

New Tools and Programs to Manage Global Emissions

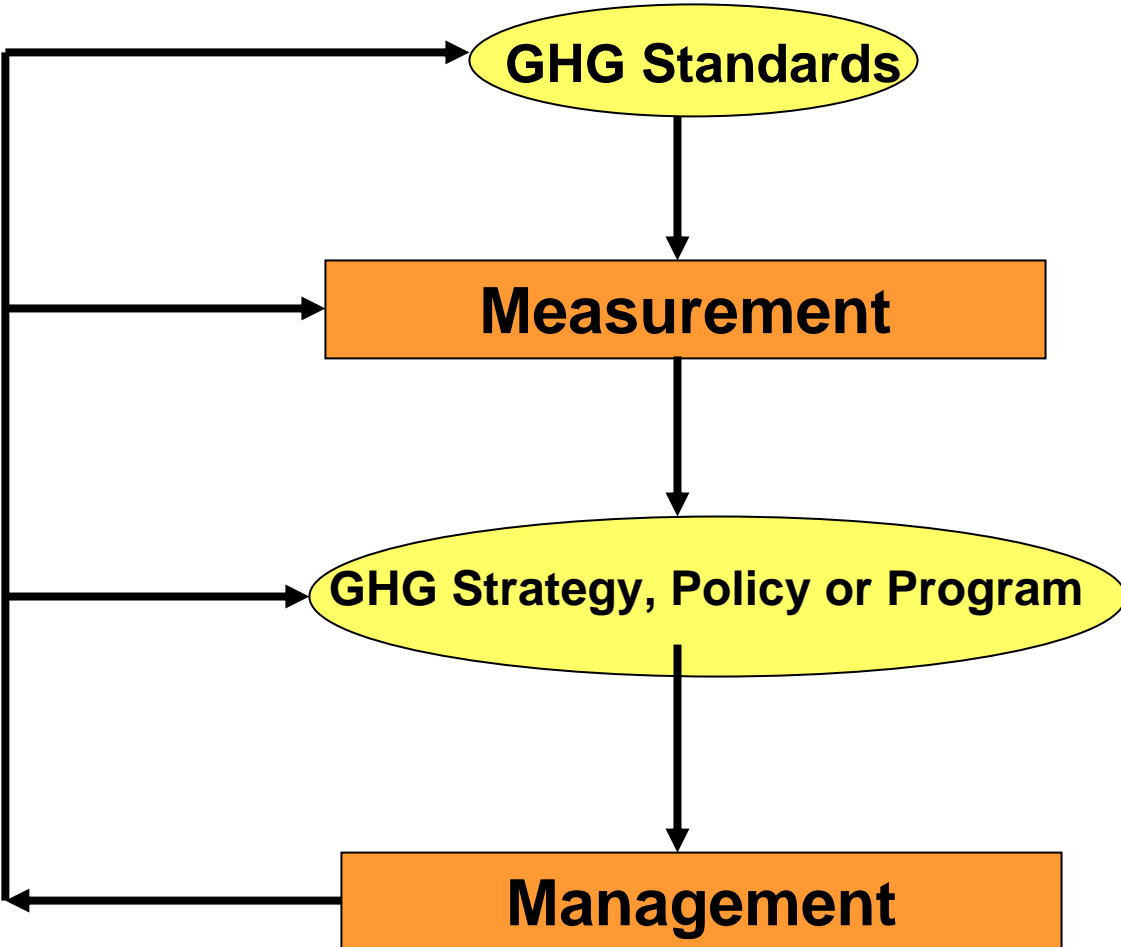


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What you measure, you can manage
What you measure WELL, you can manage WELL



