Corporate Sustainability Reporting and EPA's Biogenic Accounting Framework

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Overview

- Background: CSR Reporting, the Global Reporting Initiative, and Carbon Accounting Frameworks.
- Overview of Greenhouse Gas (GHG) Protocol
- Comparison of GHG Protocol with EPA Reporting Rule.
- Further Considerations.

CSR Reporting – What is it?

- "Corporate Social Responsibility"

- "Triple Bottom Line" –
  - People, Planet, Profit [3P]
  - Economical, Social, Ecological [ESE]
  - Environmental, Social, Governance [ESG]

- Global Reporting Initiative [GRI]
  - Economic, Environmental, Social and Governance [EESG]

Global Reporting Initiative
-- *Categories, Aspects & Indicators* --

- G4 Guidelines (May 2013) – "Environmental" Category
  - Aspect: Emissions
    - Indicators:
      - ✓ Direct Greenhouse Gas (GHG) Emissions (Scope 1)
      - ✓ Energy Indirect Greenhouse Gas (GHG) Emissions (Scope 2)
      - ✓ Other Indirect Greenhouse Gas (GHG) Emissions (Scope 3)

- "Emissions" reporting is based on the "GHG Protocol"

Carbon Accounting Frameworks

- Greenhouse Gas (GHG) Protocol: www.ghgprotocol.org
  - *GHG Protocol Corporate Accounting and Reporting Standard (2004)*
  - *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Oct. 2011)*

- ISO 14064-1(2006): www.iso.org
  - *Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals (2006)*
  - ISO Standard was based on GHG Protocol Outgrowth of GHG
  - Similar to GHG Protocol, but different terminology

GHG Protocol

- Basic Purpose: Help Companies prepare "GHG inventory" and increase consistency and transparency in GHG accounting and reporting.

- Distinguishable from EPA's GHG Reporting Rule
  - EPA seeks information from individual facilities to quantify national GHG impact
  - Companies reporting under GHG Protocol are reporting more broadly

GHG Protocol – continued…

- Threshold Considerations:
  - Setting Boundaries (organizational/operational)

- Key Data: Scope 1, Scope 2 and Scope 3 Emissions

Scope 1 Emissions

- "Direct" Emissions from sources owned or controlled by the Company
  - Stationary fuel combustion (boilers, turbines, etc.)
  - Chemical/physical process emissions
  - Mobile source (transportation)
  - Fugitive emissions

Scope 2 Emissions

- "Indirect" emissions from generation of purchased electricity, heating, cooling and steam consumed by the company.
  - Consider electricity brought into the organizational boundary of the company
  - Emissions physically occur where electricity is generated.

- Scope 2 MUST be reported.

Scope 3 Emissions

- Optional reporting of "Other" Indirect Emissions from sources that are not owned or controlled by the company
  - "Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company" [GHG Protocol, Corporate Standard, p.25]
  - Look at "upstream" and "downstream" value chain

- Recent Standard, specifically for Scope 3 Emission:
  - *Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Oct. 2011)*

Categories of Scope 3 Emissions (Upstream Emissions)

1. Purchased Goods and services
2. Capital goods
3. Fuel and energy-related activities (beyond Scope 1 and 2)
4. Upstream transportation and distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Upstream leased assets

Categories of Scope 3 Emissions (Downstream Emissions)

9. Downstream transportation and distribution
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Downstream leased assets
14. Franchises
15. Investments

Biogenic CO2 Emissions

- Definition: "CO2 emissions from the combustion or biodegradation of biomass"

- Biomass: "Any material or fuel produced by biological processes of living organisms, including organic non-fossil material of biological origin (e.g., plant material), biofuels (e.g., liquid fuels produced from biomass feedstocks), biogenic gas (e.g., landfill gas), and biogenic waste (e.g., municipal solid waste from biogenic sources)."

Source: Scope 3 Standard, p. 135.

Reporting Biogenic Emissions Using The GHG Protocol

- Example: Corporate Fleet using both diesel and biodiesel
- Analysis: Must report the direct CO2 emissions separately
  - "Direct CO2 emissions from the combustion of biomass shall not be included in scope 1 but reported separately" [Corporate Standard, p. 25]
  - Note: Emissions of other GHGs (CH4, N20) still must be reported within the proper scope. [Scope 3 Standard, p. 62]

- Rationale: consistency with national carbon inventory practices (emissions are counted when/where trees are cut, not where they are burned).

