



CRS

center for  
resource  
solutions

April 11, 2012

Mr. Keith Dennis, Senior Program Manager  
The Council on Environmental Quality  
722 Jackson Place NW  
Washington, DC 20503

**RE: Center for Resource Solutions (CRS) comments on Council on Environmental Quality (CEQ) Revision to Guidance  
*Federal Greenhouse Gas Accounting and Reporting***

Dear Mr. Dennis,

Center for Resource Solutions (CRS) appreciates the opportunity to comment on the *DRAFT Federal Greenhouse Gas Accounting and Reporting Guidance*, released for public comment on March 12, 2012. CRS strongly supports the intent of the guidance to establish government-wide requirements for calculating and reporting greenhouse gas emissions (GHG) associated with Federal agency operations.

CRS thanks CEQ Staff for consideration of our 2010 comments on the original draft guidance, as well as the following comments on the revision to the guidance. All CRS comments pertain to Section 4.0 of the *DRAFT Federal Greenhouse Gas Accounting and Reporting Guidance*, "Renewable Energy and Carbon Offsets" (pg. 24-31).

**Background on CRS and Green-e®**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy and mitigate climate change. Our leadership through collaboration and environmental innovation builds policies and consumer-protection mechanisms in renewable energy, GHG reductions, and energy efficiency that foster healthy and sustained growth in national and international markets. CRS has broad expertise in renewable energy and carbon policy and accounting.

CRS administers the Green-e programs. Green-e Energy is North America's leading independent consumer protection program providing certification and verification for renewable electricity and renewable energy certificates (RECs). In 2010, sixty-five percent of retail voluntary renewable energy purchases in the United States were certified by Green-e Energy. Green-e Climate serves the voluntary carbon market as the first and only certification and consumer protection program for retail carbon offsets. Green-e Marketplace recognizes companies that use renewable energy by allowing them to display the Green-e logo when they have purchased a qualifying amount of renewable energy and passed the program's verification standards.

Stakeholder-driven standards supported by rigorous verification audits are a cornerstone of Green-e and enable CRS to provide independent third-party certification of environmental commodity transactions. The Green-e environmental and consumer standards are overseen by an independent governance board of industry experts, including representatives from environmental nonprofits, consumer advocates, and purchasers. Our standards have been developed and are periodically revised through an open stakeholder process. Green-e program documents, including the standards, contract templates, and the annual verification report, are available at [www.green-e.org](http://www.green-e.org).

## General Comments

CRS would like to express its support of the CEQ and partner agencies in establishing and maintaining this guidance for Federal agencies reporting GHGs per Executive Order 13514. Reporting requirements for renewable energy purchasing specifically recognizing that purchased renewable energy and RECs address the purchaser's Scope 2 emissions and can be reported as such, are in general alignment with previous guidance put out by CRS, the U.S. Environmental Protection Agency (EPA)<sup>1</sup>, the World Resources Institute (WRI)<sup>2</sup>, the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) program<sup>3</sup>, the U.S. Department of Energy (DOE)<sup>4</sup>, The Climate Registry<sup>5</sup>, the Carbon Disclosure Project (CDP)<sup>6</sup>, and others.

## Comments on Section 4.0, Renewable Energy and Carbon Offsets

### 1. Sustainable Hydropower

With respect to hydropower, the revised guidance currently grants eligibility only to new capacity "achieved from increased efficiency or additions of new capacity at an existing hydroelectric project" (pg. 24), and in certain cases, "capacity added to a dam that did not previously have the capacity to generate electricity" (pg. 24, footnote 41). However, it is commonly accepted in the U.S. renewable energy market that "sustainable" hydropower is not restricted to these conditions and that new hydropower facilities that meet certain sustainability criteria can supply high-quality renewable energy to the voluntary market. Such hydropower should also be eligible for use by Federal agencies under this guidance. The Low Impact Hydropower Institute (LIHI) is generally understood to maintain these criteria as the leading standard for sustainable hydropower in the U.S.