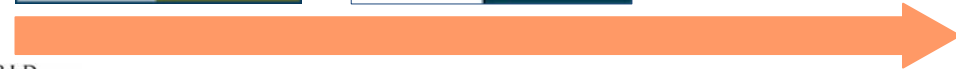
Standards, Protocol, and Tools

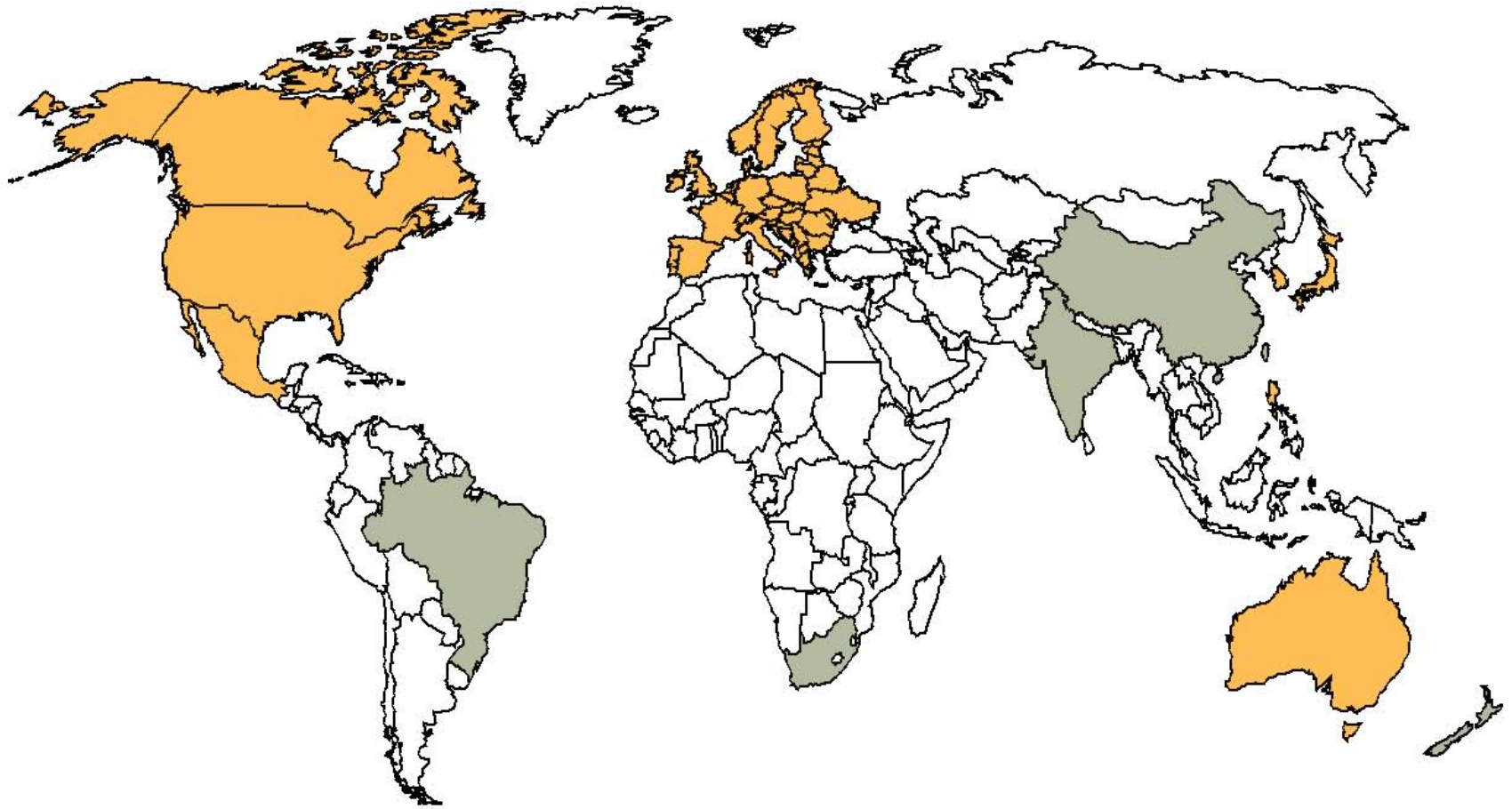
- A Corporate Accounting and Reporting Standard
- Project Accounting Protocol
- Measuring to Manage: A Guide to Designing GHG Accounting and Reporting Programs
- Designing a Customized GHG Calculation Tool
- Land Use, Land-Use Change and Forestry Guidance for GHG Project Accounting
- Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects

