

Responses to EA Section Comments on LEED-EB Comment Draft 2 (Updated August 30, 2004)

Category	Comment #	Credit	Submitted By	Organization	Likes and Dislikes	Ways To Improve	Language Changes	Proposed Response	Proposed change to LEED-EB for the Ballot Draft	Type of Change
Energy & Atmosphere	EA2.1.2.4-Com1	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	Watson (Robert Watson)		EA 2.1.2.4. Comment 1: In general, I like the consolidation of the credit and the wider range of points given for green power. Committee also needs to think about the "AND" situation as described below. Comment 2: Consider broadening the definition of certifiable renewable energy tags to include "tradable renewable credit futures" or TRC futures, such as those provided by Native Energy.	Comment 1: What happens if a building installs 10% PV AND purchases 50% of its energy from grid-based renewables? Taken separately, one could argue that the project deserves 4 points, since either action by itself warrants 2 points. Comment 2: NRODC conducted a thorough analysis of the risks and benefits associated with TRC futures in connection with the Climate Neutral Network's certification of TRC futures as offsets approved for use by companies seeking Climate Co2M certification. NRODC chairs the Network's Environmental Advisory Board and we chaired the review panel that assessed the Native Energy application. As a result of that analysis, we are convinced that TRC futures warrant equal treatment with Green-e TRCs. While we recognize that there is some additional risk in the sale of TRCs associated with power that has not yet been generated, we believe this risk is offset by the agreements that Native Energy secures from its owners and operators, along with the owners' financial interest in maintaining generator operations. We do not believe that TRC futures pose any additional risk with respect to double counting on	Clarify that up to the 4 point limit, any combination of individual actions will be awarded the sum of the points allocated to those individual actions. Comment 2: NRODC conducted a thorough analysis of the risks and benefits associated with TRC futures in connection with the Climate Neutral Network's certification of TRC futures as offsets approved for use by companies seeking Climate Co2M certification. NRODC chairs the Network's Environmental Advisory Board and we chaired the review panel that assessed the Native Energy application. As a result of that analysis, we are convinced that TRC futures warrant equal treatment with Green-e TRCs. While we recognize that there is some additional risk in the sale of TRCs associated with power that has not yet been generated, we believe this risk is offset by the agreements that Native Energy secures from its owners and operators, along with the owners' financial interest in maintaining generator operations. We do not believe that TRC futures pose any additional risk with respect to double counting on	Language will be added to the requirements that states that: "Up to the 4 point limit, any combination of individual actions will be awarded the sum of the points allocated to those individual actions." It is late in the process to introduce additional specific certification programs. The third sentence in the requirements will be modified to read: "Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements or the equivalent. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e certified Tradable Renewable Certificates or the equivalent." The "or the equivalent" will be added to references to Green-e in the submittal requirements as well.	Make the changes included in the proposed responses section	Clarification
Energy & Atmosphere	EA2.1.2.4-Com2	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	ors (Dan Lieberman)	Center for Resource Solutions	We strongly support the inclusion of an Onsite and Offsite Renewable Energy credit as part of LEED. The generation of electricity is the nation's largest single source of air pollution. We are pleased to see increased point values for this credit.	In the "Requirements" section there should be more parity among the onsite and two offsite standards. There is arguably much greater environmental benefit from offsetting 75% of a building's energy use with new renewable energy certificates than generating 20% of a building's electricity on site. The "potential strategies and strategies" section references the use of "high temperature solar, geothermal, wind, biomass (other than unsustainably harvested wood) and biogas technologies." CRIS suggests that you revise the solar reference to include photovoltaic systems, and add Municipal Solid Waste and Waste Tires to your list of excluded biomass. We believe that Green-e certification should be a requirement for offsite renewable energy purchases.	Add a link to the Green-e website ( <a href="http://www.green-e.org">www.green-e.org</a> ) where you first reference Green-e. Please also note that the term "Green-e" should have a lower-case e. In the "Requirements" section the parenthetical referencing "new" sources should read "facilities that became operational after 1997" or as defined by Green-e regional criteria". The revised sentence in the "potential strategies and strategies" section should read: "Consider and employ solar photovoltaic, solar thermal electric, geothermal, wind, biomass (other than unsustainably harvested wood, municipal solid waste and waste tire incineration) and biogas technologies." This sentence should also be referenced in the last sentence of the section. In the "Submittals" section, change the middle bullet to read: "Provide documentation demonstrating that the supplied renewable power or certificates over the performance period were certified by Green-e."	The language in the Strategies and Technologies section will be changed to read: "Consider and employ solar, geothermal, wind, biomass (other than unsustainably harvested wood) and biogas technologies." Municipal solid waste and tires are not biomass so these do not need to be excluded from biomass. Links to appropriate resource web sites will be included in the LEED-EB Reference Guide.	Make changes in Proposed Response	Clarification