Carbon Accounting Comparison Chart

GHG Protocol	EPA GHG Rule
Voluntary reporting for companies (any size) -Emissions reporting based on self-defined organizational and operational boundaries	Required reporting for certain "facilities" -Emissions reported at facility level only
Purpose: Increased transparency for companies	Purpose: International Reporting; and Information for future policy and regulation
Global Warming Potentials: "Should" use values from most recent IPCC Assessment Report, but "may" use other IPCC Assessment Reports.	Global Warming Potentials: IPCC – Second Assessment Report *Note: Proposed Rule (2013) would conform with Fourth Assessment Report*

Comparison Chart

GHG Protocol	EPA GHG Rule
Scope 1 reporting: Required (details, *infra*)	Scope 1 reporting: Some Required (details, *infra*)
Scope 2 reporting: Required	Scope 2 reporting: None
Scope 3 reporting: Optional	Scope 3 reporting: None
Biogenic Emissions Reporting Required: Yes Report Direct CO2 emissions separately	Biogenic Emissions Reporting Required: Yes Report Direct CO2 emissions separately (40 CFR 98.3(c))

Comparison Chart
Scope 1: Combustion

GHG Protocol	EPA GHG Rule
Scope 1 reporting: (Electricity/Heat/Steam) Reporting Required: --No mtCO2e threshhold	Electricity/Heat/Steam 40 CFR Part 98 – Subpart C (General Stationary Fuel Combustion) Reporting Required: --Facilities with ≥ 25,000 mtCO2e

Comparison Chart
Scope 1: Chemical Processing

GHG Protocol	EPA GHG Rule
Scope 1 reporting: (Physical/Chemical processing) Reporting Required: Yes --No limitation on types of industry --No mtCO2e threshold Nonexclusive Examples: Adipic acid Aluminum Ammonia Cement Waste Processing	Physical/Chemical Processing Reporting Required: --Only for specific industries 40 CFR Part 98 Adipic Acid: Subpart E Aluminum: Subpart F Ammonia: Subpart G Cement: Subpart H Municipal SW Landfills: Subpart HH Manure Management: Subpart JJ

Comparison Chart
Scope 1: Mobile Sources

GHG Protocol	EPA GHG Rule
Scope 1 reporting: Transportation – Mobile Source Emissions (materials, products, waste and employees) Reporting Required: Yes --No limitation on types of industry --No mtCO2e threshold	Transportation -- Mobile Source Emissions (materials, products, waste and employees) Reporting Required: Generally, none. *Various Industry-Specific Exceptions, including:* 40 CFR 98 – Subpart W (Petroleum Natural Gas Systems) --limited exceptions for portable non-self-propelled equipment associated w/well pad for onshore petroleum and natural gas production

Comparison Chart
Scope 1: Fugitive Emissions

GHG Protocol	EPA GHG Rule
Scope 1 reporting Fugitive Emissions Reporting Required: Yes --No limitation on types of industry --No mtCO2e threshold Nonexclusive Examples: -Equipment leaks -Methane emissions from coal mines -Refrigeration/air conditioning leaks -Methane leakage from gas transport	Fugitive Emissions Reporting Required: Generally, none. *Various Industry-Specific Exceptions, including:* 40 CFR 98 – Subpart FF (Underground Coal Mines) --methane venting 40 CFR 98 – Subpart W (Petroleum Natural Gas Systems) --equipment leaks, vented sources and flares

Case Study: Delta Air Lines, Inc. 2011 Carbon Accounting

Sustainability Report	EPA GHG Rule
Total Scope 1, 2, and 3 Emissions: 38,637,807 mtCO2e Total Scope 1 Emissions: 31, 948,708 mtCO2e Biogenic CO2 = None Report covered international facilities/flights	Total Subpart C Emissions: 47,936 mtCO2e Biogenic CO2 = None

- Sources:
  - 2011 Corporate Responsibility Report, Delta Air Lines, Inc.
  - EPA "Envirofacts": http://oaspub.epa.gov/enviro/GHGReport.html?pFacId=1005211&pSp=0&pReportingYear=2011

Case Study: Mohawk Industries 2011 Carbon Accounting

Sustainability Report	EPA GHG Rule
Total Direct (Scope 1) Emissions: 858.85K mtCO2e Total Indirect Emissions: 1.13M mtCO2e Biogenic CO2 = 262,717 Report excluded product and refrigerant emissions	Total Subpart C Emissions: 40,841 mtCO2e Biogenic CO2 = None Reporting only for Dalton Plant

- Sources:
  - 2011 Corporate Responsibility & Sustainability Report, Mohawk Industries, Inc.
  - EPA "Envirofacts": http://oaspub.epa.gov/enviro/GHGReport.html?pFacId=1008021&pSp=0&pReportingYear=2011

Further Considerations

- Are different methods problematic?
- Should EPA adopt a broader framework?
- (How) should EPA regulate Biogenic CO2 emissions?

Speaker

Matthew Mattila is an Environmental Attorney and Of Counsel in the Atlanta office of Miller & Martin PLLC. Mr. Mattila received his law degree from Tulane in 2001 and has counseled clients on environmental and sustainability issues for over a decade. He regularly provides advice on environmental compliance programs and the legal impacts of sustainability reporting.