Corporate Module



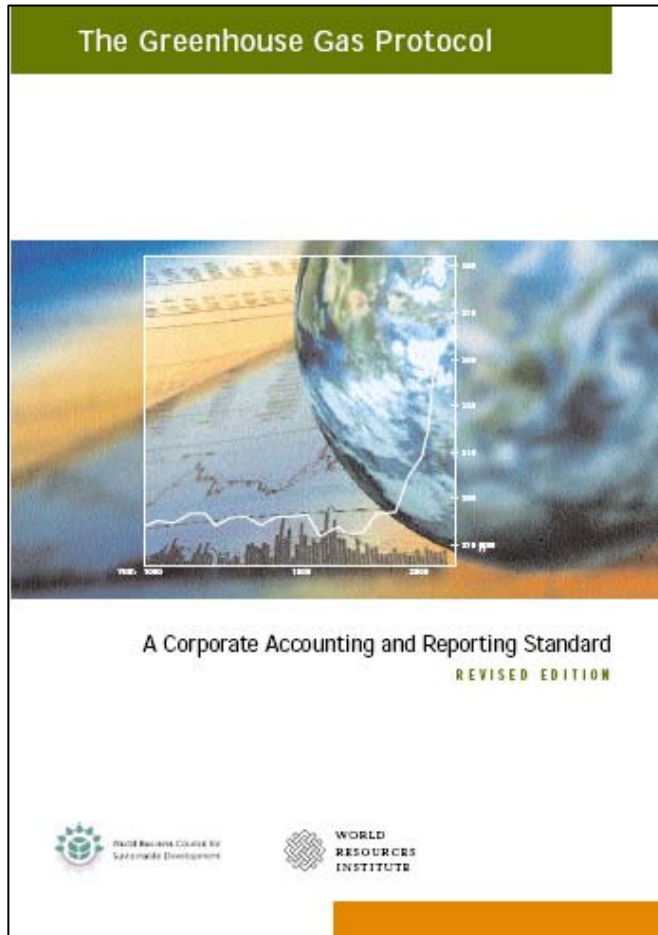
Project Module





- National and Regional Initiatives and/or GHG Registries
- National GHG accounting and reporting program in progress

Programs Based on GHG Protocol



- Carbon Disclosure Project (CDP)
- The Climate Registry
- California Climate Action Registry
- Chicago Climate Exchange
- Dow Jones Sustainability Index
- EU Emissions Trading Scheme
- French REGES Protocol
- Global Reporting Initiative
- METI, Japan
- Mexico GHG Program
- Respect Europe Business Leaders Initiative for Climate Change (BLICC)
- International Trade Associations (Aluminum, IPIECA, ICFPA, Cement, Iron and Steel)
- UK Emissions Trading System
- U.S. EPA Climate Leaders Initiative
- World Wildlife Fund Climate Savers
- World Economic Forum Global GHG Registry
- ISO 14064 Part 1
- U.S. Department of Energy (1605b)
- Brazil GHG Protocol Program
- India GHG Inventorization Program
- China Energy & GHG Management Program

The GHG Protocol in China

- National GHG Standards
- Training and Capacity-building Programs based on the GHG Protocol
- Customized GHG Calculation Tools and Software
- National, Provincial, or Industrial-level GHG Registries

Launch of the WRI-WBCSD-CBCSD China Energy and GHG Management Program on June 1, 2007



GHG Protocol implemented in three of Sinopec's oil and gas refineries, including the Yansan facility located outside of Beijing



Training and Capacity-building Programs

Partners:

- National Development Reform Commission
- China Business Council for Sustainable Development
- China Building Materials Academy (CBMA)

