## Dec 2009

CEARC iSORP discussion paper no. 5

# Environmental sustainability reporting guidelines

John Maddocks, Saint Mary's University

December, 2009

Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC) Saint Mary's University, Halifax, Nova Scotia

## CEARC iSORP discussion paper no. 5

Environmental sustainability reporting: a connected approach

#### December, 2009

The Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC) is sponsored by:

- Saint Mary's University
- Canadian Institute of Chartered Accountants
- The Co-operators
- Midcounties Co-operative
- Co-operatives Branch Service Nova Scotia and Municipal Relations
- Co-operative Housing Federation
- United Farmers of Alberta
- Nova Scotia Co-operative Council
- Scotsburn Dairy

Published by CEARC Department of Management Sobey School of Business Saint Mary's University Sobey Building, Robie Street Halifax, Nova Scotia B3H 3C3 ©CEARC, 2009

Director of Research: John Maddocks

E-mail: john.maddocks@smu.ca

Website: www.coopaccounting.coop

### Contents

1.	The iSORP project	3
2.	Introduction	4
3.	Proposals	5
4.	Example of report format	9
5.	Questions for feedback	11

#### 1. THE ISORP PROJECT

This discussion paper is the fifth in a series aimed at developing content for an international Statement of Recommended Practice (iSORP) for co-operative accounting and reporting. This paper focuses on environmental sustainability reporting.

You can find other iSORP discussion papers and CEARC working papers at the CEARC website: www.coopaccounting.coop. A draft conceptual framework for co-operative accounting can be downloaded from the website. The conceptual framework provides another component of a co-operative accounting framework and should be considered alongside the iSORP discussion papers.

#### **Comments welcome**

We welcome all and any comments regarding any of our iSORP discussion papers and we do feed these in to our review process. A series of questions are included at the end of the paper. Comments will be reported to the CEARC advisory committee and CEARC board and fed into the review and revision of the potential iSORP.

There is no set deadline for comments on this paper although our first review of comments will be completed prior to the production of a first version of the complete iSORP. This is likely to be in 2010.

#### 2. INTRODUCTION

The fourth IPCC<sup>1</sup> report published in 2007 stated that most of the observed increase in global average temperatures since the mid 20<sup>th</sup> century is likely to be due to the observed increase in human made greenhouse gas (GHG) concentrations. The IPCC put the likelihood at greater than 90%. The Stern Report (2007) describes climate change as 'the greatest and widest-ranging market failure ever seen'<sup>2</sup>. A recent UK Met Office report<sup>3</sup> argues that if GHG emissions continue to increase at current rates then it is likely that we will arrive at a 4 Centigrade increase in average temperatures by 2070, with catastrophic consequences.

Co-operatives have played an important part in the development of sustainability reporting and promotion of sustainable development. Having said that, this paper takes the view that there is a need to apply this experience to developing a more concise and focused form of reporting to be applied across all co-operatives, which can assist in driving change at the intensity and speed required in order to offer the possibility for co-operatives to fulfill their potential and their environmental responsibilities to members and communities.

Accountancy can make an important contribution to tackling climate change by applying relevant skills and utilising its pivotal role in relation to financial decision making, planning, analysing, monitoring and reporting. This paper addresses the need to develop a form of environmental sustainability reporting that:

- provides a concise, straightforward, and comparable measure of performance
- can be implemented by all co-operatives irrespective of size
- focuses on a few key environmental performance indicators
- connects non-financial indicators with financial information
- sets out a minimum while being flexible enough for those wishing to extend the report to include other environmental, social or economic indicators

This discussion paper takes the view that:

- 1. Monitoring and reporting on environmental sustainability performance is essential for any co-operative engaging in mitigating and adapting to climate change.
- Non-financial indicators must be linked to relevant financial indicators in order to assist the embedding of sustainable development in the co-operative's planning, decision making and operational processes.
- 3. Sustainability reporting must be kept short and limited to a few key indicators in order to provide focus, clarity, comparability, transparency and to enable widespread use.
- 4. The Accounting for Sustainability Connected Reporting Framework<sup>4</sup> provides a suitable model for adoption across a wide range of co-operative organisations.
- 5. Given the urgent need to address climate change it is reasonable to initially focus on environmental indicators, although longer term it will be vital to develop key social and economic sustainability indicators of relevance to co-operatives.

