

**UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT**  
**Geneva**

# **GUIDANCE MANUAL**

## **ACCOUNTING AND FINANCIAL REPORTING FOR ENVIRONMENTAL COSTS AND LIABILITIES**

### **PART 1. INTRODUCTION**



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# ***1. INTRODUCTION TO GUIDANCE MANUAL ACCOUNTING AND FINANCIAL REPORTING FOR ENVIRONMENTAL COSTS AND LIABILITIES***

## **Introduction**

Environmental financial accounting deals with accounting for and reporting on environmental transactions and events that affect, or are likely to affect, the financial position of an enterprise. One of the challenges is to ensure that 1) environmental costs and liabilities are accounted for by following relevant accounting standards or, in their absence, generally accepted accounting practices, and 2) the meaningful disclosure of the environmental performance of an enterprise is provided. A further challenge is to ensure that appropriate management accounting procedures are, where necessary, developed, and used, for instance, to cost out pollution controls, to compare alternative materials that can be used in manufacturing, and to investigate recycling alternatives.

## **Objective of the Manual**

The objective of this manual is to inform and give guidance on environmental accounting issues, and identify best practices that may be considered by national standard setters in the development of their own accounting standards, rules or regulations. The manual was originally designed as a training tool for the UNCTAD's workshop series on Environmental Accounting and Reporting. In order to explore the full range of possible disclosures on environmental issues, sections on environmental reporting and environmental performance indicators (EPIS) have been added to the manual. These complementary section reflect the findings of UNCTADs broader work programme.

It is not UNCTADs objective for actual guidelines or standards to be written during the workshop. An ultimate aim coming out of the workshops is for local partners to adopt this guidance material and to create local centres of excellence, promulgating this material. At the conclusion of the workshop, participants should:

- **be familiar** with the various issues of environmental accounting
- be able to begin to **integrate** environmental issues into conventional financial accounting, cost accounting and the financial statement audit
- **identify** areas where accounting guidance is needed
- **know** which enterprises are currently 'leading the field' in environmental accounting and their pronouncements; and be able to use these pronouncements for designing future guidance.

## Scope of the Manual

This manual is primarily based on work that has been, undertaken by the UNCTAD-ISAR<sup>1</sup> group, the European Accounting Advisory Forum, and accounting organisations and standard-setting bodies in Canada, the United Kingdom and the United States. A survey of other countries was undertaken, and responses were received from Brazil, China, the Czech Republic, Germany, Korea, Mauritius, the Netherlands, Pakistan, Poland, Russia and Switzerland. A number of countries indicated that they had Statements on the basic concepts on accounting similar to those that had been issued by UNCTAD-ISAR and the IASC, which, as is noted in the preamble to the *Position Paper*,<sup>2</sup> provide the basic underpinning for accounting for environmental costs and liabilities.

The *Position Paper Accounting and Reporting for Environmental Costs and Liabilities within the Existing Financial Reporting Framework (1998)* on which the manual is based deals with accounting for and reporting of environmental costs and liabilities arising from transactions and events that affect, or will likely affect, the financial position and results of an enterprise and, as such, should be reported in an enterprise's financial statements. The recognition and measurement of costs or events that are not absorbed by the enterprise are not covered.

## What It Is – What It Is Not

The manual covers only those environmental costs that can be dealt with under the existing financial reporting framework. These are often referred to as 'internal costs' and generally arise because of a transaction between the reporting entity and another party.

The manual does not cover the recognition and measurement of costs that are external to the entity, such as the impact of air pollution and water pollution on the environment, and that are not currently absorbed by the entity (often referred to as 'external costs'). It should be noted, however, that the boundaries of internal costs are not static. Legislation and other measures can impose an obligation on an entity to undertake specific action for which there was previously no such obligation, thereby converting an 'external cost' into an 'internal cost.' It should also be noted that a number of entities and industry associations are exploring appropriate ways of reporting 'external costs' relating to the environmental impacts of their operations.

## Technical updates

The 2002 edition of the manual includes technical accounting developments that have taken place since the release of the UNCTAD Position Paper in 1998 and additional teaching materials used by trainers during the UNCTAD workshop series.

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<sup>1</sup> The United Nations Conference on Trade and Development – (United Nations Intergovernmental Working Group of Experts on) International Standards of Accounting and Reporting.

<sup>2</sup> The technical position paper endorsed by the Inter-governmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) was presented on its fifteenth session February 1998.

To date there is no general statement that addresses the environment directly and the subject does not feature in the agenda of the International Accounting Standards Board (IASB). There is no international accounting standard requiring the automatic disclosure of any such items. In the absence of any mandatory reporting requirement the recognition, measurement and separate disclosure of environmental expenditures and liabilities is governed by the accounting concept of materiality.