Completed training of the trainers for key staff

- CBCSD
- CBMA
- Beijing Cement Company
- Sinopec Economic Development Division

Over 50 Cement Companies Trained in January 2008



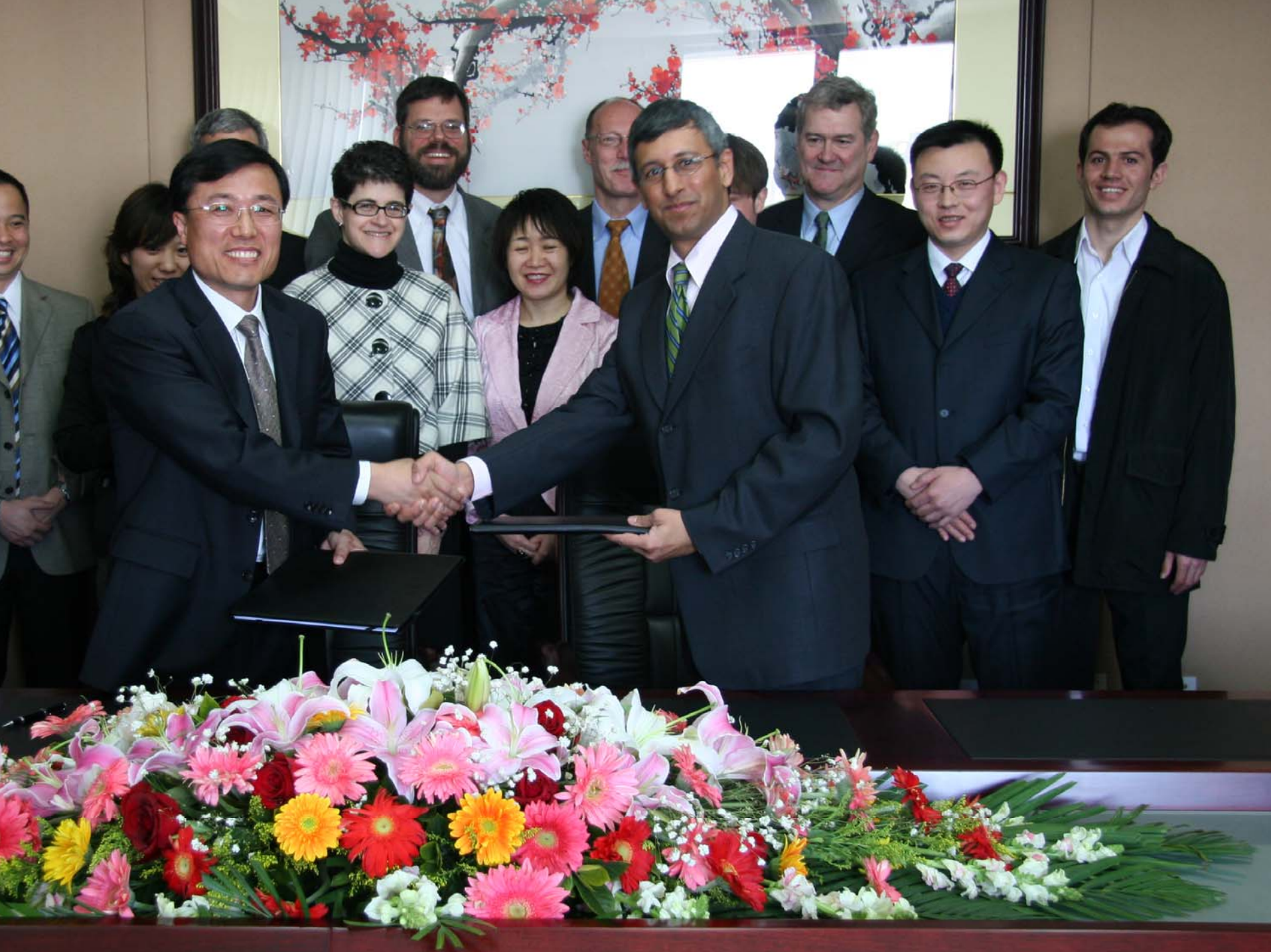
National, Provincial, and/or Industrial-level GHG Registries

Partner:

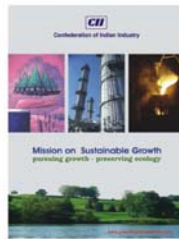
- China Standards Certification Center

Key Planned Activity:

- Prepare recommendations on a GHG registry for China based on GHG Protocol



India GHG Inventorization Program (2008)



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Objectives

- Provide tools & technical assistance to build inventories, identify reduction opportunities, set targets & track progress
- Establish a national model on emissions accounting using a consistent standard
- Create business and institutional capacity in the country to undertake credible & comprehensive GHG inventories & programs

Benefits

- Early movers – leaders in the industry
- Cost competitiveness
- Investor disclosure such as through CDP