What follows is a first draft of proposed iSORP content regarding reporting on environmental sustainability performance.

<sup>&</sup>lt;sup>1</sup> International PPC (2007), Climate change, IPCC

<sup>&</sup>lt;sup>2</sup> HM Treasury (2007), Stern Review: The economics of climate change, HM Treasury, London

<sup>&</sup>lt;sup>3</sup> Betts, R., Sanderson, M., Hemming, D., Booth, B., Lowe, J., Jones, C., New, M.,(2009) 4 degrees of global warming: regional patterns and timing, *Met Office Hadley Centre, Exeter, UK, & Tyndall Centre, University of Oxford, Oxford, UK* 

<sup>&</sup>lt;sup>4</sup> See Accounting for Sustainability website: <u>www.accountingforsustainability.org.uk</u>

#### 3. PROPOSALS FOR REPORTING ON ENVIRONMENTAL SUSTAINABILITY

- 1. The annual report should include a section reporting on the co-operative's environmental sustainability performance. This should include: a brief narrative commenting on performance and future plans; and an environmental sustainability report which focuses on a table of financial and non financial information covering the organisations environmental impact in relation to:
  - a. Greenhouse gas emissions
  - b. Waste generated
  - c. Finite resource use; in particular:
    - I. Energy used
    - II. Water used
    - III. Optional reporting on other finite resource use
- The report format to be adopted should be based on the 'Connected Reporting' format promoted by the Accounting for Sustainability Project<sup>5</sup>. A report example is included in section 4 of this paper (see page 9).
- 3. Sustainability is broader than environmental sustainability and broader than the triple bottom line view. For example, in addition to environmental, social and the economic performance, we could make the case for also including justice and equity as additional aspects which are certainly of relevance to co-operatives and could usefully be included under the heading of sustainability<sup>6</sup>. While this discussion paper focuses on reporting on environmental performance, we recognise that this represents only part of the picture in terms of sustainability reporting. Longer term, a more comprehensive form of sustainability reporting is required.
- 4. Co-operatives are encouraged to adopt additional sustainability performance indicators, but to also consider the benefits of staying focused on just a few key indicators. So, for example, the co-operative may want to identify just one, two or three key indicators for each aspect of sustainability. The choice of key indicators is likely to be influenced by the nature of the co-operatives activities.

#### **Report layout**

- 5. Environmental reporting information should be broken down into three subsections:
  - a) Greenhouse gas emissions
  - b) Waste
  - c) Finite resource use
- 6. Comparative data should be provided, covering up to five years. This historical data to be built up over time as each annual report is produced.
- 7. Key performance indicators should be included along with a brief narrative explaining impacts, trends and measures being taken to correct and improve performance.
- 8. A brief description of the approach taken in calculating greenhouse gases should be included, which includes reporting on the scope of emissions included.

<sup>&</sup>lt;sup>5</sup> Further information on the Accounting for Sustainability project and examples of reporting based on this model can be found at: <u>www.accountingforsustainability.org.uk</u>

<sup>&</sup>lt;sup>6</sup> Nola Buhr (2007) mentions justice, equity and timeframe as additional aspects of sustainability not covered in the triple bottom line model.

9. Where changes in regard to the measurement, timing and boundaries of sustainability reporting have taken place during the year, these should be disclosed in the notes, preferably at the end of the sustainability report section.

#### Connected financial reporting

- 10. Expenditure associated with each of the areas reported on should be included in the report. This will be as follows:
  - Greenhouse gas emissions expenditure aimed at reducing emissions, including related staff training and education, renewable energy supplies, and offsetting.
  - Waste expenditure on waste disposal, recycling and reuse.
  - Water, electricity and other finite resources expenditure on finite resources purchased and consumed.
- 11. This information should be available through the co-operative's existing accounting and reporting systems.

