A silver revolver with a gold-colored handle and a sheriff's star badge are shown on a dark surface. The revolver is positioned diagonally across the frame, and the star badge is in the foreground. The background is dark with a blue and black wavy graphic at the top.

Carbon Accounting *New Frontier or Wild West*

Croydon Members Network
7 April 2011

Raj Gandhi & Carlison Morris

Outline

Presentation:

- Climate Change & Environmental Reporting
- The Kyoto Protocol
- Post Kyoto
- Tackling Climate Change
- UK Climate Change Act
- Carbon Accounting & Reporting
- ACCA Research
- Expert Perspectives
- Case Study

Facilitated Discussion / Carbon Quiz

Climate Change & Environmental Reporting

Intergovernmental Panel on Climate Change (IPCC) reported:

- Increasing global temperatures
- likely due to greenhouse gases (GHG)
- Evidence emissions will grow
- would cause further warming
- Induce changes during 21st century

GHG types covered:

- carbon dioxide
- methane
- nitrous oxide
- Hydrofluorocarbons
- perfluorocarbons and
- sulphur hexafluoride

The Kyoto Protocol

The 1992 Rio Earth Summit created Convention on Climate Change

The treaty (1994) aims to stabilise GHG concentrations

Since then, implementation has been negotiated at annual Conference of the Parties (COP), the first took place in 1995

Includes updates (called 'protocols') that set mandatory emission limits

Principal update is the Kyoto Protocol, adopted at COP3 in 1997

Kyoto Protocol gained ratification in 2005

Sets emissions reduction targets for industrialised countries (2008-2012)

Post Kyoto

COP's recent focus is on preparing for post 2012, when Kyoto agreement expires

Requires all signatory nations, c.190, to submit annual accounts of emissions

Nations must account credibly for the emissions and reductions

Need accounting, reporting and assurance at nation, entity and project levels

Requires ability / capacity to:

1. identify GHG emissions
2. establish / manage GHG-emission inventories
3. set emission reduction objectives / targets
4. monitor / analyse performance
5. report on / assure performance



Kyoto impact - Tim Jackson, Professor of Sustainable Development, University of Surrey

Unsure Kyoto has been effective in changing corporate behaviour.

However, people more aware of carbon

General idea of trading carbon was set in place in The Kyoto Protocol.

In the UK, impact on national policy, resulted in the Climate Change Act and the Carbon Reduction Commitment.

These will impact on industry.

It's a long process, interesting there hasn't been more mainstream business change, it's 12 years since Kyoto Protocol was drawn up.

Tackling Climate Change

Lord Nicholas Stern

... tackling climate change would cost 1% of GDP, consequences of not acting could cost up to 20 times that

Thus ambitious carbon reductions targets are being set

E.g. the UK's Climate Change Act 2008 set the target of reducing total GHG emissions by at least 80% below 1990 levels by 2050

Recent Developments

Carbon Accounting

UK's Climate Change Act 2008

Reporting Burden

ACCA Research on Disclosures

Recommendations Arising

Expert perspectives on corporate responses

Case Study - Royal Dutch Shell plc

UK's Climate Change Act 2008

The GHG Protocol's Corporate Accounting and Reporting Standard:
*...most globally recognised reporting standard to measure / disclose
GHG emissions*

UK's Climate Change Act 2008:
*...reporting of carbon emissions mandatory for large- and medium-
sized enterprises from April 2012*

Carbon Reduction Commitment involves introduction of UK-based
emissions trading scheme, similar to that in the EU

UK's Climate Change Act 2008

Mandatory for large commercial/public sector organisations in 2010

Participation involves emissions reporting / target setting

Carbon Accounting

Accounting and reporting is voluntary

The Ethical Corporation Institute reports:

...based on a survey of FTSE 500 companies, found 34 different carbon emission measurement methodologies...

...makes data comparison impossible

“We must have a globally-accepted carbon accounting and reporting standard – and accountants need to work with other professionals”

ACCA's Dr Steve Priddy



Reporting Burden

Professor Mervyn King, SC, Chair of GRI Board

If companies are compelled to report or explain how they are impacting on society and the environment,

that will bring corporate social responsibility (CSR) issues to the fore.