The groundwork started with the first program design meeting in Dec 2007

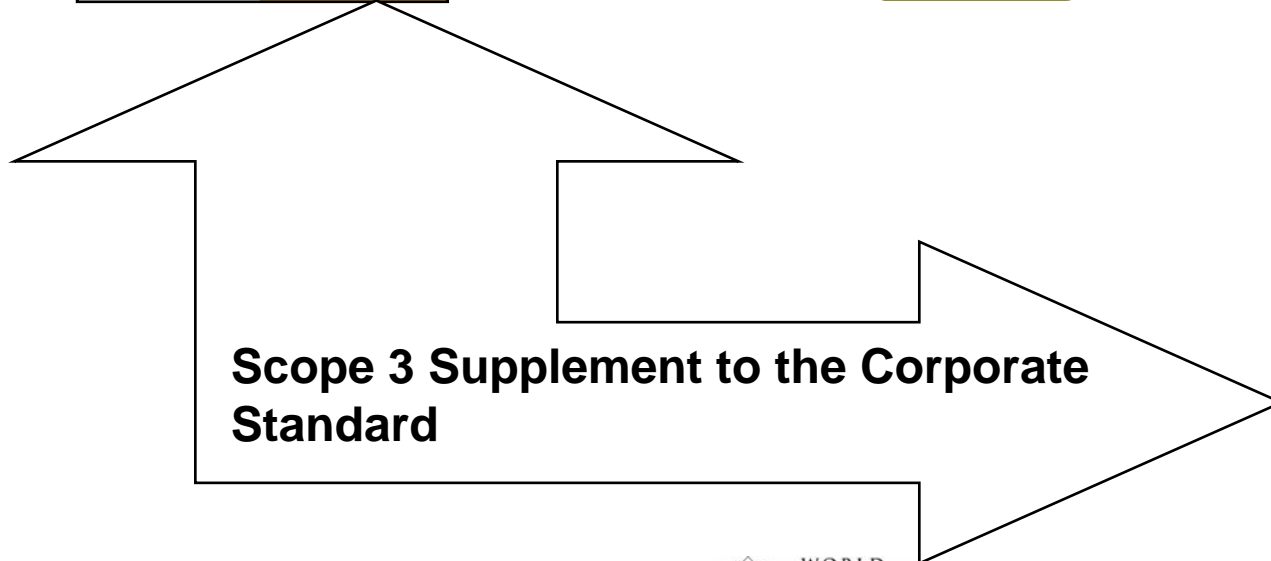
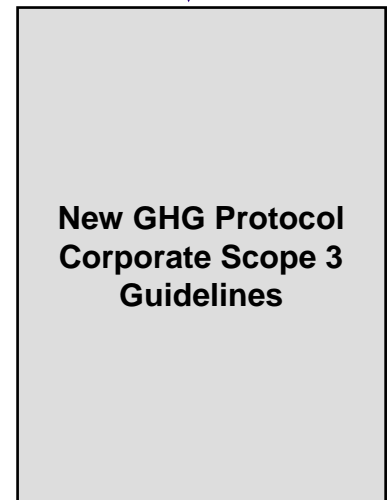
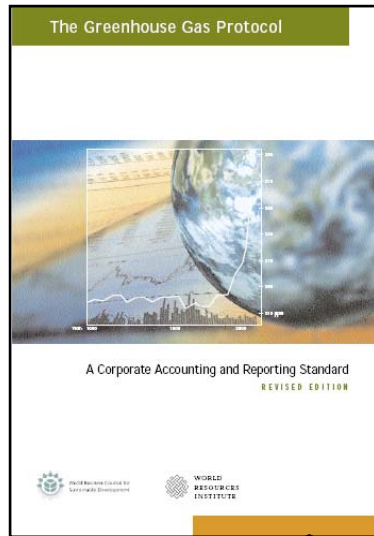
Other Emerging Initiatives

- Company-specific: Wal-Mart's supply chain sustainability initiative; Tesco's product carbon labeling initiative
