to all rating systems. In general, this will increase the cost of these LEED credits since other emission sources are being taken into account. It will not have an immediate effect on the North American renewable energy industry, however, as these additional emissions will be offset with carbon offsets rather than green power.

**Offset Percentages and Total Points Achievable**

LEED v4 requires the same offset percentages for all LEED types (50% for one LEED credit and 100% for two) except LEED EB:O&M (which will now be able to achieve up to 5 LEED credits). For many standards (NC, CS, Schools) these requirements are higher than previous LEED versions that required 35% and 70% offsets, respectively. The number of LEED points a project can achieve has also been revised—please see the list below:

**LEED BD&C—New Construction (EAc7) and LEED Core & Shell (EAc7)—Green power and carbon offsets**

- New Construction (1–2 points)
- Core & Shell (1–2 points)
- Schools (1–2 points)
- Retail (1–2 points)
- Data Centers (1–2 points)
- Warehouses & Distribution Centers (1–2 points)
- Hospitality (1–2 points)
- Healthcare (1–2 points)
- Commercial Interiors (1–2 points)
- Retail (1–2 points)
- Hospitality (1–2 points)

**LEED EB:O&M (EAc7)—Renewable Energy and carbon offsets**

- Existing Buildings: Operations & Maintenance (1–5 points)
- EB:O&M Schools (1–5 points)
- EB:O&M Retail (1–5 points)
- EB:O&M Data Centers (1–5 points)
- EB:O&M Hospitality (1–5 points)
- EB:O&M Warehouses & Distribution Centers (1–5 points)
GREEN POWER AND CARBON OFFSETS

In LEED v4 the LEED rating system will be updated to reflect industry best practices when it comes to offsetting emissions from different sources. The new rules to allow both renewable energy credits (RECs) and carbon offsets (also known as verified emissions reductions or VERs—see our white paper on carbon offsets for a detailed overview) to be used. RECs may be used as before to offset the electricity use of a LEED project, though these same emissions can now also be offset with VERs. Other emissions such as natural gas and steam may only be offset with VERs.

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Carbon offsets may be used to mitigate Scope 1 (natural gas, etc.) or Scope 2 (electricity) emissions on a metric ton of carbon dioxide-equivalent basis, and must be independently certified through Green-e Climate, a Green-e Climate endorsed program, or the equivalent. For projects located in the U.S., the offsets must be from greenhouse gas emissions reduction projects from within the United States.

For LEED developers, the inclusion of VERs as an option for offsetting electricity emissions broadens the potential pool of offsets available and should help control offset costs. Ironically, this could be one change within the LEED v4 rating system that is decidedly bad for renewable energy developers, as many LEED projects could end up choosing to purchase carbon offsets to meet their Green Power Credit needs and skip renewable energy altogether. The winners in this scenario are voluntary U.S. carbon offset developers—companies that are funding projects like tree planting, landfill gas capture, and fuel-switching. These companies will have a powerful new source of demand from the growing LEED market.

It is our hope that the changes to the Green Power Credit specifically will serve to further promote the growth of renewable energy and carbon offset projects while remaining achievable credits from the perspective of a LEED developer.

For more information, we invite you to contact us.

For more than 14 years, Renewable Choice has provided best-in-class renewable energy products and services to C&I buyers. Recognized as the EPA’s Green Power Supplier of the Year for the last three out of four years, Renewable Choice has advised our corporate clients on more than a gigawatt of new build renewables. Renewable Choice has long-standing relationships with the top wind and solar developers in the country and consistently negotiates successful, win-win contracts for our clients. Contact us today to learn more about your renewable energy options, including long-term PPAs, and how we can help.