The compulsion to report will help people change.

Reporting Burden

Entities increasingly required to report on GHG emissions...enable levels to be monitored...increase pressure on high emitters

Highlight areas resulting in particularly high emissions

Also highlight business opportunity, as the 'green economy' develops

Reporting Burden

The annual Carbon Disclosure Project (CDP) survey

3,000 companies participated in 2008

collates information on carbon risks / opportunities

greenhouse gas (GHG) emissions accounting

GHG performance and climate change governance

Findings confirm climate change reporting is still in early stages...

...there is plenty of scope for improvement



ACCA Research on Disclosures

Explores how climate change disclosures of
'high impact', developed-nation based, multinationals
have expanded over a 6 year period

*Results show disclosures have doubled over 2003 to 2008 but, overall,
fall far short of what informed financial statement users actually want*

ACCA / GRI Recommendations

Policy

- include operational / product climate change policies in annual reporting

Governance and strategy

- explain how policy is governed / managed

Risk

- demonstrate clear process for identifying and managing risks

GHG emissions

- disclose detailed trend data (e.g CO2 per tonne of product)

ACCA / GRI Recommendations

Mitigation and adaptation

- disclose attempts to mitigate climate change impacts/emissions

Credibility

- disclosures should be credible and robust



Expert perspectives on corporate response

**Martin Hiller, Head of Communications and Campaigns, WWF
Global Climate Change Initiative**

Business world's response to climate change has been timid.

Some sectors like renewable energies, are pushing ahead.

Obvious enemies to change – the oil and coal industries.

Lots of people sit on the fence.

They need legislation to encourage them to take action.

Investors need clarity beyond 2012 about what regimes will look like.

Now a question for heads of state and heads of government to address.



Corporate policy and other weaknesses
**Rory Sullivan, Head of Responsible Investment, Insight
Investment**

Specific issues

Quality of inventory data is mixed.

Lack of clarity around scope of reporting, whether all GHGs covered.

Most companies do not conduct assessments of risks and opportunities.

Climate change policies generally weak.

Many have policy on emissions, but few have explicit reduction plans.

Many support market-based emissions trading, but support is qualified by comments about not harming company's competitive position.

Overall, the level of corporate support for strong / effective public policy action remains weak.

Case Study

Royal Dutch Shell plc - Accounting Issues

Carbon management raised a variety of accounting issues:

- How should carbon offset credits be accounted for?
- How should allowances be treated from an accounting perspective?
- How should they be valued?
- If carbon allowances are traded with third parties or amongst subsidiaries within a company, what are the tax implications?
- Will the latter issues be considered material in an audit?



Case Study

Royal Dutch Shell plc - Accounting Policy

- Work with Group Auditors (KPMG and PWC)
- Reference IASB advice on accounting for Emission Credits
- Provide guidance by teleconference to c.50 senior managers (across the Asia, US, Middle East, Africa and Europe)
- Business sectors (OP, EP, Chemicals, etc)
- Formulate new accounting policy

Case Study

Royal Dutch Shell plc - Accounting Policy

- Request entities to put in place accounting system to report on all Cap and Trade Emission Rights Schemes
- Implement periodic tracking/monitoring/reporting systems for actual versus permitted emissions
- Ensure proper recording in Profit & Loss account
- Record emissions assets and liabilities in the Balance Sheet



Facilitated Discussion

All Delegates Participation

Key Issues / Concerns

Carbon Quiz



How much water does it take to produce 1lb of beef?

- 128 gallons
- 586 gallons
- 1799 gallons



How much water does it take to produce 1lb of beef?

- 128 gallons
- 586 gallons
- 1799 gallons


Which nation has the highest average CO2 output per capita?

- China
- UK
- USA

Which nation has the highest average CO2 output per capita?