The nearest the IASB has come to dealing with environmental issues directly is *International Accounting Standard (IAS) 37 on Provisions, Contingent Liabilities and Contingent Assets* whose appendices draw on environmental examples to illustrate accounting treatment. Accounting issues identified by IAS 37 will be subject to the application of the materiality concept. In addition, the International Federation of Accountants (IFAC) is currently working on proposals for an accounting standard for public sector bodies (*Exposure Draft 21 Provisions, Contingent Liabilities and Contingent Assets*) drawn up primarily from IAS 37. It is noteworthy that standards and related guidance are not always mandatory in the local context. IAS 37 is only currently subject to voluntary adoption (introduced 1 July 1999).

Across Europe national standards tend to take precedence. The UK's Financial Reporting Standard (FRS) 12 and IAS37 are almost identical standards on Provisions, Contingent Liabilities and Contingent Assets. From 2005 all listed companies within the European Union will be required to use International Financial Reporting Standards (IFRS's is the new name for International Accounting Standards).

ISAR is also pleased to acknowledge that the European Commission's 2001 *Recommendation on the recognition, measurement and disclosure of environmental issues in the annual accounts* compares favourably with ISAR's Position Paper.

## How to use the manual

As noted previously, this manual was prepared by UNCTAD as a guide to environmental accounting and reporting. It includes guidance on the use of financial and non-financial performance indicators of environmental performance. The manual has been designed as a starting point for all those interested in environmental accounting from policy makers and standard setters to practitioners and academics, trainers and students. It can be read in its entirety or each section can be read as a standalone unit of analysis.

UNCTAD's international workshop series provides one example of how the manual can be used. The manual was initially designed as the main background document for workshop participants. The three technical guidance sections formed the basic structure of each workshop. Workshop participants highlighted the use of the manual as both a classroom tool and a desktop reference guide. Full details of the workshop series including a list of workshop locations and agendas is posted on the UNCTAD web site.

## Layout of the manual

### • **Technical sections**

The manual is divided into three technical guidance sections on; Environmental Accounting, Liabilities and Costs in Financial Statements (section 2), Environmental Reporting (section 3), and Standardised Environmental Performance Indicators (section 4).

### • **Appendices**

The three technical sections share common Appendices that have been designed to add clarity of interpretation and further reference material on each subject matter. You may wish to add regional and local references if you deem this necessary. (For guidance on further tailoring of the manual to reflect regional/local issues see below)

### • **Caption boxes**

The *key points* in each section of the manual are contained within caption boxes. For example, in section two Environmental Accounting, Liabilities and Costs in Financial Statements technical points drawn directly from the ISAR position paper are highlighted using caption boxes. In other instances practical *examples* are highlighted in boxes. *Each box can be reproduced by trainers as a slide to highlight points or illustrate examples.*

### • **Questions and answers**

Each section of the manual contains *questions* for course participants/ students to work through. In some cases answers are provided in the text but in some cases questions have been deliberately left open so that the reader can form an answer specific to their own regional/ local priorities or role.

### • **Regional/local issues**

The manual represents ISAR's international guidelines on environmental accounting and reporting. It should be considered in line with local/regional issues and updates to recognise changes in legislation, regulations and local guidelines.

### • **Technical updates**

The manual was originally based on ISAR Position Paper released in 1998. This edition of the manual has been updated to reflect technical development between 1998 and 2002 in particular the development of IAS 37 and its reporting requirements. The ISAR committee has celebrated the introduction of this standard. As accounting regulations develop you may find it necessary to insert further adjustments.

### • **Further information**

Further details on the UNCTAD workshop series are available on the UNCTAD website and/or by contacting UNCTAD directly. ([www.unctad.org/isar](http://www.unctad.org/isar))

## Potential modifications to address regional and sectoral issues

The objective of the workshop and the manual is to open up the subject area of environmental accounting and reporting for debate and stimulate debate on the application of the guidance within a regional and local context. Over time, across locations and among different readers issues considered relevant are likely to vary. Thus, the reader should consider the application of guidance in light of local issues and be prepared to add to the manual to reflect local priorities.

Consider inserting caption boxes to add regional guidance and examples or questions that you believe are relevant (and/or are posed by local bodies). Additional references may be added to the appendix and web links established to other guidance providers (enterprises).

A list of regional issues identified during UNCTAD international workshop is available for reference on the workshop website. The list is provided as a starting point for debate and may be updated as necessary in light of your own experience.

