An overview of the accounting for social and environmental co-benefits

The CARBONplus Online Conference

June 9 – 13 2008

International Institute for Industrial Environmental Economics IIIEE – Lund University

Environmental Management and Policy Masters Students – Batch 14

CARBONplus

The aim of this presentation: to describe the different methodologies upon which the CARBONplus accounting tool will be built

The presentation will be divided in three parts:

1. In the "**Methodology based on existing techniques**" part**,** we will apprehend the existing accounting methodologies including social and environmental considerations

2. Then we will assess the **different existing guidelines**, in order to identify proper indicators to develop an over-all accounting methodology to link issues related to sustainable development and climate change

3. Finally we will tackle the **main challenges** and

CARBONplus

I. Methodology based on existing techniques

1- EMA: Environmental Management Accounting

2- FCA: Full Cost Accounting

3- ABC: Activity Based Costing

II. The different guidelines: what will be counted?

III. Challenges and potential means

CARBONplus

I.The existing methodologies

1- EMA: Environmental Management Accounting

• Procedures for internal decision-making (1):

- Including both physical procedures for material and energy consumption,

- Including flows and final disposal,

- Including monetarized procedures for costs, savings and revenues related to activities with a potential environmental impact

• Dual goal (2) :

- to assess the social and the environmental costs and benefits created by the activities

-to develop performance indicators

(1) United Nations Division for Sustainable Development (UNDSD) (2001)

(2)US EPA

CARBONplus

I.The existing methodologies

2- FCA: Full Cost Accounting (US EPA definition)

• Full Cost Accounting (FCA): systematic approach for identifying, summing, and reporting the **actual costs of solid waste management**.

•FCA considers past and future outlays, overhead (oversight and support services) costs, and operating costs.

•FCA focuses on the flow of economic resources (assets) and **recognizes costs as resources are used or committed**, regardless of when money is spent.

• The 5 principles of the methodology:

-Accounting for costs rather than outlays
-Accounting for hidden costs
-Accounting for overhead and indirect costs
-Accounting for past and future outlays

I.The existing methodologies

3- ABC: Activity Based Costing

• ABC is a costing model that identifies the cost pools, or activity centers, in an organization and assigns costs to products and services (cost drivers) based on the number of events or transactions involved in the process of providing a product or service. It is also considered as a **continuous improvement process.** (US EPA definition)

•The 4 principles of the methodology (University of Pittsburg):

-More accurate cost management methodology

-Focuses in indirect costs (overhead)

-Traces rather than allocates each expense category to the particular cost object

-Makes “indirect” expenses “direct”

CARBONplus

I. Methodology based on existing techniques

II. The different guidelines: what will be counted?

1- Cost-effectiveness

2- Co-benefits

3- Data methodology ideas

4- Existing example: the Social CarbonTM

III. Challenges and potential means

II.The different guidelines: what will be counted?

In that part, we will assess the different existing guidelines helping us creating an accounting tool used specifically for the projects promoted by CARBONplus.

A dual consideration based on cost effectiveness analysis and on co-benefits evaluation will be enhanced to create a so-called triple bottom line assessment.

We will divide our reflection on 4 specific topics:

1- Cost-effectiveness
2- Co-benefits
3- Data methodology ideas: data specifications exist for a number of assessment areas
4- Existing example: the Social CarbonTM

II.The different guidelines: what will be counted?

1- Cost-effectiveness (World Bank Operations Evaluation Department (1))

- Financial or other resource savings, and increased revenue;
- Increased income and employment for the target population;
- Improved utilization of public funds;
- Improved quality of services; and
- Integrating economic and social concerns into development policies

CARBONplus

II.The different guidelines: what will be counted?

2- Co-benefits (1/3)

• Goal of CARBONplus: assess sustainability development for the ongoing projects

• Starting point: the Global Reporting Initiative (GRI)

- Economic
- Environmental
- Social Performance: Labor Practices & Decent Work
- Social Performance: Human Rights
- Social Performance: Society

CARBONplus

II.The different guidelines: what will be counted?

2- Co-benefits (2/3)

• Other indicators shall be considered and merged with the GRI indicators such as the Gold Standard indicators (1):

- Local/global environmental sustainability
- Social sustainability and development
- Economic and technological development

CARBONplus

II.The different guidelines: what will be counted?

2- Co-benefits (3/3)

• Considering the Millennium Development Goals (MDG) to identify proper indicators to address specifically climate security, ethics and justice:

- Eradicate poverty and hunger
- Achieve primary education
- Promote gender equality
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS and malaria
- Ensure a sustainable environment
- Global cooperation

CARBONplus

II.The different guidelines: what will be counted?

3- Data methodology ideas: data specifications exist for a number of assessment areas

•The Best Foot Forward (1) existing data specification and collection: a starting point

•The Best Foot Forward table, to assess the sustainable development goal of the projects, considers:
-Waste and recycling
-Use of resources
-Purchasing
-Transport
-Pollution prevention
-Raising awareness and advice

II.The different guidelines: what will be counted?

4- Existing example: the Social CarbonTM

• Social CarbonTM methodology:

- set of diagnostic assessments of communities affected by emission reduction projects, and of the projects themselves.
- a baseline (Point Zero) is created at the beginning of the project,
- diagnostic assessments repeated over time to provide a moving picture of the contribution to sustainable development.

• Assessment made according to the six Methodology Resources: carbon, biodiversity, social, financial, human and natural.

• Credibility of the Social CarbonTM enhanced: all the projects are validated by an independent third party (as well as their verified VER's)

I. Methodology based on existing techniques

II. The different guidelines: what will be counted?

III. Challenges and potential means

1- Controlling Transaction Costs

2- Ensure compliance verification

3- Ensure transparency

4- Payment for environmental services

III. Challenges

Through our researches, we identified different challenges that CARBONplus will have to face while implementing its accounting tool, including:

1- Controlling Transaction Costs
2- Ensure compliance verification
3- Ensure transparency

We also identified a potential means to consider:
4- Payment for environmental services

III. Challenges

1- Controlling Transaction Costs

• One of the first challenges to consider to improve the bottom line of the projects

• Introducing a cost control system can bring immediate savings and ensure that the projects remain competitive in the longer term

• Transaction Cost control carefully managed according to the three above-mentioned methodologies (EMA, ABC, FCA)

CARBONplus

III. Challenges

2- Ensure compliance verification (1)

-demonstrate additionality,
-avoid double counting,
- have a realistically calculated baseline and emissions reduction projection,
-account for leakage
-and be permanent.

CARBONplus

III. Challenges

3- Ensure transparency

- In order to achieve credibility
- And in order to enhance legitimacy
- By implementing a monitoring and validation process by third parties

CARBONplus

III. Challenges

4- Payment for environmental services (PES)

• Definition of the PES:

-No global definition of PES schemes

-But "series of classifications based on environmental services, structure, approaches, types of payments, and others which help define it."(1)

-Those who benefit from environmental goods and services pay those who provide these services. (2)

• Limitations of the PES:

-lack of knowledge concerning the links between ecosystem management, service provision and economic activity;

-absence of enabling policies and institutions to capture willingness-to-pay,
resulting in limited effective demand for ecosystem services; and;

-limited capacity to design and implement PES schemes, especially in developing countries.

• Conclusion about PES:

Potential schemes to be used in the future by CARBONplus, depending on their maturity and their legitimacy.