### 2. Renewable Energy Certification

Given the intangible nature of the commodity, it is important that the guidance include some information, if not requirements, related to the provision of quality assurances around renewable energy and RECs. The Green-e Energy program, launched in 1997, has emerged as the leading standard for renewable energy in North America, and certified over 23 million MWh of retail energy and REC sales in 2010. We recommend that the CEQ include key quality criteria necessary to ensure a credible renewable energy purchase, and limit eligibility to renewable energy that has been shown to meet said quality criteria. The easiest way for the CEQ to achieve this is to limit eligibility to Green-e Energy Certified renewable energy products and RECs. However, with the understanding that CEQ may not be able to promote the use of an individual certification program, the following summarizes the primary assurances of Green-e Energy:

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<sup>1</sup> U.S. EPA Green Power Partnership, *The Environmental Value of Purchasing Renewable Energy Certificates Voluntarily, Discussion Draft*, October 2010, [http://www.epa.gov/greenpower/documents/gpp\\_basics-recs\\_voluntary.pdf](http://www.epa.gov/greenpower/documents/gpp_basics-recs_voluntary.pdf). And U.S. EPA, EPA's *Green Power Partnership's Partnership Requirements*, Dec. 2010, [http://www.epa.gov/greenpower/documents/gpp\\_partnership\\_reqs.pdf](http://www.epa.gov/greenpower/documents/gpp_partnership_reqs.pdf).

<sup>2</sup> C. Hanson and V. Van Son. September 2003. *Corporate Guide to Green Power Markets, Installment 5. Renewable Energy Certificates: An Attractive Means for Corporate Customers to Purchase Renewable Energy*. World Resources Institute, Sustainable Enterprise Program, [http://pdf.wri.org/gpmdg\\_corporate\\_guide\\_05.pdf](http://pdf.wri.org/gpmdg_corporate_guide_05.pdf).

<sup>3</sup> U.S. Green Building Council. *LEED Reference Guide for Green Building Operations and Maintenance*, 2009, pg. 207

<sup>4</sup> L. Bird and J. Sumner. January 2011. *Using Renewable Energy Purchases to Achieve Institutional Carbon Goals: A Review of Current Practices and Considerations*. National Renewable Energy Laboratory, Department of Energy. Prepared under Task No. SA09.3102. Technical Report, NREL/TP-6A20-4993. <http://www.nrel.gov/docs/fy11osti/49938.pdf>. And March 2010. *Guide to Purchasing Green Power: Renewable Electricity, Renewable Energy Certificates, and On-Site Renewable Generation*. A collaboration of U.S. DOE, U.S. EPA, WRI, and CRS. DOE/EE-0307, [http://www1.eere.energy.gov/femp/pdfs/purchase\\_green\\_power.pdf](http://www1.eere.energy.gov/femp/pdfs/purchase_green_power.pdf).

<sup>5</sup> The Climate Registry. *Climate Registered Leadership Program, Draft Accounting and Reporting Requirements*. August 2010. <http://www.theclimateregistry.org/downloads/2010/08/Draft-Climate-Registered-Leadership-Program-Reporting-Requirements.pdf>.

<sup>6</sup> The Carbon Disclosure Project. *Guidance for responding companies, Investor CDP 2011, CDP Supply Chain 2011, CDP Public Procurement 2011*. 2011. <https://www.cdproject.net/Documents/Guidance/CDP2011ReportingGuidance.pdf>.

- i. Renewable resource quality and eligibility
  - Renewable electricity and RECs must be sourced from facilities as defined in the Green-e Energy National Standard. Prominent criteria for facilities are facility online date, renewable resource type used, whether facility was built to meet a law or mandate, and only counting generation that is put onto the electric grid;
  - The carbon avoidance value of renewable energy must remain with the Federal Agency, must not be claimed by another party, and must remain with the renewable electricity or REC. In regions or countries where there is carbon cap-and-trade, carbon attributes must be maintained consistent with the Green-e Energy National Standard;
- ii. Verification of renewable energy sourcing and sales
  - Independent, third-party verification that the renewable electricity or REC being sold meets the eligibility criteria above;
  - Independent, third-party verification that a MWh of renewable electricity or RECs (including its carbon value) is not being sold to more than one buyer, counted against a voluntary sale and a state renewable portfolio standard or other mandate, or claimed by more than one party, including verification of the chain of custody of all RECs and/or use of approved electronic tracking systems;
- iii. Verification of accurate disclosure and consumer protection
  - Full and accurate disclosure about the renewable electricity or REC being offered by the seller at the point of purchase as described in the Green-e Energy Code of Conduct. Prominent criteria include: availability of product content label and price, terms and conditions documents prior to purchase, use of clear language, and use of standard disclosure language; and
  - Accurate marketing and advertising enforced through regular compliance review of website and marketing materials against guidelines in the program's Code of Conduct.

