Charting the Path Forward: Accounting for Renewables and the Environment

Guidance for the CEC Working Group from Similar Initiatives

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Why this study?

- Let's not re-invent the wheel
- What should the CEC work be compatible with?
- What are the most recent changes and developments at the national and international level?
- Establish some contacts with other groups that the CEC working group could network with
- Get international expert advice on some of the main issues



International

- CDM combined margin
- UNIDO system average (for CDM projects)
- UNCTAD system average (corporate ecoefficiency indicators)
- PROBASE EU-financed model to calculate operating margin (not available for North America)
- WRI GHG Protocol (Corporate Standard) average emissions from electricity provider or regional grid
- WRI GHG Protocol (Project Standard) under development



Mexico

- FIDE system average (energy efficiency projects)
- ATPAE combined margin: thermal average and build margin (energy efficiency and renewables)
- Comisión Federal de Electricidad operating margin (renewable energy)



USA

- SO₂ & NOx defined factors
- RGGI may adopt WRI methodology
- LBNL, MAGPWR operating margin, simplified dispatch model (for small CDM and JI projects)
- LBNL, MBASE weighted averages of operating or build margin (an alternative to complicated models – being considered by the WRI process?)
- Oregon Climate Trust regional averages of plants operating at the margin (set regional EPA factors)
- NREL work on NOx emissions system average or dispatch model (relevant for US State Implementation Plans under EPA guidance)



Canada

- PERRL use ICF operating margin model for pre-Kyoto project offsets
- Offset Trading System under development, but likely to adopt proxy factor (CCNG; equivalent to 0.4 t/MWh or similar)



Key Findings (1)

Most important on-going initiatives:

- CDM Consolidated Methodology
- World Resources Institute/WBCSD GHG Protocol (Project Standard)
- Canadian Offset System
- NREL work on NOx emissions for the EPA



Key Findings (2)

- Tendency towards more complicated methodologies than grid average, or weighted grid average as a simpler alternative
- Tendency towards standardisation of methodologies
- Still lots of incoherence between methodologies, esp. for corporate reporting and project-based calculations. Canadian proxy factor approach stands out.



What now?

- Working group may want to observe developments with respect to other initiatives
- Choice of methodology and related model is necessary to move the work forward (operating, build or combined margin, plus details)
- Methodology should match or surpass requirements of relevant initiatives, such as CDM and WRI work
- May need to choose and test computer model
- Some recommendations contained in workshop document





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