*Answering the following questions may help you to identify local issues:*

- *Does your national accounting body issue any additional advice/guidelines on environmental accounting and reporting?*
- *Are there any requirements on enterprises (public or private) in your area to report on environmental issues to the government, shareholders, the stock exchange (for example as found in Thailand) or the local regulator (Environmental Protection Agency)?*
- *Do regional universities; professional training bodies or trade associations offer guidance on environmental accounting and reporting?*
- *Can you find similar examples of accounting and reporting by enterprises within your region? (Take a copy of the reports for future reference and insert the examples in the manual)*

Another example of how the manual can be used is to apply the guidance material to one specific industrial sector. The sector may for instance be chosen for its local dominance or perceived environmental impact. Two of the UNCTAD workshops were devoted to the steel sector at the request of local participants. A steel sector resource pack was designed by trainers to support the workshops in this instance. The pack provides practical examples of enterprises applying the guidance material contained within the manual. A similar preparation could be produced for/ by other sectors as a basis for debate.

*Ask yourself:*

- *What are the key industries operating in your area?*
- *Are you aware of any enterprises producing environmental accounts and reports?*
- *Do their trade associations offer any guidance on environmental accounting and reporting?*

Again, consider inserting caption boxes to add sector guidance, examples or questions that you believe are relevant. Additional references may be added to the appendix and web links established to trade bodies or reporting examples.

See UNCTAD steel sector resource pack for examples of the type of material that you may wish to *prepare for* a sector specific workshop or even prepare *during* a workshop.

## Designing a workshop based on the manual

If you are designing a workshop or other form of training course based on the manual there are a number of key questions that can help you get started. These are outlined below and can be considered in any order. The answers are likely to be related.

*What is the aim of the workshop? Why hold a workshop?*

Is the workshop to be used as a general introduction to environmental accounting and reporting or do you want it to have a more specific purpose (by sector or issue)? Consider local issues. As noted previously, the manual can be tailored for local issues in advance of the workshop and modifications can be added after the event to take account of additional issues/ examples raised. Alternatively, the workshop can be designed as a starting point through which to identify local issue and set regional priorities for action. In this aim the standard format manual is an ideal starting point (a number of UNCTAD workshops have operated on this basis see for example Brazil 1998). Think about whether or not there is a dominant industry sector operating in your area that you would like to influence? Do examples of reporting already exist? Good and bad they can be used during the workshop!

*Who is the workshop aimed at? How many participants do you envisage?*

Who do you want to engage; practitioners/academics, accountants/nonaccountants, industry/sectoral representatives, policy makers? You may decide to focus on one specific issue with one specific group of participants or engage a mixed group in debate?

*Where will the workshop be held? Who will pay the bill?*

Design factors will include the type and number of trainers matched against type and number of potential participants (practitioners or academics, accountants or non-accountants etc). Potential constraints may include the feasibility of workshop location, time-scale for the event, cost of administration offset against potential contribution from sponsors and/ or fees for participants. Note the profile of the workshop can be altered by choice of host and/or sponsor and the timing of the event to coincide with the release of local guidelines/ regulation.

Remember you may wish to:

- Select local writers to include additions to the manual as necessary.
- Select local speakers (see regional workshop agendas UNCTAD website for examples).
- Publish a copy of speeches made and provide a list of delegates to facilitate future local networking (see website for Indian workshop agenda/speeches for example and the list of delegates at the Geneva workshop).

- Set targets for the future. i.e. a programme of follow up events.

Further details on designing a workshop are provided in the UNCTAD train the trainers "guidance notes" on the workshop web site. This document was designed to support a training event for trainers of environmental accounting and reporting.

## The Importance of Environmental Accounting and Reporting<sup>3</sup>

Accounting serves several functions in an enterprise. One, financial accounting, is a score keeping and reporting tool; a standardised means for compiling and communicating financial information to external audiences. Another, management accounting, is supplying information that helps managers to plan and control enterprise activities, and to evaluate performance of an enterprise, both profitability performance and environmental performance. This includes complete systems for identifying, monitoring, and reporting corporate environmental impacts, and for integrating those impacts into corporate decisions on product costing, product pricing, capital budgeting, product design, and performance evaluation.

To serve such functions, an audience must be kept clearly in view. Society has entrusted the management of a large portion of its wealth to corporate management. As a result, corporation executives become responsible to numerous internal and external stakeholders. Owners of an enterprise are the immediate audience. Owners' interest is in the status of assets and the performance of an enterprise. Owners seek to protect themselves against environmental liabilities.

Expanding owners' interest into meeting legal environmental obligations brings an extended audience: consumers, competition, courts/legal system, employees, financial institutions, general public, government, interest groups, media, scientific community, and suppliers/ channels. This extended audience has a varied appetite for environmental reporting of enterprise activities (Freeman, 1984).

For example, creditors have a vested interest in more complete and timely disclosure of environmental liabilities to assess credit risks; under US law they share joint potential liabilities for loans secured by contaminated properties, while employees expect safe working conditions. Likewise, the general public may simply be interested in how the enterprise affects the country's economic growth.

