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Climate Leaders Draft Guidance for Purchases of Green Power and Renewable Energy Certificates (RECs)



Overview

- ◆ Many Climate Leaders partners interested in using purchases of green power/RECs to meet GHG reduction goals
- ◆ No relevant guidance exists
- ◆ EPA developed outline, presented at last partner meeting, and now draft guidance
- ◆ We welcome your comments

What is Green Power?

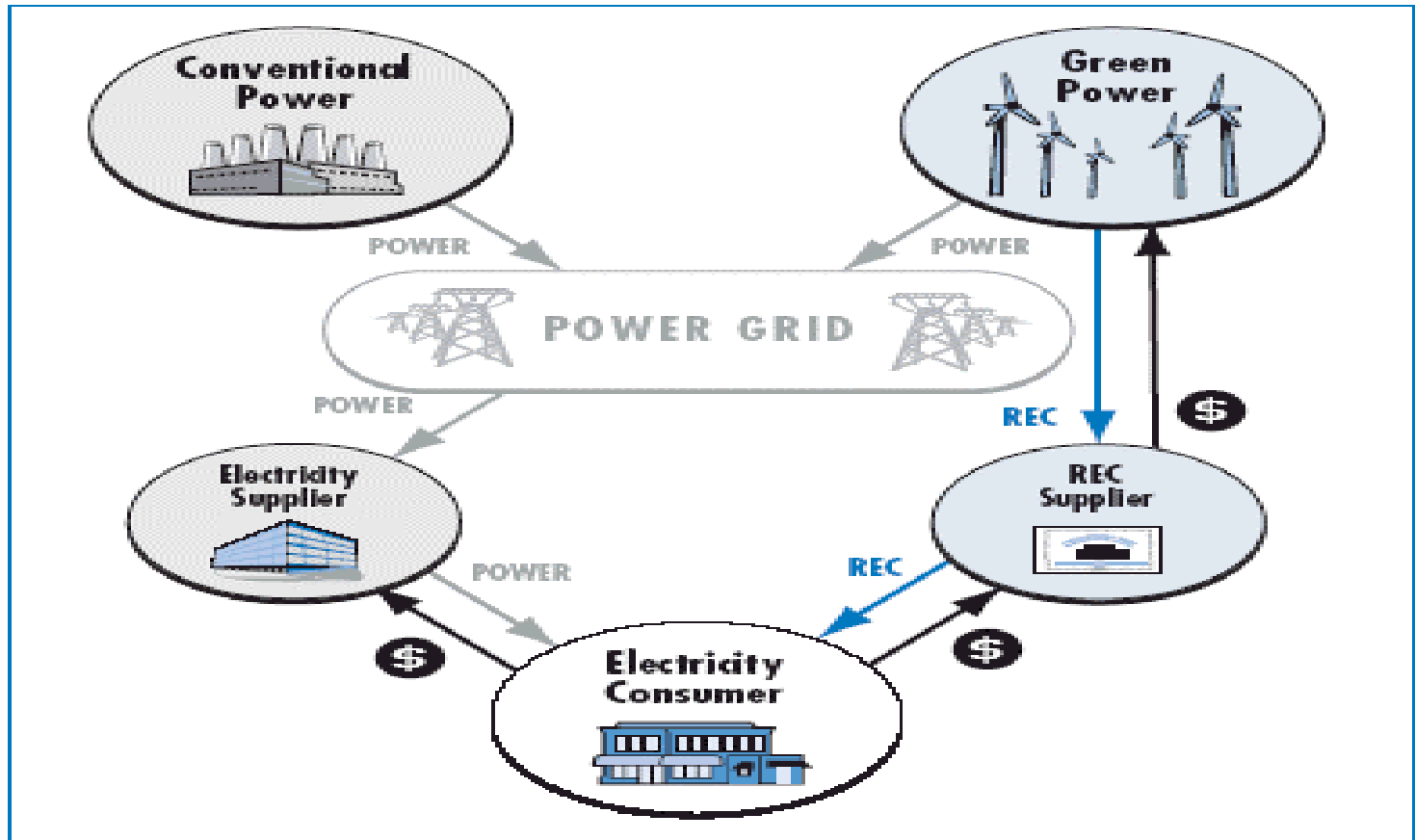
Green Power is a marketing term for electricity that is generated from renewable energy sources such as solar, wind, geothermal, biomass, biogas, and low-impact hydro

How Can I Buy Green Power?