Energy & Atmosphere	EA2.1.2.4-Com3	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	is (Brian Mullis)	Sustainable Travel International	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com4	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	Connell (William Connely)	NativeEnergy, LLC	Other legitimate renewable power and certificate options exist and will likely develop. Recognition would facilitate greater use of this credit and drive even more NEW renewables development, including renewable certificate futures that DIRECTLY finance NEW renewable generators. Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development.	This prerequisite or credit could easily be improved by permitting renewable power, utility programs, renewable certificates (RECs) and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Intent or Requirements: With respect to the performance period, meet some or all of the building's total energy use through onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com5	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	WindEnergyGuy (Owen Connolly)		Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com6	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	madicwenter (Ashley McGregor)		Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com7	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	bilburris (Bill Burris)	Clean Air - Cool Planet	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com8	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	castiglione (Robert Castiglione)		Requiring Green-e certification of all offsite renewable power and tradable renewable certificates ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25%... Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1



Energy & Atmosphere	EA2.1.2.4-Com18	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	Rickmap123 (Richard Mappin)	Berks County Community Foundation	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Intentionally omitted Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com19	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	rhdevit (douglas hyle)		Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com20	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	Sherrick (Joseph Sherrick)	PA Department of Environmental Protection	The intent is good but the allocation of points should not be predicated upon the use of only one system such as Green-e.	The rating system should not prescribe a single certifying entity or system. It should be written in a manner that allows consideration in the broadest terms, for other third party certification programs that currently exist and which may enter the market in the future. Green-e is but one of these systems. In short, just establish the standards and let any third party verification and certification mechanisms qualify. This will provide greater market penetration for clean, renewable energy.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Renewable power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified tradable renewable energy certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% of any offsite renewable power or renewable energy certificates used to earn this credit needs to be from new sources (generating capacity that in existence more than 12 months prior to the performance period).	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com21	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	gifford1 (Jason Gifford)		Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com22	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	skalock (Bill Kallock)	Summit Blue Consulting	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com23	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	isham (Jonathan Isham)	Middlebury College	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com24	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	schure (Dorothy Schure)	Green Mountain Power	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Intentionally omitted Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com25	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	vbar (Spencer Putnam)	VBSR	Requiring Green-e certification of all offsite renewable power and tradable renewable certificates (ignores other opportunities for this credit to stimulate renewables development. Other legitimate renewable power and certificate options exist and will likely develop whose recognition would facilitate greater use of this credit and drive even more new renewables development, including renewable certificate futures that directly finance new renewable generators.	This credit could be improved by permitting renewable power, utility programs, renewable certificates and certificate futures that are certified by Green-e, the Climate Neutral Network, or other independent certifying organizations.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Intentionally omitted Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1
Energy & Atmosphere	EA2.1.2.4-Com26	Credit 2.1.2.4 (Onsite and Offsite Renewable Energy)	SterlingGreen (Robert Maddox)	Sterling Planet	Excellent change to award up to 4 points/very important and this can really help boost the market.	While this can really help develop the market for renewable energy, it should allow for similar renewable energy opportunities, other than just Green-e.	Requirements: Over or with respect to the performance period, meet some or all of the building's total energy use through the use of onsite or off-site renewable energy systems. Points are earned according to the following table. The percentages shown in the table are the percentage of building energy use over the performance period that is met by renewable energy. Off-site renewable energy sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e, Climate Neutral Network or equivalent third-party certified Tradable Renewable Certificates. Certificates procured on a basis longer than the performance period may be used to meet performance period energy use if retirement of the certificates is assured. At least 25% - Intentionally omitted Submittals: Provide documentation demonstrating that the supplied renewable power or certificates over the performance period met the referenced certification requirements.	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1	See response to Comment EA2.1.2.4-Com1

Here are some suggestions to improve this area. As I understand the proposed language, it only allows for the use of Green-e certified RECs or products. This ignores Utility sponsored programs and the ability for certification from other programs like the Climate Neutral Network, New England GIS, or the Environmental Resources Trust. I would suggest that Utility sponsored Green power programs (that usually always have a local impact), Green-e certified RECs, onsite sources, any state or power pool approved trading program (Like the New England GIS system) and similar certified programs be allowed.

