

Summary of WRI Work on GHG Accounting for Renewables

**Charting the Path Forward: Accounting for
Renewables and the Environment**

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Overview

- The GHG Protocol
- GHG Protocol Project Quantification Standard
 - Draft Electricity Sector Guidelines
- Pocantico Workshop on Green Power Accounting Methods
- Current Electricity Sector Work



GHG Protocol Initiative

- Convened in 1998 by WBCSD & WRI
- Mission: to develop international GHG accounting & reporting standards for business through an inclusive & transparent multi-stakeholder process
- Two modules: *corporate inventories & GHG projects*



Adoption of GHG Protocol corporate standard

Voluntary Climate Initiatives

- ◆ U.S. EPA Climate Leaders Program
- ◆ WWF Climate Savers Program
- ◆ Respect Europe Business Leaders Initiative for Climate Change (BLICC)
- ◆ USAID Greenhouse Gas Pollution Prevention Program

GHG Registries

- ◆ California Climate Action Registry
- ◆ Wisconsin GHG registry
- ◆ WEF Global Registry

Reporting Initiatives

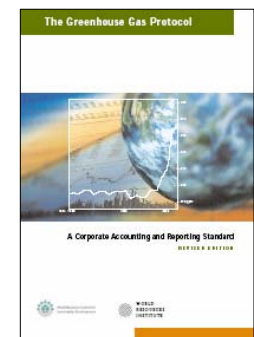
- ◆ Global Reporting Initiative
- ◆ CERES Sustainable Governance Initiative
- ◆ French REGES Protocol

Industry Initiatives

- ◆ WBCSD Cement Protocol
- ◆ International Forum of Forest and Paper Associations
- ◆ International Aluminium Association
- ◆ International Iron and Steel Institute
- ◆ International Petroleum Industry Environmental Conservation Association
- ◆ NZ Business Council for Sustainable Development
- ◆ European, Japanese, Canadian, and Australian Cement Industry Associations

Trading Schemes

- ◆ EU Emissions Trading Scheme
- ◆ UK Emissions Trading Scheme
- ◆ Chicago Climate Exchange





Businesses using GHG Protocol Corporate Standard

Automobile Manufacturers

Ford Motor Company, USA
Volkswagen, Germany

Cement

Cemex, Mexico
Cimpor, Brazil
Heidelberger Cement, Germany
Holcim, USA (and worldwide
Holcim facilities)
Italcementi, Italy
Lafarge, France and North America
RMC, UK
St. Lawrence Cement Inc., Canada
Siam Cement, Thailand
Taiheiyo, Japan
Votorantim, Brazil

Consumer Goods Manufacturers

Bank of America
Body Shop, UK
Cargill, USA
Eastman Kodak, USA
Fetzer Vineyards, USA

IBM, USA
IKEA International, Sweden
Johnson & Johnson, USA
Miller Brewing Company, USA
Nike, USA
Norm Thompson Outfitters, USA
Pfizer Inc., USA
Raytheon, USA
SC Johnson, USA
Sony Electronics, Japan
Starbucks Coffee, USA
Staples Inc., USA
Sun Microsystems
Target Corporation, USA
Unilever HPC, USA
United Technologies Corporation, USA

Energy Services

Birka Energi, Sweden
Cinergy, USA
Edison Mission Energy, USA
ENDESA, Spain
Exelon Corporation, USA
FPL Group, Inc., USA
General Electric, USA
Green Mountain Energy, USA
Kansai Electric Power, Japan
Mirant, USA

N.V. Nuon Renewable Energy,
Netherlands
PSEG, USA
Seattle City Light, USA
Tokyo Gas, Japan
Wisconsin Electric, USA
We Energies, USA

Oil and Gas

BP, USA
Norsk Hydro, Norway
Shell Canada, Canada
Suncor, USA

Industrial Manufacturers/ Mining

Air Products and Chemicals, Inc.
Alcan Aluminum Corporation, USA
Alcoa, USA
Ball Corporation, USA
Baltimore Aircoil, USA
Baxter International, USA
Bethlehem Steel Corporation, USA
CODELCO, Chile
DuPont, Inc.
Interface, Inc., USA
International Paper, USA
ITC Inc., India

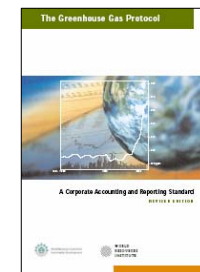
Lockheed Martin Corporation, USA
Philips & Yaming, China
Simplex Paper & Pulp, India
STMicroelectronics, Switzerland
StoraEnso, Finland
Tata Steel, India
United States Steel Corporation

Non-Government Organizations

World Business Council for Sustainable
Development, Switzerland
World Resources Institute, USA