- USA 20 tonnes
- UK 10 tonnes
- China 3.5 tonnes

Source: BBC.com <http://news.bbc.co.uk/1/hi/6769743.stm>




How many human deaths per year does the WHO attribute to climate change?

- 1,500

- 1,500,000

- 150,000



How many human deaths per year does the WHO attribute to climate change?

● 1,500

● 1,500,000

● **150,000**

How much has acidity of ocean surfaces increased due to CO₂ emissions?

- 20%

- 30%

- 45%

How much has acidity of ocean surfaces increased due to CO2 emissions?

● 20%

● 30%

● 45%

How much global electricity is produced from renewable sources?

- 1%
- 5%
- 8%

How much global electricity is produced from renewable sources?

● 1%

● 5%

● 8%



Environmental cost

- What is environmental cost?
- How well have businesses considered these costs?

Measurable impact on demand / pricing or politically driven?

Do Carbon markets work?

- Are targets restrictive enough?
- Can we reliably measure emissions?
- Is there an effective market?

What Do YOU Think?

Accounting for Carbon

- IFRIC 3 (in a nutshell)
- Current Practice
 - “Activity based” KPMG 2008
 - “Cost with Balance at Market Value”
- Future proposals
 - IASB Emissions trading schemes project

Accounting for Carbon

- IFRIC 3
 - Issued in December 2004.
 - Rights to emit (allowances) treated as intangible assets and measured at fair value.
 - Difference between value of allowances issued and amount paid for them treated as a gov't. grant.
 - Liability recognised for obligation to transfer allowances.
 - Measurement based on fair value of allowances to be surrendered.

Accounting for Carbon

- IFRIC 3
 - Withdrawn in June 2005 in response to concerns raised by EFRAG and others regarding the “accounting mismatch”.
 - And the limitations of the EUETS at the time making an interpretation less urgent.