Energy & Atmosphere	EA2.1-2.4-Com27	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	matlouse (John Clouse)	U.S. Environmental Protection Agency	The U.S. EPA's Green Power Partnership strongly supports the inclusion of on-site renewable energy technologies, green power, and renewable energy certificates as a means of improving the environmental performance of a facility or set of facilities. We strongly recommend that the USGBC increase the number of points available to support the growth in the use of renewable energy, whether on-site or purchased through green power or renewable energy certificates.	Regarding the number of LEED points assigned for each type of purchasing, the current distribution of points appears problematic. From an environmental perspective, there is a slightly higher benefit for on-site generation over purchased green power or renewable energy certificates; however, the current point system indicates that using on-site generation has almost a four-fold marginal benefit. We recommend either reducing the % required for "offsite" or increasing the % required for "onsite" to bring the two systems closer in line with each other. Just for the sake of comparison, the Green Power Partnership has minimum purchasing requirements for organizations to consider prior to their purchases. The purchasing levels are based on an organization's total annual electricity consumption (not just one facility) and range from 2% to 15% depending on whether the organization uses less than 100 MWh/year or over 100,000 MWh/year. The minimum purchasing levels to achieve the Green Power Partnership's Green Power Leadership Club range from 8% to 60%. (See: <a href="http://www.epa.gov/greenpower/greenpower.htm#why">http://www.epa.gov/greenpower/greenpower.htm#why</a> for more)	Recommend clarifying the language throughout the credit to use market-based definitions of renewable energy products, as well as clarification of the different ways to identify and use the various products. Change the title of the Energy and Atmosphere Credit that relates to renewable energy from "Onsite and Offsite Renewable Energy" to "On-site Renewable Energy, Green Power, and Renewable Energy Certificates". This title more accurately reflects the current market terminology for the renewable energy products and services referred to by the USGBC credit. Also, recommend change all other references of "offsite renewable energy" to conform to the new title. Change the content of the credit to: A. Use the market-used definitions of green power and renewable energy certificates. Green power should be defined to include both utility green pricing programs (offered by utilities), as well as green power marketing (offered by electricity marketers in competitive electricity markets). Renewable energy certificates (which are sometimes called green tags, tradable renewable energy certificates, or credits)	The change to allowing either on-site or off-site renewables to earn all 4 renewable energy credits is a major step toward making the recognition for on-site and off-site renewables more similar. (Note that in the pilot version of LEED-EB, three credits were available for on-site renewable and only 1 point was available for off-site renewable energy. Once experience is gained with this new approach, the levels required for on-site and off-site renewable energy points may be further adjusted. See response to Comment EA2.1-2.4-Com1	See response to Comment EA2.1-2.4-Com1	See response to Comment EA2.1-2.4-Com1
Energy & Atmosphere	EA2.1-2.4-Com28	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	Mahjoun (Fariborz Mahjoun)	Thermom Technologies	It is refreshing to see integration of solar water heating systems in the rating. Thank you for that. Potential technologies need elaboration. Solar heating can be both active water heating systems and space heating or cooling systems. It will be very helpful to define further the employment of "high temperature solar" technologies.	Using solar for heating the service water and/or space heating reduces the energy consumption. Buildings with food service facilities or hospitals are consuming a large amount of hot water. In addition, the roof of commercial building can be used more effectively through solar collector installation. They will reduce the cooling load of the building in addition to supplying the hot water for domestic or service usage.	high temperature solar for DHW, space heating and cooling, and kitchen use, such as Evacuated Heat Pipe Collectors".	See response to comment EA2.1-2.4-Com2. On-site solar thermal energy systems are not excluded.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.