Purchase Options

- ◆ On-Site Generation
- ◆ Electricity Delivered Over the Grid
 - ✦ either existing utility (green pricing) or competitive supplier
- ◆ RECs
 - ✦ market-based commodity designed to facilitate transactions between buyers and sellers of renewable electricity
 - ✦ provides proof that 1 MWh of renewable electricity has been generated; also allows purchaser to make some claims regarding associated environmental attributes

What are RECs?



Using Purchases of Green Power and RECs to Meet Climate Leaders' Objectives

- ◆ Support renewable energy purchases as a corporate environmental strategy
- ◆ Provide a straightforward method of accounting for these actions
- ◆ Build upon CL's existing GHG inventory methodology

Accounting for Purchased Electricity

- ◆ Categorized as **Indirect Emissions**
- ◆ Estimated CO2 Emissions =
Electricity (MWh) X Emission Rate (#/MWh)
- ◆ Emissions rate
 - From eGRID database
 - Average, annual, regional
 - Vary substantially (3x) by region

Accounting for Purchases of Green Power and RECs

Both treated as an adjustment to indirect emissions

However, accounted for somewhat differently:

- ◆ Emissions **Rate** adjustment for Green Power Purchases
- ◆ Emissions Inventory **Line-Item** adjustment for RECs purchases



Accounting for Green Power Purchase

CO2 Impact of Green Power Purchase =
Green Power Purchase (MWh) X Emission
Rate (#/MWh)

- ◆ Emissions rate based upon case-specific green power product (usually zero)
 - ▶ NOTE some green power products not required to contain 100% renewable electricity
 - ▶ Many states & certified purchases have disclosure information

Accounting for REC Purchase

CO2 Impact of REC Purchase =

RECs (MWh) X Emission Rate (#/MWh)

- ◆ Emissions rate based upon average, regional eGRID factor **from region REC sourced**
- ◆ This becomes line item adjustment to indirects

Key Implication

- ◆ If REC is sourced from same region as electricity purchase, effect is to “avoid” emissions 1:1
 - ↳ i.e., 1 REC “avoids” emissions from 1 MWh purchased
- ◆ If REC is sourced from outside the region it’s not that simple

Accounting for REC Purchase (cont.)

- ◆ RECs are unbundled from underlying electricity, so not inherent part of corporate GHG inventory
- ◆ Like offsets, credibility/transparency important
 - ▶ No netting in GHG inventory (line item adjustment)
 - ▶ Eligibility (resources, new, same year)
 - ▶ Ensuring avoided emissions (no reg. requirements)
 - ▶ Double counting restrictions (retirement, attestation)
- ◆ Certified RECs help ensure all criteria are met

“Offset” Adjustments for Certain Green Power Projects

- ◆ Certain types of green power projects may require more rigorous baseline
 - ✦ Non-grid connected renewables
 - ✦ Direct emissions reductions (i.e. captured methane)
 - ✦ Some biomass projects (i.e. coal co-firing)
- ◆ These should be treated under CL offsets provisions

Issues to Consider

- ◆ Does accounting approach make sense?
 - ✦ Consistent with existing CL inventory methods
 - ✦ Reasonably simple to apply/understand?
 - ✦ Enables use of GP/RECs to reduce GHG inventories
- ◆ How to ensure REC is not double-sold and CO2 impact is real?
 - ✦ Seek certification
 - ✦ If sourced from within region w/ tracking system (Texas, Wisconsin, New England)
 - ⑦ Maintain documentation and “retire” if possible
 - ✦ If sourced from outside region w/ tracking system
 - ⑦ Attestation letter from seller?
- ◆ What documentation/due diligence required?

Next Steps/Questions

- ◆ Getting input from Partners
- ◆ Revise guidance on indirect emissions from purchases/sales of electricity and steam to include purchases of green power and RECs

Any questions?

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