Accounting for Carbon

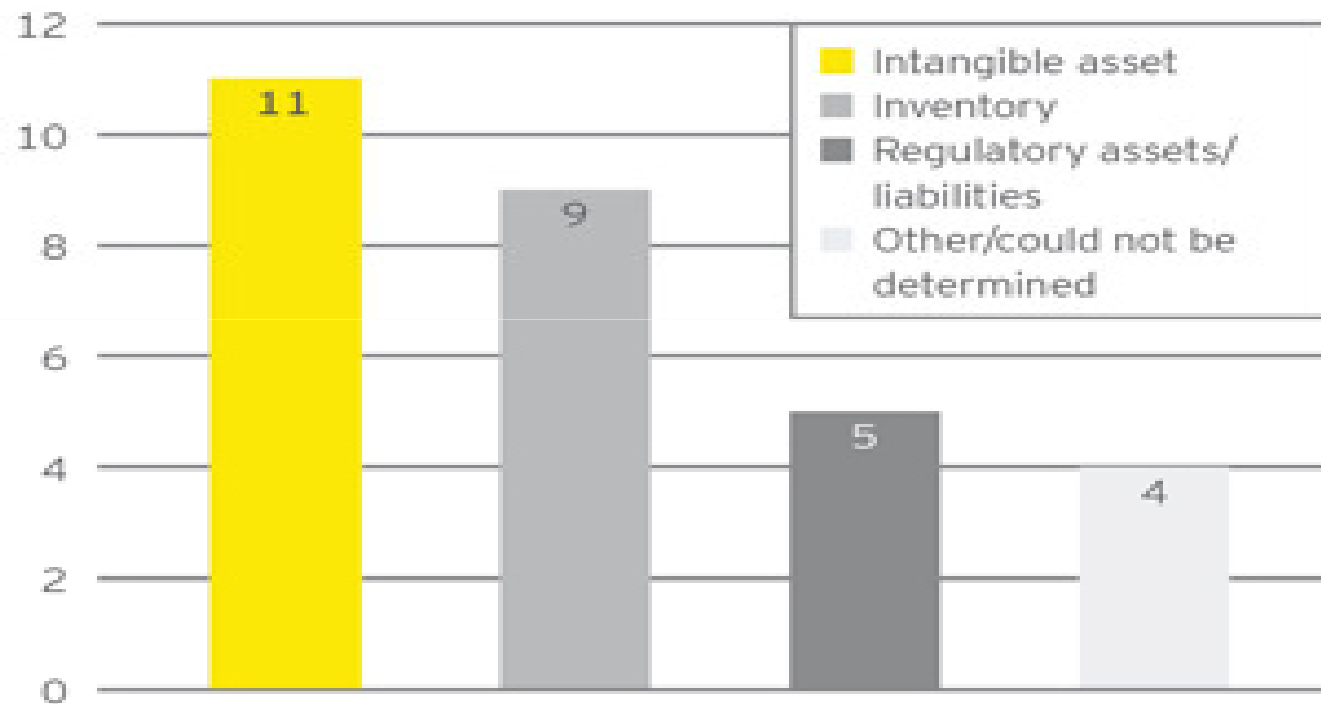
Current Practice

- In most cases the allowances are being measured at cost which is close to zero when granted.

“Activity based approach” Proposed by KPMG 2008

- Here the treatment of the allowance as an intangible/investment or inventory is dependent on the nature of the activity that the company is involved in.

Methods of accounting for emissions credits or allowances



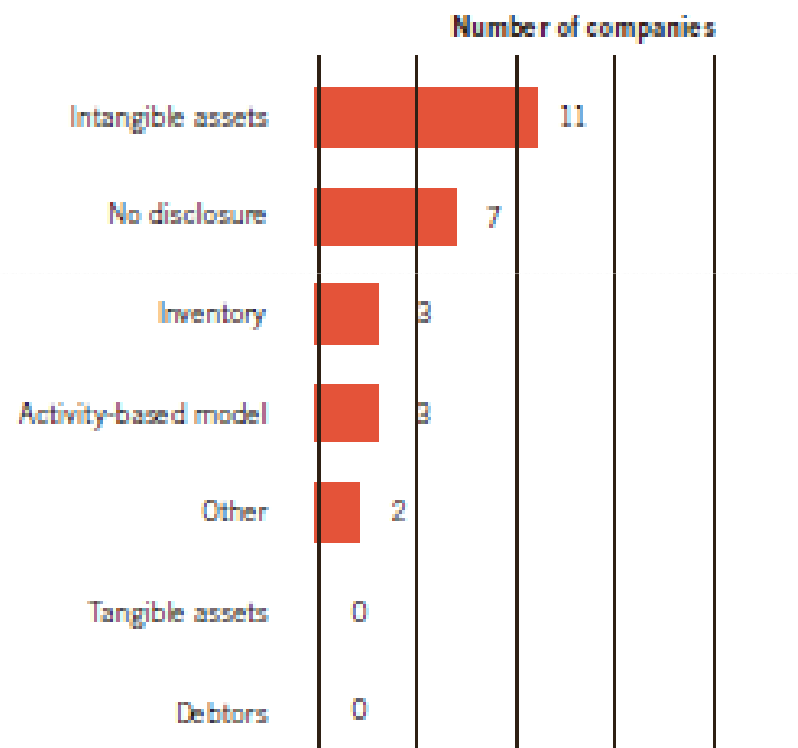
Based on a survey of US public registrants with revenues between \$1 billion and \$100 billion for annual filings occurring between 1 February 2009 and 13 September 2009.

Source: Ernst & Young - <http://www.ey.com/US/en/Industries/Oil---Gas/Carbon-market-readiness---4---Accounting-guidance-for-emissions-programs>