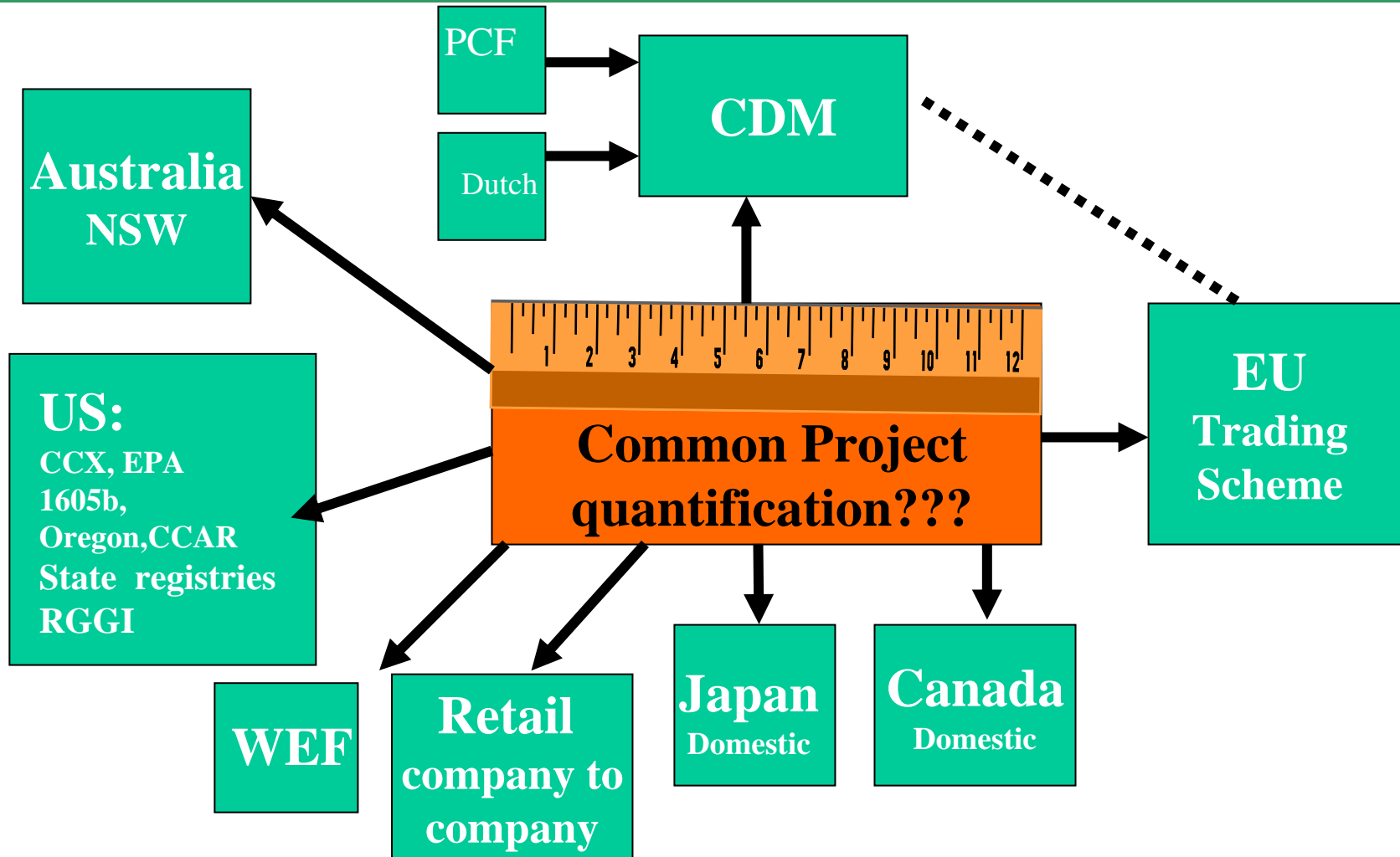
Services

500 PPM GmbH, Germany
AstraZeneca, UK
Casella Waste Systems, Inc., USA
DHL, USA
European Bank for Reconstruction &
Development
PE Europe, Germany
PowerComm, Canada
Price Waterhouse Coopers, New Zealand
Verizon Communications, USA





GHG Protocol Project Guidelines: the need for a common approach





Objectives of GHG Protocol Project Guidelines

- Simplify GHG quantification & reduce transaction costs
- Improve environmental integrity
- Promote consistency across different trading schemes
- Increase investor confidence/reduce uncertainty



GHG Protocol Electricity Project Guidelines

- Annex on Grid-Connected Electricity GHG Quantification Developed for Road Test Draft (2003)
- Two options presented:
 - Using firm & non-firm power classification (LBL methodology)
 - Using a combined margin approach (Tellus methodology)



WRI Pocantico Workshop Summary

- 25 person workshop across RE value chain shared US perspectives and goals
- Participants agreed that state and national averages do not correlate well with what is being displaced
- Simple, accurate, publicly available emissions factors sought by buyers and suppliers



WRI Pocantico Workshop Summary

- Regional scale:
 - Powerpool subregion preferred for geographic scale
 - But leakage and system constraints need to be identified
- Temporal issues:
 - 2+ year old data on eGRID
- Selecting emissions factors:
 - Dispatch approaches preferred for accuracy, but
 - uncertainty whether practical, replicable and public



WRI Pocantico Workshop Summary

- Accuracy test:
 - uncertain that RE projects actually influence build margins
 - size, scale distributed nature of renewable projects
 - New electricity capacity in US may not be CCNG as most build margin advocates believe



Ongoing Work at WRI

- Electricity Project Workgroup convening this month
- Quantification Principles:
 - Relevance
 - Completeness
 - Transparency
 - Consistency
 - Accuracy
 - Conservativeness
 - Practicality?



Ongoing Work at WRI

- Outstanding Questions:
 - How does one define the grid in different countries, different contexts?
 - Does project size matter? For example, do small baseload DG projects affect the build margin?
 - How should accuracy and practicality be balanced?
 - Given a choice of methodologies, can greater accuracy be ‘incentivized’?



Thank You!

**Comments
&
Questions**



**For more information visit:
www.ghgprotocol.org**