

# *Sustainable Accounting and Financial Management*



*Presented at AASHE 2006: The Role of  
Higher Education in Creating a  
Sustainable World*

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# What is sustainability?



Intergenerational  
Economic  
Environmental  
and Social  
Equity

# Overall Course Objective.



To introduce markets, investments, reporting techniques and analytical methods used by entities (governments, firms and individuals) to support business decisions that are sustainable.



Our process.

“Tell me and I will forget, show me and I might remember. But INVOLVE me and I will understand.”

# 18 Modules

- Disclosures and Reporting
- Decision-making
- Investment Analysis
- Market Mechanisms
- Other



# External Financial reporting of:



## ■ Environmental Liabilities

- ◆ Issue: Recording probable and estimable liabilities
- ◆ Teaching tool: Experience the continuum of events at Purity Oil superfund site that led to Chevron's reporting of a liability

## ■ Sustainable Business Practices

- ◆ Issue: Recording and Reporting Goodwill
- ◆ Teaching tool: It appears that the assets that really count are the ones that accountants can't count--Yet

# Sustainability Reporting



- Issues:
  - ◆ Comparison to required financial reporting
  - ◆ GRI voluntary guidelines
  - ◆ Define the scope
  - ◆ Where is sustainable reporting headed in the next 5 years?
  - ◆ Will (parts of) sustainability reporting be included in required external reporting?
    - ★ When sustainability is part of the strategic plan
- Teaching tool: Corporate sustainability reports i.e., FedEx/Kinko's
  - ◆ Fly under the radar
  - ◆ Obtaining upper management support

# External reporting of Green House Gases



- ◆ Issue: GHG Accounting and Reporting Standard
  - ★ Inventory GHG
  - ★ Set GHG target
  - ★ Reduce GHG
- ◆ Set Boundaries
  - ★ Organizational boundaries
  - ★ Operational boundaries
- ◆ Teaching Tool: Stanford GHG Primer



# Sustainability Reporting Assurance



## ■ Issues:

- ◆ Who is requiring assurance?

- ◆ Assurance of:

  - ★ The report

  - ★ The underlying management systems

  - ★ Governance

# Balanced Scorecard basics

- Issue: Capture qualitative performance indicators
- Teaching tools:
  - ◆ Balanced Scorecard basics
  - ◆ Internal assessment and reporting
  - ◆ Ties corporate metrics to strategy
  - ◆ Considers 4 perspectives including learning/growth, business process, customer and financial
  - ◆ Expanded to sustainable balanced scorecard



# Sustainable Management Accounting – Costing Issues



- Issue: Financing and Costing a Cleanup site
  - ◆ Which generation should pay for the cleanup?
    - ★ Past/current/future or some combination
- Resource: Chesterfield Municipal Landfill
  - ◆ Municipal Bonds and service rate increase

# Sustainable Management Accounting



- Issues: Proper allocation of environmental costs to products for product introduction, retention and elimination decisions
- Current costs
  - ◆ Past costs
  - ◆ Future costs from retroactive regulation
- Resource
  - ◆ Specialty Glass Case

# Socially responsible investing



## ■ Issues:

- ◆ financial performance and social/sustainable/ethical etc.. Performance
- ◆ Many vehicles are available
- ◆ Competitive with non SRI
- ◆ Screening methods
- ◆ Socially responsible firm is a signal of good management

## ■ Resources:

- ◆ Innovest Research and Rating methodology
- ◆ Harvard Case-ABB 2000
- ◆ Develop Socially Responsible Investing vehicle

# Market Mechanisms



- Issue: Regulatory response evaluation to Clean air act amendments, which originated from the Acid Rain problem ( $SO_2$ )
- Emerging area is in  $CO_2$  greenhouse gas trading
- Resource: Acid Rain: Southern Co. Case
  - ◆ Quantitative NPV analysis
  - ◆ Sensitivity to assumptions on permit prices, fuel prices etc.
  - ◆ Qualitative considerations

# Environmental Accounting

## ■ Issues

- ◆ Financial Accounting
- ◆ Finance (NPV analysis, estimating cash flows)
- ◆ Management Accounting
- ◆ Legal
- ◆ Ethical
- ◆ Public relations

## ■ Teaching tool

- ◆ Multipaint Inc.

★ Producer of environmentally friendly paints



# National Income Environmental Accounting



- ◆ National Government level accounting
- ◆ How do we adjust national income accounting to include the use of
  - ★ renewable
  - ★ non renewable resources
  - ★ environmental degradation



# National Income Environmental Accounting



- National Income  
Environmental Accounting
  - ◆ Genuine Progress Indicator
    - ★ An alternative to GDP
    - ★ A measure of well-being
  - ◆ A Comparison of
    - ★ 9 countries

# Social Return on Investment



- ◆ A compliment to the financial bottom line
- ◆ Computed on the same investment as financial ROI
- Distributed Generation Technologies
  - ◆ A sophisticated case of SROI

# Eco Efficiency



- ◆ method to provide information on environmental performance vis-à-vis financial performance
- ◆ Normalized by net value added by the firm
- ◆ Guideline areas
  - ★ Water use
  - ★ Energy use
  - ★ Global warming contribution
  - ★ Ozone depleting substances
  - ★ Waste
- ◆ Case Example-Ciba Specialty Chemicals



*The world we have created today as a result of our thinking thus far has problems which can not be solved by thinking the way we thought when we created them.....*

*Albert Einstein*



*"Some people see the world as it is and ask "Why?"*

*I see the world as it can be and ask "Why not?"*

*John F. Kennedy*