Schoemaker and Schoemaker (1995) observes that information about company's potential future environmental liability can be used:

- to encourage defensive and prudent operations and waste reduction;
- to improve manufacturing, waste disposal and shipping practices;
- to negotiate and settle disputes with insurance carriers;

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<sup>3</sup> Research carried out as a part of UNCTAD's continuing project to examine the development of environmental accounting and reporting in TNCs. In particular, to develop that part of the project related to the role of accounting in the pursuit of sustainable development by The Centre for Social and Environmental Accounting Research (CSEAR) based at Glasgow University.

- to influence regulators and public policy makers;
- to determine suitable levels of financial resources;
- to reassess corporate strategy and management practices (think green);
- to articulate a comprehensive risk management program;
- to improve public citizenship;
- to assess hidden risks in takeovers and acquisitions.

From the functions of accounting, and the audience for financial reporting, the role of accounting standards becomes obvious. Standards provide a firm basis on which to record, compare and analyse status and performance of an enterprise. So firm is the basis provided that ambiguity of analysis is minimised. Further, standards provide a separation of 'fact' from opinion and non-qualified facts.

The overall scheme of accounting standards and related procedures has been developed over long periods. This time span reflects change in enterprise, in technology (particularly computerisation and telecommunication) and in government (local, national, international). Accounting standards have met such changes, and have responded with a great shift in meeting reporting requirements of the audiences. Now, with increase in duties of environmental protection and under environmental regulation, financial reporting (recognition and disclosure) poses additional challenges to accounting standards and procedures. The connection between environmental effects and financial results is of concern to the enterprise: what impact on the environment, what control of the impact by the enterprise, and what financial consequences to the enterprise. Making this connection is the challenge to enterprise and the accounting profession, and to the broad audience whose interest is environmental protection.

## History of ISAR

The United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) started the move toward meaningful environmental accounting at the enterprise level in 1989. It was concerned by the fact that accountants had remained on the sidelines in the environmental debate and had ignored their role in environmental management. They had failed to see how the conventional accounting model could be applied to environmental questions even when the survival of their firms depended on it. The connection between environmental management and environmental accounting is obvious if one understands the maxim, 'If you can't measure it, you can't manage it.'

ISAR discovered in its first survey that there were no national accounting standards specific to environmental information disclosure. That led the Group to formulate its first guidance for accountants in 1991 in terms of what should be disclosed in financial statements if users were to have a true and fair view of the environmental performance of an enterprise. This started a virtual avalanche of activity. Environmental accounting quickly spread beyond the confines of financial accounting. Other international and national organisations took up the subject such as OECD, the European Commission, the Canadian Institute of Chartered Accountants, the Association of Chartered Certified Accountants, and the Institute of Chartered Accountants of England and Wales to name a few. ISAR approved its

Position Paper on 'Accounting and Financial Reporting for Environmental Costs and Liabilities' in February 1998. Its purpose is to contribute to harmonisation by lessening the chance that national standard-setters would devise radically different accounting treatments for the same environmental problems.

While many corporate leaders subscribe to the concept of sustainable development, they have difficulty in translating it into operational terms for their enterprises. The World Business Council for Sustainable Development coined, therefore, the term 'eco-efficiency'. Eco-efficient behaviour decreases an enterprise's impact on the environment while increasing its profitability. However, eco-efficiency can be measured only through environmental accounting – or by producing accurate information on environmental costs, savings and performance. There is agreement that steps have been taken in the area of environmental accounting and that it was not only useful but would also be increasingly required by legislation, by investors and banks, by the public and by global competition.

## The Scope of ISAR Recommendations

Reflecting the scope of the ISAR position paper section two only deals with environmental costs and liabilities that affect, or are likely to affect, an enterprise's financial position and results of operations and, as such, would be included in its financial statements (that is, an enterprise's 'internal costs'). There seems to be general agreement among those developing standards on environmental accounting and disclosure that the basic concepts presented in various accounting frameworks are equally applicable to environmental costs and liabilities.

The framework for environmental accounting and disclosure is thus being developed in the context of providing information on an entities financial position, performance and changes, aiding users in making economic decisions, and showing the results of the financial stewardship and accountability of management for the resources entrusted to it.

## The Need for Environmental Accounting and Reporting

There are many reasons why environmental issues need to be integrated into corporate accounting.

- Enterprise accounts should reflect firms' attitudes towards the environment and the impact of environmental expenditures, risks and liabilities upon the financial position of an enterprise.
- Investors need information on environmental performance and expenditures to make investment decisions.
- Environmental issues are management issues, managers need to identify and allocate environmental costs so that products are correctly priced and investment decisions are based on true costs and benefits.
- Enterprises may be able to exploit a competitive advantage with customers if they are able to show that goods and services are environmentally preferable.
- Environmental accounting is a key to sustainable development.

Most corporate leaders agree that a main objective for the economy is sustainable development. Sustainability requires companies to strive for eco-efficiency, but they can only measure that by producing accurate information on both environmental costs and revenues and environmental performance.