#### Reporting greenhouse gas emissions

- 12. Reporting on greenhouse gas emissions should be based on the greenhouse gas protocol<sup>7</sup> and should include all scope 1 and scope 2 emissions (see the greenhouse gas protocol website for further information: www.ghgprotocol.org ).
- 13. Co-operatives may also opt to report on some or all identifiable and quantifiable scope 3 emissions. This discussion paper views scope 3 reporting as optional and recognises that collecting robust data on scope 3 emissions may present considerable challenges. Longer term it is expected that reporting of scope 3 emissions will become more commonplace.
- 14. Scope 1 are direct emissions which occur from sources owned and controlled by the organisation. Examples include: emissions arising from the co-operative's furnaces or boilers; and emissions from co-operative owned or leased vehicles.
- 15. Scope 2 are indirect energy emissions resulting from energy consumed by the cooperative which is supplied by another party. Examples include: electricity supplied; purchased heat or cooling.
- 16. Scope 3 are other indirect emissions. Examples include: staff business travel, external delivery and distribution services, purchased materials and consumables, use of owned and leased assets, contracted out activities.
- 17. Co-operatives should account for their emissions and internal emissions reductions on a gross basis. Separate net emissions figures can also be provided which will enable the co-operative to report on the use of renewable tariffs and carbon offsets. The figures should be prepared in accordance with the carbon accounting standards<sup>8</sup>.

<sup>&</sup>lt;sup>7</sup> The greenhouse gas protocol was developed by the Worlds Resources Institute and the World Business Council for Sustainable Development. It is used by the International Standards Organisation (ISO). See <u>www.ghgprotocol.org</u>.

<sup>&</sup>lt;sup>8</sup> The greenhouse gas protocol sets out accounting principles.

- 18. The metric used is the Carbon Dioxide Equivalent (CO2e) in tonnes. This captures information related to six greenhouse gasses (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>).
- 19. The Greenhouse Gas Protocol allows two approaches to setting reporting boundaries:
  - Equity share approach
  - Control approach
- 20. This discussion paper favours the control approach; which is where an organisation accounts for all of its emissions from operations over which it has control. This can be defined in financial or operational terms.

#### **Reporting waste**

- 21. The nature of the co-operative will affect the range and types of waste reported.
- 22. The report should include total volume of all waste and, where possible, this should be analysed into:
  - Waste recycled
  - Waste to landfill
  - Waste incinerated
  - Hazardous waste
- 23. Co-operatives may want to refer to the Global Reporting Initiative which includes guidance on waste reporting and specifically environmental indicator EN22: Total weight of waste by type and disposal method<sup>9</sup>.
- 24. The financial costs of handling and processing waste should be reported alongside the volume reported.

#### Reporting water use

- 25. The report should include direct water use measured in cubic metres. Direct water use covers water from suppliers, water from abstraction and water collected. All scope 1 and scope 2 water sources are included, i.e.:
  - Scope 1 Water owned or controlled by the co-operative, including lakes, reservoirs or bore holes.
  - Scope 2 Purchased water, steam or ice, including mains water supply, water coolers ad ice, delivery of water for the purposes of heating.
- 26. The report should include direct water usage analysed by source.
- 27. Co-operatives should refer to the Water Footprint Network at <u>www.waterfootprint.org</u> which was established in 2008 with the aim of developing a standard approach to water accounting and reporting.

#### Reporting energy use

28. The report should include all energy produced and consumed through sources owned or controlled by the co-operative as well as energy supplied to the co-operative.

<sup>&</sup>lt;sup>9</sup> For more information on the Global Reporting Initiative and the sustainability reporting guidelines, including EN22, see: <u>www.globalreporting.org</u>