### **Comments on Section 4.0.5, Purchase of Energy from Municipal Solid Waste Consumption**

#### **3. Requirements for Municipal Solid Waste (MSW) and Waste-to-Energy (WTE)**

Green-e Energy currently maintains restrictions on MSW and WTE facilities as eligible renewable energy resources that are stricter than those in section 4.0.5 of the draft guidance. We encourage the CEQ to align its eligibility criteria for MSW and WTE to the Green-e Energy National Standard, which has been developed through open stakeholder consultation. Requirements of Green-e Energy for MSW include:

- i. The facility must use a non-combustion thermal process to convert the municipal solid waste to a clean burning fuel;
- ii. The technology must be designed to produce no discharges of air contaminants or emissions, including greenhouse gases;
- iii. The technology must produce no discharges to surface or groundwater;
- iv. The technology must produce no hazardous wastes;
- v. To the maximum extent feasible, the technology must remove all recyclable materials, including plastics, and marketable green waste compostable materials from the solid waste stream prior to the conversion process, and the owner or operator of the facility must certify that those materials will be recycled or composted; and
- vi. The facility must comply with all applicable laws, regulations, and ordinances.

Third-party verification that an MSW facility has met these criteria is required in order for the electricity or RECs from a facility to be used in a Green-e Energy Certified product.

#### 4. “Renewable Portion of the Waste Stream”

Where the draft guidance states, “WTE must ensure that the electricity is created from the renewable portion of the waste stream” (pg. 27), “the renewable portion of the waste stream” is in need of additional definition and clarification. Given that the majority of the BTU value of WTE often comes from plastics, and therefore, the feasibility of WTE facilities typically depends on waste plastic, by eliminating all plastics as nonrenewable, the unintended result may be a complete exclusion of WTE generated electricity. Alternatively, if the intent is to consider all waste streams en route to the landfill renewable, then our recommendation would be that the facility promote recycling and composting to the greatest extent commercially feasible. Furthermore, we encourage emissions limits similar to those of MSW.

### **Comments on Section 4.2, Renewable Energy Purchases and Use of Renewable Energy Certificates to Meet GHG Reduction Targets**

#### 5. REC “Ownership” vs. “Retirement”

With respect to “acquiring and retaining (or requiring retirement of) renewable energy certificates (RECs)” (pg. 28) the draft guidance states, “Whatever acquisition method is used, the REC must be owned by the agency in order to qualify for adjustment to their Scope 2 emissions to meet GHG reduction targets” (pg. 28). The draft guidance appears to require REC “ownership,” as opposed to REC “retirement.” By only requiring ownership, the potential remains for RECs to be subsequently transferred to third parties and therefore presents an opportunity for double counting. CRS suggests that the CEQ clearly define “ownership” with respect to retirement, to ensure that the intent of the draft guidance is properly conveyed. Where ownership, as opposed to retirement, is determined to be sufficient, we request clarification on how the CEQ will ensure that “owned” RECs are not ultimately double counted.

#### 6. GHG Accounting for Renewable Energy Purchases

The third paragraph on pg. 29 of the draft guidance document (beginning with “RECs can be used...”) and the first paragraph on pg. 30 (beginning with “Agency adjustments...”) provide general guidance on accounting for renewable energy purchasing. Though this reflects an accepted approach to GHG accounting in the market, a recent and ongoing process at the World Resource Institute (WRI) is developing new guidance specifically on the subject of GHG reporting for green power purchasing. Though the guidance has not yet been released by WRI, CRS and others have supported a different approach which is gaining acceptance in this process.

The approach reflected in the CEQ’s draft guidance has been described as a “consequential” accounting approach, in which the impact of renewable generation on the electricity grid is calculated as avoided or displaced grid emissions in the region of generation, which is then subtracted from the Scope 2 emissions associated with the purchaser’s electricity consumption, with the difference representing an adjusted Scope 2 number. An alternative approach would account for the direct emissions associated with the megawatt-hour (MWh) of green power purchased, which is zero, in most cases. Using this approach, the purchaser subtracts RECs or MWh of green power purchased from the total MWh of electricity it has consumed, leaving only electricity consumption with associated emissions, and then calculates the emissions associated with this difference. This is its adjusted Scope 2 number. This approach, described as an “attributorial” accounting method, is simple, appropriately reflects the nature RECs and green power as MWhs of zero-emitting power, and is consistent with GHG accounting for other indirect emissions (i.e. other purchased commodities and products).

The approach currently included in WRI drafts (as of the date of this letter) is a hybrid of sorts of these two approaches. It reflects the fact that both GHG emission-related attributes included in a REC (emission rates and avoided emissions) are important and that the reporting and accounting of each reveals valued information about the purchase. However, it also recognizes that to accurately report the GHG footprint of purchased electricity, only the GHG emission rate attribute is necessary. As such, the approach uses an emission factor of zero for purchased renewable energy to adjust scope 2 emissions (attributional accounting), but includes supplemental reporting of *total* avoided grid emissions (based on consequential accounting) also under Scope 2, since this is important in order to reflect the GHG value and benefit of renewable energy purchasing outside of a cap (e.g. most of the U.S.).

