

Wind-Powered Electricity Generation Protocol

Alberta Protocol Stakeholder Consultations ~ January 2008
Baseline Emissions Management Inc.

Wind-Powered Electricity Generation Protocol

- Seed Materials
 - CDM and WRI protocols
 - EcoLogo Certification Criteria (CCD-003)
- Technical Review
 - Alberta process with gov't and industry stakeholders

Wind-Powered Electricity Generation Protocol

- **Project Condition**

Where wind-powered electrical energy facilities energize either loads connected to the electrical utility grid, or off grid loads.

- **Baseline Condition**

Where the generation of electricity by other facilities are linked to the electrical loads to cover the net generation capacity of the generation facility.

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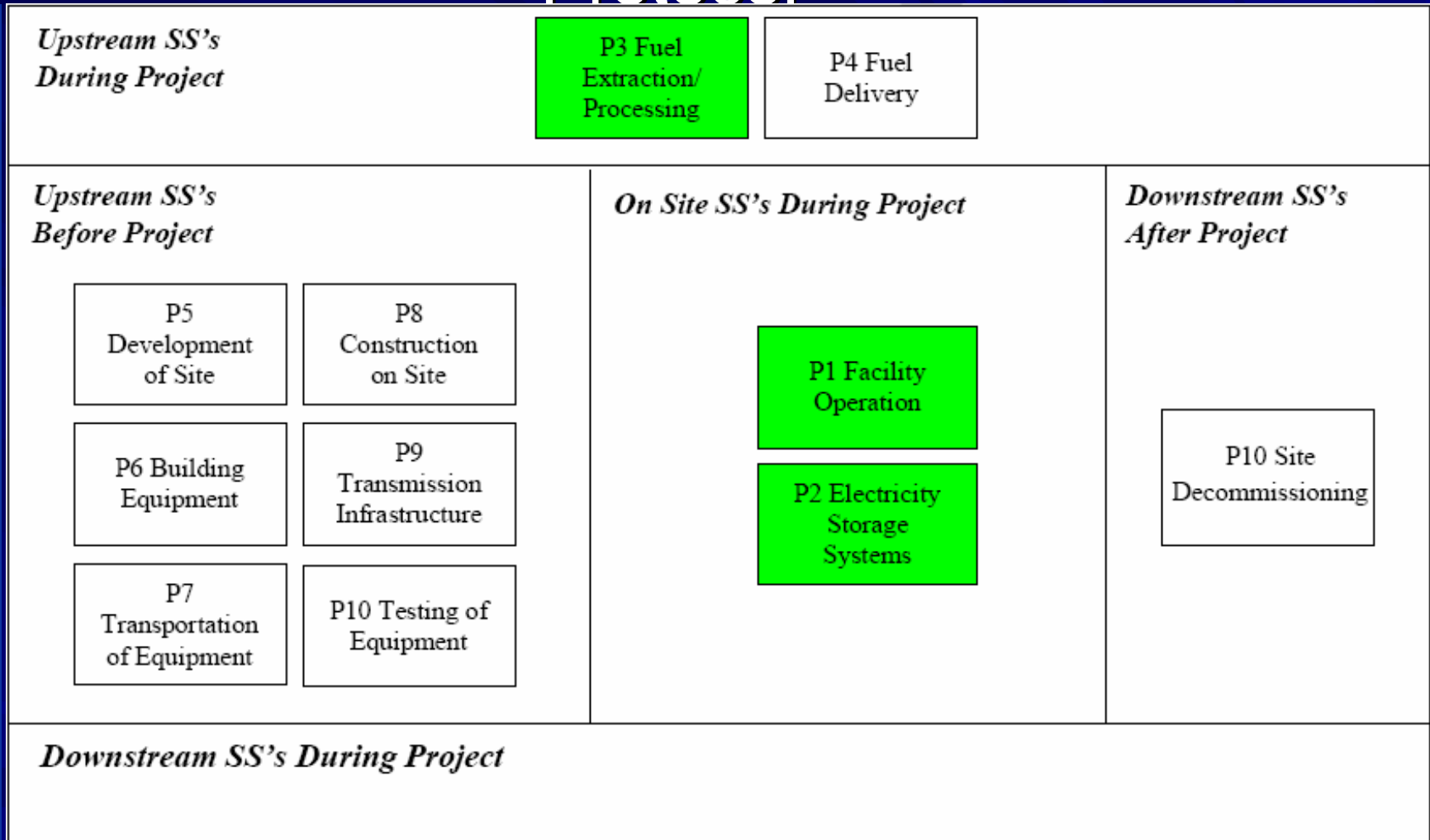
- **Emission Reduction Mechanisms**
 - Reduce use of fossil-fuels to generate electricity
 - Implementation of renewable power generation technologies to displace a proportion of fossil-fuel derived electricity from the grid.
- **Applicability criteria:**
 - Appropriate measurement and metering of all SS as described in the protocol;
 - EcoLogo certification eligibility (audit/verification report, attestation, or certification certificate);
 - Rigorous accounting practices.

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- Flexibility mechanisms
 - Where the generation facility energizes an off-grid load, a site specific emission factor, reflecting the source of generation displaced under the project condition may be used.
 - Calculation methodology must be robust.

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Project Condition



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Baseline Condition

*Upstream SS's
During Project*

**B1 Electricity
Generation**

*Upstream SS's
Before Project*

On Site SS's During Project

*Downstream SS's
After Project*

Downstream SS's During Project

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$$\text{Emission Reduction} = \text{Emissions}_{\text{Baseline}} - \text{Emissions}_{\text{Project}}$$

$$\text{Emissions}_{\text{Baseline}} = \text{Emissions}_{\text{Electricity Generation}}$$

$$\text{Emissions}_{\text{Project}} = \text{Emissions}_{\text{Fuel Extraction and Processing}} + \text{Emissions}_{\text{Facility Operation}} + \text{Emissions}_{\text{On-Site Electricity Storage Systems}}$$

- **Data Capture**

- Electricity sales receipts;
- Fuel purchase receipts; and
- Metering of electricity consumed (In the case where the generation facility energizes an off-grid load.

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- Questions and Comments
 - Technical issues?
 - Policy concerns?
 - Questions?