Energy & Atmosphere	EA2.1-2.4-Com29	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	Samelli (Brian Whelan)	Samelli Inc.	N/A	N/A	On Site & Off Site Renewable Energy, Credit 2.1-2.4. We believe there should be more points available for renewable energy. We would suggest the following: On Site Renewable Energy Points 5% 1 10% 3 15% 5 20% 10 25% 15 We will not get into all the benefits of renewable energy here, but it is probably one of the most important developments needed for the Green Movement. Presently renewable energy is expensive which will require government subsidies or recognition programs such as the U.S.G.B.C. LEEDS to move ahead.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.
Energy & Atmosphere	EA2.1-2.4-Com30	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	PatrickS (Patrick Spearing)	Thermomax Industries Ltd.	Congratulations on including "high temperature solar" in this section. In northern climates heat in excess of 140°F can provide a significant proportion of the energy load, including DHW, space heating and cooling, kitchen use etc. Modern solar collectors can work consistently above that temperature - even in adverse weather.	The "high temperature" solar is good...and could be elaborated on. It is necessary to specify solar collectors that can maintain high efficiencies at high temperatures, and in adverse conditions.	"high temperature solar for DHW, space heating and cooling, and kitchen use, such as Evacuated Heat Pipe Collectors".	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.
Energy & Atmosphere	EA2.1-2.4-Com31	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	GhettMark (Sara Mahjoun)	Thermo Technologies	Congratulations on considering solar energy in the LEED program. Thank you very much for acknowledging this important renewable energy resource.	The credit could be improved by mentioning that hot water consumption can be a major part of energy usage in commercial buildings, especially buildings with cafeterias or health centers.	The world High Temperature Collector does not elaborate the purpose of the collector. The general population is not aware of the collector function, thus please define that high temperature collectors produce hot water to be used for service and space heating, as well as cooling.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.
Energy & Atmosphere	EA2.1-2.4-Com32	Credit 2.1-2.4 (Onsite and Offsite Renewable Energy)	carljonnes (Carol Jones)	Seattle Pacific Northwest National Laboratory	Comment to LEED-EB second draft: The current energy credits allow for efficiency improvements in buildings on a whole building scale but do not specifically identify or encourage technology systems that can have dramatic effects on energy in buildings. One such system is the use of commonly available lighting equipment and controls in a system (referred to as "intelligent" lighting) that provides optimum control and savings without compromising lighting quality. We suggest that the use of this type of system (achievable with different types of equipment) be included as a 1 credit point in LEED-EB to encourage the use of better lighting control. The system provides a combination of reduced connected load, user control of the daylight and facility control of the daylight (including occupancy sensors, load shedding, daylight dimming) for energy savings that ranges from 40% to 70% compared to a standard direct-only, constant light level, constant-on type design. (See Background section for more details) Background: Lighting for buildings is typically designed to cover all spaces with sufficient light to perform tasks	See above.	Credit Proposed: Credit X - Optimize Lighting Energy Performance INTENT: Achieve maximum lighting energy performance while maintaining optimum occupant comfort and controllability. REQUIREMENT: Apply an "intelligent" lighting system to 75% of the personally occupied lighted building space. Personally occupied space is that which has individual workstations and includes private offices, open workstation/office areas and any other spaces where individuals have specified work space. The "intelligent" system includes direct-indirect lighting fixtures specifically located at each workstation that allow for personal control of the direct (downlight) component by means of manual, computer system, or other means. The indirect (uplight) component will be tied to centralized whole building or similar control systems for peak load shedding, lumen maintenance, perimeter daylight dimming, and workstation-specific occupancy sensors. LEED Points: 1 point DOCUMENTATION REQUIREMENTS: Provide documentation in terms of a copy of drawings and/or specifications indicating the 75% of the personally occupied lighted	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.	See response to comment EA2.1-2.4-Com2.