- Sector-specific: Electronics Industry Citizenship Coalition's De-Carbonizing the Supply Chain Initiative
- Cross-sector: Carbon Disclosure Project's Supply Chain Leadership Collaborative
- Methodologies and Standards: ISO and Carbon Trust's product life cycle methodology

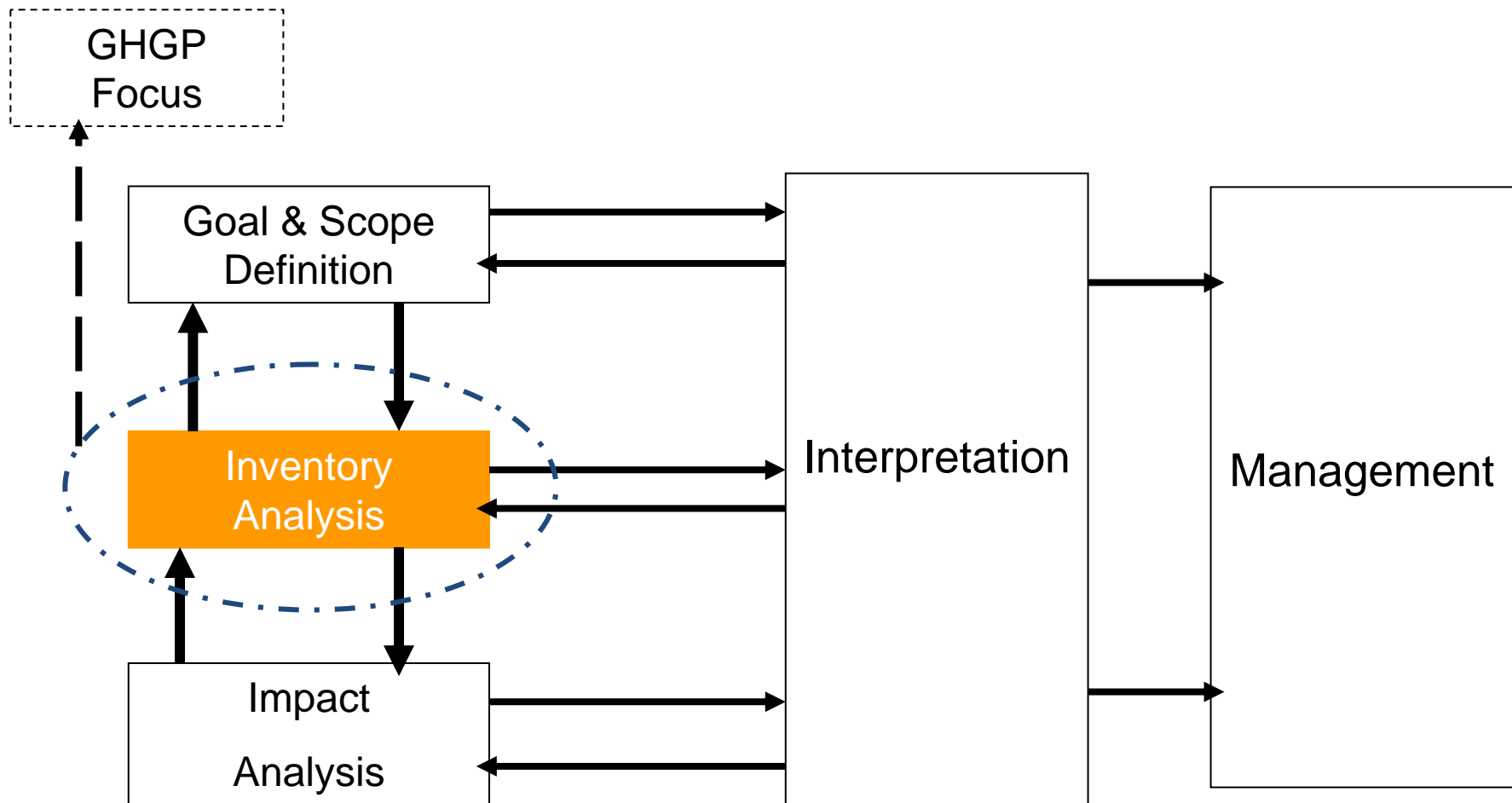
Global GHG Management - Emerging Challenges

