



# ACCOUNTING FOR ENVIRONMENTALLY SUSTAINABLE PROFITS

*a partnership project between Forum for the Future and  
Interface Europe with funding from the Chartered Institute of  
Management Accountants (CIMA)*

ABSTRACT & EXECUTIVE SUMMARY  
OF THE  
**PHASE I RESEARCH REPORT**  
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# ABSTRACT

As is all too apparent, current patterns of industrial production and consumption are far from sustainable. As a result of market imperfections, prices are not an adequate reflection of the true (total/full) costs of our consumption and production decisions, and as such, 'sub-optimal' decisions are made as we all respond to imperfect price signals.

So what does all these mean at the level of an individual company? Quite simply, that profits as reported may not be environmentally sustainable. Dividends are perhaps being paid out of *natural* capital rather than income - a situation which is clearly unsustainable over the long term. It also means that corporate accounts drawn up on the basis of the enterprise being a *going concern* may no longer be valid.

This paper details the outcome of a collaborative project between Forum for the Future - a UK Sustainable Development organisation and Interface Europe, a major manufacturing company, which is investigating how companies can develop more integrated and complete management and financial accounting and reporting systems that specifically take into account the most significant environmental impacts resulting from their activities. It aims to calculate the 'sustainability cost' of a company - the notional cost the company would need to spend to restore or avoid the environmental damage caused by its activities and hence, to estimate what could be termed as the company's environmentally sustainable profits.

Specific areas covered include the approach taken to defining and identifying the company's environmental impacts; the approach adopted in relation to the monetary valuation of those impacts; a review/insight into the methodology developed; and a discussion of why such experimental and innovative projects are needed. The reasons for Interface's participation in this work and the potential benefits accruing to the company are also discussed.

The project has been generously funded by the Chartered Institute of Management Accountants (CIMA) with in-kind support from Interface.

# EXECUTIVE SUMMARY

*Accounting for Environmentally Sustainable Profits* investigates how companies can develop more integrated and complete management and financial accounting and reporting systems that specifically take into account the most significant environmental impacts resulting from their activities. It has attempted to estimate the 'sustainability cost' of a company - the notional cost a company would need to spend to restore or avoid the environmental damage caused by its activities and hence, to estimate what could be termed the company's environmentally sustainable profits.<sup>1</sup>

In short, the project is concerned with the operationalisation of *environmental sustainability* at the company level. It attempts to address the following questions: What does environmental sustainability mean for an individual company? If a company desires, or needs to reduce significantly the environmental impacts of its operations - both internal and external - what information flows/systems will it need to develop in order to address this challenge? In particular, how should it relate its need to reduce environmental impacts to its financial accounting system?

The project is a collaborative initiative between Forum for the Future, a UK based sustainable development organisation, and Interface Europe, a multinational manufacturer of carpet tiles and floor coverings. The project is divided into two stages - a pilot study and a full study. This report details the findings of the now completed pilot study and presents the environmental accounts produced for Interface during this stage of the work programme. Interface make a particularly interesting case study company. The production of carpet tiles involves energy intensive manufacturing processes, the use of non renewable and energy intensive resources such as nylon, PVC and bitumen and the distribution of work in progress and finished products across Europe.

Corporate accounting for environmental sustainability is a new area with no hard and fast rules or standards and one in which very few companies are actively engaged. If a company is seriously committed to the idea of decreasing its environmental footprint it needs to manage and control both its internal environmental costs - such as the costs relating to waste management, energy consumption and so on - and also, to begin to reduce the external environmental costs resulting from its activities. These costs - such as the health and financial costs associated with poor urban air quality, traffic congestion and the contamination of ground water - are currently borne by the rest of society and represent 'value extracted' by the company but not paid for.

The pilot study has focused on the identification and valuation of these external costs as the first step in assisting Interface's management begin to address how these costs can be managed and ultimately reduced. The key innovation in the project has been the linking of monetarised corporate environmental data to the company's financial

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<sup>1</sup> The *sustainability cost* approach is one of three ways identified by Rob Gray to enable organisations to begin to account for sustainability (see Gray R, et al. (1993). *Accounting for the Environment*. Paul Chapman Publishing, London.). This project draws on this concept in developing a methodology that could be employed by companies to account for the external environmental impacts resulting from their activities

accounts in order to arrive at a figure for the company's environmentally sustainable profits. The three key stages in the pilot study involved:

- the identification of the most significant/major environmental impacts resulting from Interface's activities and operations
- the valuation of those impacts
- the development of a set of environmental accounts incorporating these values and subsequent estimation of the company's sustainability cost and environmentally sustainable profits

The report details the approach taken and methodology developed for each of these stages. It highlights some of the methodologically difficult areas involved - particularly with regard to where the system boundaries are drawn and the approach to environmental valuation.

The most significant environmental impacts resulting from Interface's operations were identified as those relating to the company's high use of electricity and natural gas, direct production emissions resulting from the various manufacturing process and transport related emissions. This is reflected in the headings of the environmental accounts.

The approach to environmental valuation taken in the study has been to estimate what Interface would need to spend in order to either restore the environmental damage caused by its activities and operations, or to avoid the impacts in the first place. 'Real' or market based prices have been used where possible. The use of avoidance or restoration costs is in line with United Nations recommendations for environmental adjustments to the national accounts.

Having identified and then valued the most significant environmental effects resulting from Interface's operations, the company's sustainability cost was estimated to be £1.5 million. This equates to about 10% of the Interface Europe's operating profit. The significance of this finding is that it is not beyond the realms of possibility for Interface to begin to provide/set up a provision in their accounts to pay for the cost of avoiding the environmental impacts disclosed in the accounts, or where this is not possible, to provide for the cost of the restoration of the damage caused as a result of their activities.

Consequently, the transition to becoming an environmentally sustainable company (one of Interface's publicly stated objectives) is within their reach. The report suggests practical ways the company could undertake to achieve this. Had the sustainability cost been say 70%, 80% or 120% of operating income it would be harder to see how Interface could have embarked on (and justified to their shareholders) such a transition (in isolation) without a fundamental rethink about the nature of company's core business activities. Indeed, the whole idea of a sustainability cost may actually have been easier to ignore.

The first phase of the project has developed a methodology to estimate what could be considered to be Interface's environmentally sustainable profits. The full study will

develop this methodology further. It will explore extending the system boundaries to take into account some of the more significant upstream environmental impacts associated with Interface's use of energy intensive and non renewable resource inputs. The intention is to systematise the production of periodic environmental accounts in the form most relevant to the company personnel. It will also investigate the accounting treatment of environmentally related expenditure already incurred by the company and captured in the financial accounting system. The identification, measurement and subsequent management of these costs can result in considerable financial savings - i.e. in the realisation of so called double dividend or win-win outcomes of enhanced profitability and reduced environmental impacts.

Outputs from this phase of the study will include a set of more detailed and refined environmental accounts together with a systems manual detailing how environmental accounts can be produced. The idea is to produce a 'how to do it' manual for use by the company's financial controllers and to publish a modified version of this which will be of more use/relevance for other companies wishing to embark on the production of their own environmental accounts and determination of their environmentally sustainable profits.

The full report is due to be published by CIMA in early 1999. For further information please contact Rupert Howes directly. Contact details are shown on the cover page of this document.