29. Energy use should be reported gross with no netting of renewable or low carbon energy sources.

#### 4. EXAMPLE OF ENVIRONMENTAL SUSTAINABILITY REPORT FORMAT

#### Co-op Sustainability Report For the Year ended XX Month 2010



WASTE		2008	2009	2010	Graphical Analysis		
	Total waste		ххх	ххх	ххх	Tonnes	
Non- Financial	Hazardous waste	Total	ххх	ххх	Ххх		
Indicators	Non	Landfill	ххх	ххх	xxx		
(t)	hazardous waste	Reused and/or /Recycled	ххх	ххх	Ххх		
		Incinerated / energy from waste	ххх	xxx	ххх		
	Total disposal cost Hazardous waste disposal cost		Ххх	ххх	ххх	Non Haz Waste volumes and disposal routes	
Financial Indicators (\$k)			Ххх	ххх	Ххх	600	
	Non hazardous waste - disposal cost Incinerated energy from waste	Landfill	Ххх	ххх	ххх	500	
		Reused and/or Recycled	ххх	xxx	Ххх	400 Landfill waste Recycled waste Incinerated waste 200	
		Incinerated / energy from waste	ххх	ххх	ххх	100 0 08/09 09/10 Year 10/11 11/12	
TARGETS							
Performance against targets to date. Expected future performance against targets. Steps taken to support this.							
DIRECT IMPACTS							
Main areas and or activities associated with waste.							
INDIRECT IMPACTS							

Areas identified and actions taken to effect change externally.

FINITE RESOURCE CONSUMPTION - Water		2008	2009	2010	Graphical Analysis		
		Supplied	ххх	ххх	Ххх	m3	
Non- Financial Indicators	Water Consumption (M <sup>3</sup> )	Abstracted	ххх	ххх	Ххх		
Financial Indicators (\$k)	Water Supply Costs		XXX	xxx	XXX	80000 70000 60000 40000 30000 0 0 0 0 0 0 0 0 0 0 0 0	
TARGETS							
Performance against targets to date. Expected future performance against targets. Steps taken to support this.							
DIRECT IMPACTS							
Main areas and or activities associated with water consumption.							
INDIRECT IMPACTS							
Areas identified and actions taken to effect change externally.							

FINITE RESOURCE CONSUMPTION – Energy		2008	2009	2010	Graphical Analysis	
Non- Financial Indicators	Energy (kWh)	Electricity: Non- Renewable	xxx	ххх	ххх	Million Total energy usage
		Electricity: Renewable	ххх	ххх	ххх	60 - 40 -
		Gas	ххх	ххх	ХХХ	20-
		LPG	ххх	ххх	ххх	20
		Other	ххх	Ххх	ххх	0
Financial Indicators (\$k)	Total Energy Expenditure		ххх	ххх	ххх	Year
TARGETS						
Performance against targets to date. Expected future performance against targets. Steps taken to support this.						
DIRECT IMPACTS						
Main areas and or activities associated with energy consumption.						
INDIRECT IMPACTS						
Areas identified and actions taken to effect change externally.						

#### NOTES:

- 1. Details of emissions included in report, i.e. all Scope 1 and 2 emissions and whether any scope 3 emissions included.
- 2. Details of conversion rates used to account for carbon.
- 3. Details of any change to accounting policies or boundaries which impacts prior year, or year-on-year, reporting.
- 4. Details of any web published information supporting the report.

#### 5. QUESTIONS FOR FEEDBACK

CEARC is keen to receive feedback concerning any aspect of this discussion paper and including the ideas and views presented. In particular we would be interested in your views on all or any of the following:

- 1. Do you agree with the initial focus on environmental indicators?
- 2. Do you agree with the requirement to report on scope 1 and 2 greenhouse gas emissions and the optional reporting of scope 3?
- 3. Which approach do you favour regarding greenhouse gas reporting boundaries (equity share or control approach)?
- 4. Are there any additional items to include in regard to environmental sustainability reporting?
- 5. Are there any items currently listed that you feel are inappropriate for inclusion?
- 6. Are there any revisions you would recommend regarding the existing wording, structure and/or order of items?
- 7. Do you think that any of the above items would be better reported in the non-financial part of the annual report rather than in the notes to the financial statements?

Please send comments in writing by e-mail or mail to:

john.maddocks@smu.ca

John Maddocks Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC) Management Department Sobey School of Business Saint Mary's University Sobey Building Halifax Nova Scotia B3H 3C3 Canada

Please include your name and your organisation's name and address and indicate the paper you are commenting on.

There is no deadline for comments.

#### © CEARC, 2009

Published by CEARC Management Department Sobey School of Business Saint Mary's University Sobey Building Robie Street Halifax Nova Scotia B3H 3C3 Canada