- Identify and prioritize GHG reduction opportunities in product and corporate supply chains
- Set targets, track performance, enable benchmarking across supply chains
- Engage suppliers and outsourced activities in GHG management
- Develop and procure low-GHG products
- Enable credible disclosure and communication across supply chains

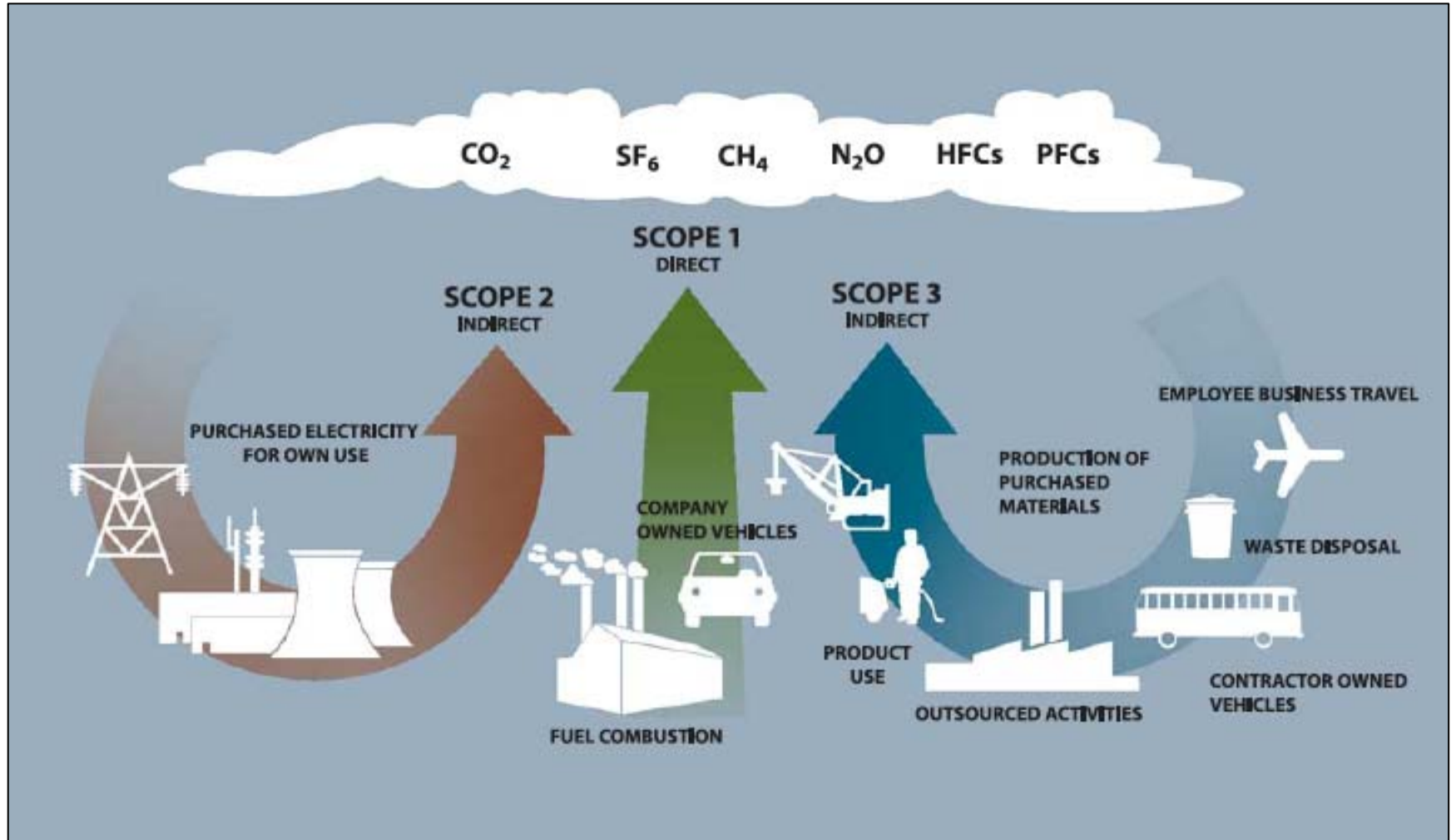
New GHG Protocol Accounting Standards



Life-cycle Assessment Framework



Accounting Under GHG Protocol Corporate Standard



Two Related Standards

1. **Scope 3 / Supply Chain Accounting & Reporting**
 - Build on GHG Protocol Corporate Standard
 - Identify, quantify, and report relevant scope 3 activities

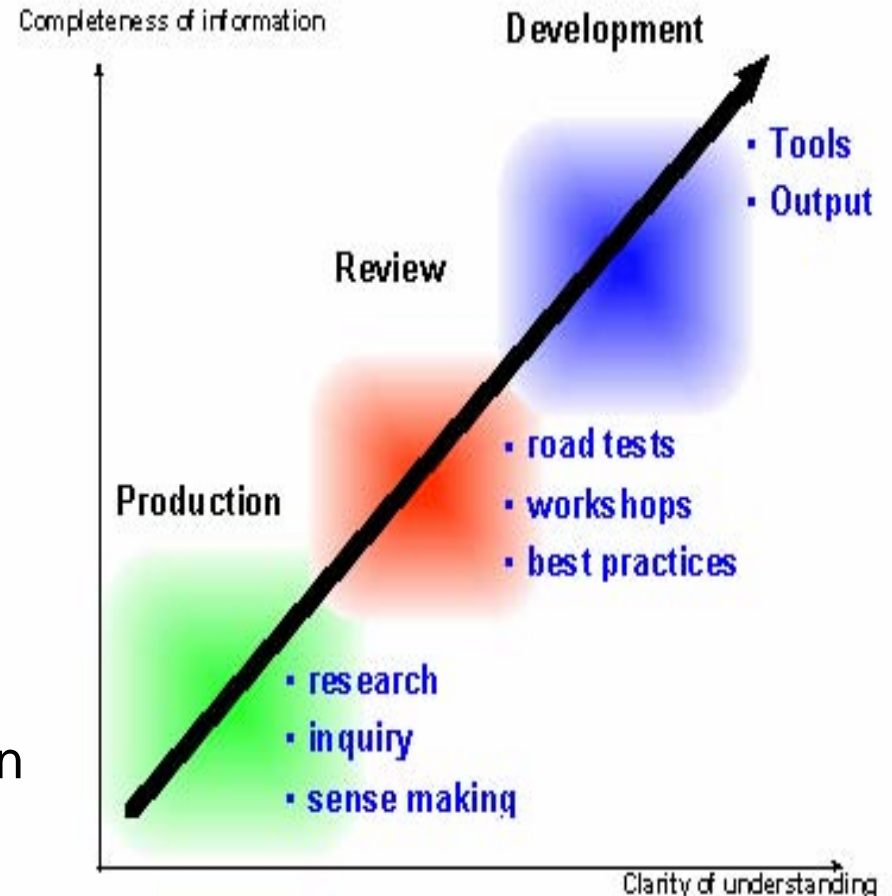
2. **Product Life Cycle GHG Accounting & Reporting**
 - Build on existing LCA standards
 - Quantify and report product-level emissions