Energy & Atmosphere	EA3.1-Com1	Credit 3.1 (Building Operation & Maintenance: Staff Education)	rwatson (Robert Watson)		The placement of EA 3.1 seems inappropriate. For example, what does training in janitorial O&M practices have to do with energy? Similarly EA3.3 seems to be oriented to comfort not energy. The "OR" language in EA Credit 4 is ahead of TSAC & should be removed.	Either restrict the O&M requirements to energy, or move the credits elsewhere. EA 4. Sets up a special case for CFC-1 equipment.	EA 3.2 seems to take care of the energy equipment issue. Why not move the 3.1 language to the ETO green cleaning credit? Move EA 3.3 to IEQ. EA 5.1-5.3 cover the energy aspects of this issue. EA4: Remove "OR" language pending TSAC resolution of the EA4 question, including superfluous "HFCs are being phased out" language.	(EA3.1) EA3.1 covers having an education program for the full range of building operation and maintenance staff that provides each staff person primarily working on building maintenance with at least 24 hours of education each year over the performance period on building and building systems operation, maintenance, and achieving sustainable building performance. Energy systems operation and maintenance is a very important part of this education but it does cover other aspects of building operation and maintenance as well. Having it all here allows 1 credit and point to cover all these aspects of staff education. (EA4) The "OR" language was provided by TSAC.	None	None
Energy & Atmosphere	EA3.1-Com2	Credit 3.1 (Building Operation & Maintenance: Staff Education)	blankRFK (Kimberly Barker)	Siemens Building Technologies, Inc.	Building Systems Operation and Maintenance is the core to achieving sustainable building performance. Since sustainable buildings have new technologies and advanced building systems so continuous training programs targeted at the building operations staff is of great importance. Most building automation system training courses are 4 days (3.0 CEU) in length. It takes several classes for an operator to become certified operator (3 classes). Typically instruction can be done via webinars, in-house training classes at the facility. Training courses focus on clearly stated objectives focused at operating and maintaining the building operating systems. Sustainable buildings have equipment and technologies that will require building operators to be trained in O&M of these systems. How can sustainable energy goals be met, if you don't train building operation staff in how the systems are to be operated and maintained. The best investment a company can make for a sustainable building is in the talent and skills of the people, who run that facility.	The Continuing Education Unit (CEU) is a nationally recognized method of quantifying the time spent in the classroom during professional development and training activities. Ten hours of instruction equals one (1) CEU. The primary purpose of the CEU is to provide a permanent record of the educational accomplishments of an individual who has completed significant non-credit educational and career enhancement experiences.	Change 24 hours of education to 3.0 CEUs of education. Change: Training must be highly qualified and relevant to Training programs must provide Continuing Education Units (CEUs) and learning objectives focused at operating and maintaining building systems.	The "24 hour of education" approach provides flexibility to include relevant training on the full range of "building and building systems operation, maintenance, and achieving sustainable building performance."	None	None
Energy & Atmosphere	EA3.1-Com3	Credit 3.1 (Building Operation & Maintenance: Staff Education)	lynneecherKelle (Lynne Eicher Kelley)	City of Eugene-Facility Management Division	Ongoing training is critical to the success of any sustainability measures. Very glad to see this included. Also glad to see the number of hours reduced for this reason: it's quite difficult to find applicable and high-quality training for O&M staff. This is important because of the limited amount of staff time available. The number of hours should be reduced to a total of 16 (2 full days per year). A remaining problem with the credit is that it does not specify well enough who should be trained, and the form that training could take.	Allow the NECC Building Operator Certification renewal requirements to be included in the annual requirements. Vary the amount of training required for different skill levels of O&M staff. Provide links to providers of good training programs in the reference guide.	Hands-on technical staff (electricians, HVAC techs, plumbers, carpenters, lighting technicians) and their direct supervisors should complete the full requirement. Custodial and support staff should complete a 4 hour (1/2 day) group training per year on general sustainability concepts.	This is a point not a prerequisite so specified number of hours is appropriate.	None	None
Energy & Atmosphere	EA3.1-Com4	Credit 3.1 (Building Operation & Maintenance: Staff Education)	Drew-Alton (Lisa Drew-Alton)		This is a great addition to the rating system	This needs to be for all building operation and maintenance staff, regardless if it is a new or existing building.	No specific recommendation.	OK	None	None