We suggest that the CEQ continue to monitor the WRI process and ultimately revise its accounting procedures to align with WRI guidance. CRS would be happy to provide more clarification on these accounting methods and their use in the market.

#### 7. REC Identification Numbers

We request clarification where the draft guidance states, “RECs should be reported using identification numbers supplied by the utility or REC provider if they are available” (pg. 29). Utilities and marketers typically do not assign identification numbers to REC purchases that relate to the numbering system of any other owner of the REC in the chain of custody. Rather, renewable energy tracking systems assign unique serial identification numbers to each qualified MWh (REC) generated by facilities in the region, state, or province covered by the system, and enable secure transfer and retirement of RECs amongst account holders within the system. If the intent of the draft guidance is to require reporting of tracking system serial numbers when generation facilities are in tracking systems, that should be explicit.

#### 8. Scope 3 Adjustments for Transmission and Distribution Losses

The draft guidance states, “RECs may be used to adjust [...] Scope 3 emissions associated with transmission and distribution losses” (pg. 30). RECs are not traditionally used in this way to address Scope 3 emissions (i.e. to cover the electricity portion of any electricity embodied in a Scope 3 emission). More often, the producer of the product or service used under an entity’s Scope 3 reporting would purchase RECs for their own Scope 2 reporting. Likewise, transmission and distribution losses are not typically factored into REC purchases, as RECs are typically purchased to address Scope 2 emissions. Buying RECs for Scope 3 is possible, but because it is not common in our experience, we request clarification and further explanation as to the rationale behind use of RECs for Scope 3 emissions and how such calculations are being done.

#### 9. Gross vs. Net Reporting

With respect to where the draft guidance requires that “All adjustments associated with renewable energy projects (such as purchase of RECs) must also be reported separately from initial inventory emissions” (pg. 30), per our comments above (see CRS comment no. 6, GHG Accounting for Voluntary Renewable Energy Purchases) we suggest gross, as opposed to net reporting of renewable energy purchases under this guidance. Again, since a REC represents one MWh of emissions-free generation, the MWh of RECs purchased can be subtracted from the number of MWh of electricity consumed *before* calculation of Scope 2 GHG emissions.

### **Comments on Section 4.3.2, Hosted Projects Where the Agency Does not Purchase Energy and/or RECs**

#### 10. Hosting Credits

CRS generally supports draft guidance that encourages and recognizes the hosting of clean electricity generation equipment by Federal agencies. However, in as far as the current draft guidance recognizes said “hosting” by assigning “hosting credits” to agencies and allowing agencies to record them as a part of GHG accounting, we are concerned that this may cause confusion, and may result in double-claiming. Considering guidance which *rightly* requires that RECs be retained by the agency to substantiate any claim to the *use* of renewable energy and in order for the agency to record any adjustment to reported emissions, we request additional explanation as to the rationale behind a separate “credit” as the mechanism for recognizing pure hosting (in which the agency is not retaining the RECs, and therefore not making a claim of use and not adjusting any scope of emissions reported), and further explanation of what a “hosting credit” can be used for and why these credits are being reported as a part of GHG accounting.

We also encourage the CEQ to compare the Federal Trade Commission Green Guides document with any policy issuing credits for hosting renewable energy.

## Comments on Section 4.4, Carbon Offsets

### 11. How to Allow Carbon Offsets

CRS feels that sufficient mechanisms exist in the carbon offset market to enable application of offsets as an adjustment against a Federal agency’s emissions for the purposes of meeting its target. Sufficient time has passed to understand how the market and the use of offsets could be applied consistently across the Federal community. The CEQ may now establish similar requirements for offsets or emissions reduction credits as those it currently has in place for RECs.

Purchases of qualifying carbon offsets should be able to be used for net adjustments to all scopes of emissions reported by Federal agencies. Though not a substitute for important internal climate mitigation efforts, offsets can represent real reductions of GHGs and therefore are a valuable and cost-effective mitigation tool that should be made available to the Federal community through this guidance. The carbon market has matured to the extent that there is now broad consensus around the quality criteria that must be present in a project, reduction, and finally an offset product in order for these to be considered credible. Beyond these, qualification and eligibility criteria for offsets may be set based on the particular preferences and priorities of the Federal government.