Examples of Key Questions

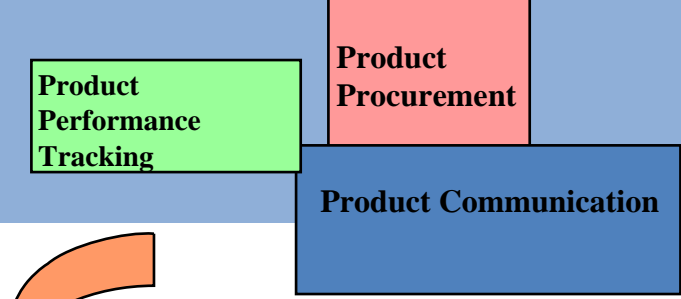
- Which scope 3 sources should you include in your inventory?
- How far up the supply chain should you go?
- Which of your suppliers' total emissions are associated with your company?
- When should you use a particular method or level of accuracy?

Development Approach

- Identify and establish key end-uses
- Identify and build on relevant guidelines and standards e.g. ISO
- Integrate / build on existing work and initiatives e.g. Carbon Trust
- Obtain sound technical data, input and support from users and practitioners
- Understand practical constraints on GHG accounting / reporting
- Explore/ address key accounting issues



Modular Approach - Progressive Implementation

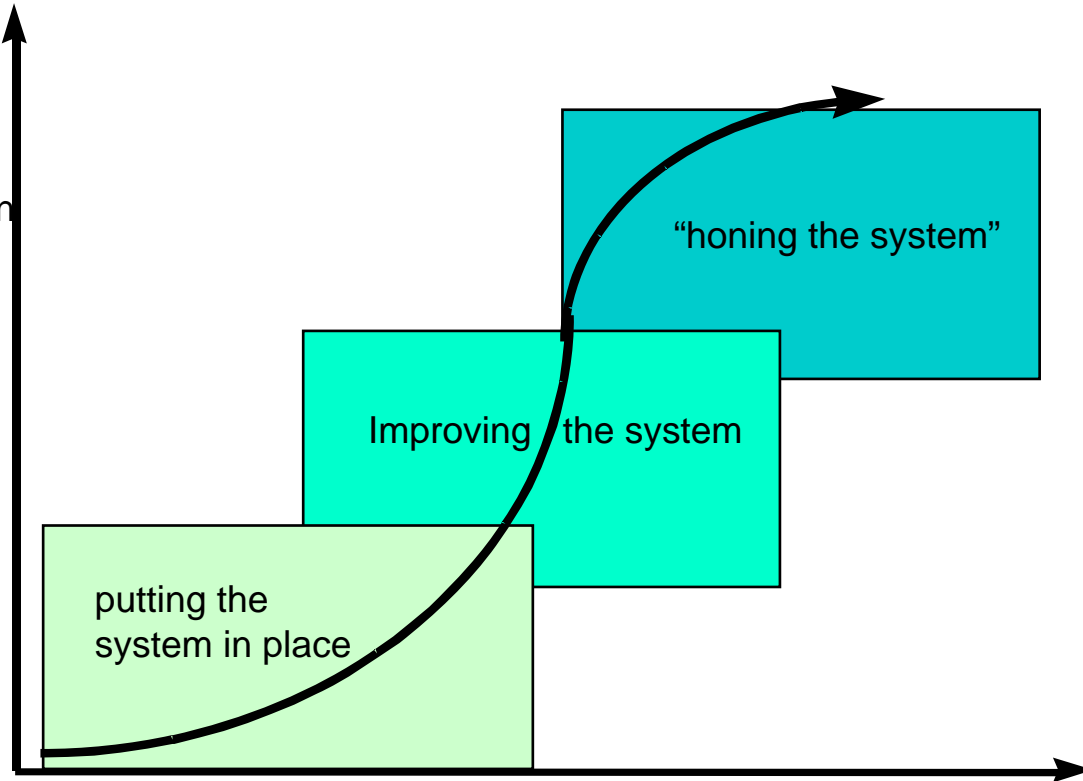


End Use

Product Communication

Procurement

Internal performance tracking



Level 1

Level 2

Level 3

Quality / Effort

Approaches to Effective Global GHG Management

- Use GHG Protocol Corporate Standard
- Track both Corporate and Facility Data
- Organizational Boundary
 - Most common approach: Operational Control
 - But also track equity approach
- Operational Boundary
 - Track Scopes 1 and 2
 - Also track relevant Scope 3 categories
- Avoid Double Counting
- Transparency is the Key
- Stay Tuned for the New GHG Protocol Standards and Tools

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