Figure 4.1: Granted allowances – initial recognition



Figure 4.2: Purchased allowances – initial recognition



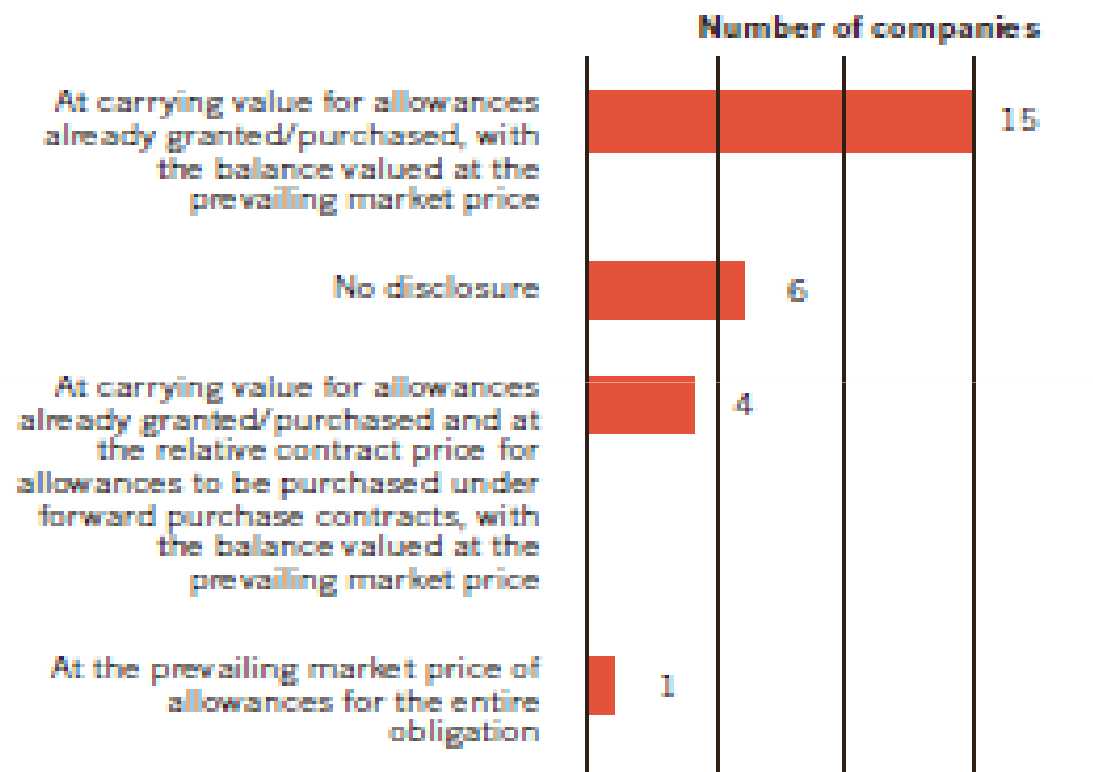
Source: ACCA paper “Accounting for Carbon” 2010 - http://www.accaglobal.com/pubs/general/activities/research/research_archive/rr-122-001.pdf

Accounting for Carbon

Current Practice

- Obligations are often measured at “Cost with Balance at Market Value”
 - Here the obligation to surrender allowances are recognised at cost of the allowance plus the market value of any allowances that need to be purchased on the market to settle the obligation.
- This option was prohibited by IFRIC 3

Figure 4.7: Measurement of liabilities



Source: ACCA paper "Accounting for Carbon" 2010 - http://www.accaglobal.com/pubs/general/activities/research/research_archive/rr-122-001.pdf



Accounting for Carbon

Future proposals

- IASB /FASB Emissions trading schemes project
 - Are emission allowances assets?
 - Initial recognition of allowances
 - Subsequent measurement of allowances
 - Recognition and measurement of surrender obligations
 - Overall financial effects



Accounting for Carbon

How relevant are these proposals?

Taxation

- Climate change levy
- Emissions tax?
- Land fill tax?
- Airline fuel tax?
- Petrol tax and perverse VAT effect

Can taxation really make a difference?



What About Subsidisation

- Energy saving trust
- Congestion charge exemptions
- Available subsidies
- Potential innovations

Why so little take up?

Legislation – Weak or Strong?

- EU Directives
 - Waste electrical equipment
 - Land fill
- Relevant UK legislation
- Legislation from other parts of the world

*Can you really change behaviour
with legislation?*



What Do YOU think??

What can we do differently?