These quality criteria can be categorized into project-level (supply) and retail- or consumer-level (sales) assurances. The internationally recognized project-level assurances (called “P.A.V.E.R.” criteria) include:

- i. *Permanent* - Emissions reductions must last in perpetuity, and cannot be reversed;
- ii. *Additional* - The facility must be spurred by the carbon market, or mark a change in behavior from a business-as-usual scenario (“beyond business-as-usual”);
- iii. *Verified* - The emissions reductions must be confirmed to have occurred as described from projects whose performance has been monitored;
- iv. *Enforceable* - Emissions reductions must be backed by contracts or legal instruments that define their creation and ensure exclusive ownership; and
- v. *Real* - The emissions reductions must represent actual reductions that are not artifacts of incomplete or flawed accounting.

Retail- or consumer-level assurances include:

- vi. *Legitimate Supply* - Offsets are supplied with verified emissions reductions that come from projects certified under high-quality project standards that ensure P.A.V.E.R. criteria;

- vii. *Legitimate Sales and Exclusive Ownership* - Emissions reductions are not being double-sold; retirement of correct volumes and types of emissions reductions on behalf of customers based on an audit of sales and supply; and
- viii. *Accurate Disclosure* - Customers are given complete and accurate information about their purchase and are not misled with inaccurate advertising.

These critical quality assurances can be readily and credibly provided in today's voluntary carbon market through a combination of different independent, third-party certifications and voluntary standards supporting the market, covering both project-level and consumer-level assurances. Project-level assurances are most easily provided through established voluntary project certification programs which develop and maintain project standards through transparent and stakeholder-driven public vetting processes and use electronic registries to issue, track, and retire credits<sup>7</sup>. Agencies can express preferences and put limitations on project type, location, certification program, and vintage in order to ensure consistency with other Federal objectives and even coordinate directly with individual projects.

On the consumer side, retail offset certification programs, such as Green-e Climate, filter only high-quality project standards, require an annual audit of a retailer's supply and sales to ensure exclusive ownership and correct delivery, and enforce full and accurate customer disclosure and accurate advertising. Through such programs and use of said standards, the Federal Government can be reasonably assured of both offset quality and retailer accountability.

Green-e Climate is currently the most complete and standardized way for offset sellers to demonstrate clear, unique, correct, and permanent delivery of high-quality offsets; the only way that involves third-party, independent verification and certification of retail transactions; and the easiest way for Federal agencies to gain assurance of these important consumer-level protections. However, recognizing that CEQ may not be able to promote the use of an individual certification program, the following summarize the primary assurances of Green-e Climate:

- i. Offset project eligibility
  - Project eligibility defined as registration under a project standard and a GHG program that is determined to be eligible/endorsed by an independent governance board based on the standard's and program's adherence to quality criteria in the [Green-e Climate Standard](#), including *inter alia* criteria for transparent program development, balance and impartiality, environmental integrity (permanence, additionality, enforceability, and accounting), validity and verification, disclosure and double-counting, as well as some project-specific criteria;
- ii. Verification of offset sourcing and sales
  - Independent, third-party verification that offsets sold to end-use consumers source verified, certified, and tracked GHG reductions from eligible projects;
  - Independent, third-party verification that offsets are fully, accurately, and exclusively delivered (i.e. not being double sold) by the seller in the quantity and quality promised/sold, consisting of an annual audit of sales and supply as described in the [Green-e Climate Verification Audit Protocol](#), which includes *inter alia* verification of supply, sales, balance of supply and sales, customer disclosure, and third-party distributor sales;
- iii. Verification of accurate disclosure and consumer protection
  - Independent, third-party verification that offset purchase information provided to customers is accurate;

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<sup>7</sup> For a sample of such programs, see Green-e Climate Endorsed Programs: [http://www.green-e.org/getcert\\_ghg\\_endorsed.shtml](http://www.green-e.org/getcert_ghg_endorsed.shtml).

- Full and accurate disclosure of offset information by the seller at the point of purchase, including provision of a minimum amount of offset information in the form of a product content label, a project list, and price, terms and conditions, as described in the [Green-e Climate Code of Conduct](#); and
- Accurate marketing and advertising enforced through regular compliance review of website and marketing materials against guidelines in the [Green-e Climate Code of Conduct](#), including *inter alia* no false or misleading statements or information, clear presentation of information, and no overstating environmental benefits or benefits of certification, and consistent with Federal Trade Commission and National Association of Attorneys General guidelines for environmental marketing.

Thank you very much for the opportunity to comment on the draft guidance document. We would be happy to supply any other supporting information that would be helpful, and review any subsequent drafts of the guidance. If we can lend our expertise in voluntary renewable energy and carbon markets to any future CEQ work we would also appreciate the opportunity to contribute.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Martin". The signature is fluid and cursive, with the first name being more prominent.

Jennifer Martin  
Executive Director