ACCOUNTING FOR SUSTAINABILITY

Future proofed decision making

Integrating environmental and social factors into strategy, finance and operations

About The Prince's Accounting for Sustainability Project (A4S)

A4S was established by HRH The Prince of Wales in 2004 to bring together the finance and accounting community from business, government, academia and the capital markets in order to develop the institutions, systems, tools and approaches needed to build a sustainable economy. A4S's work focusses on ways to integrate measures of environmental health, social well being and economic performance to provide a 'future proofed' framework for decision making, and build the capacity needed to take action.

www.accountingforsustainability.org

Future proofed decision making, published December 2012.

“There was a time when we could say that there was either a complete lack of knowledge, or at least room for doubt, about the consequences for our planet of our actions.

That time has gone.

We now know all too clearly what we are actually doing and that we need to do something about it urgently. Better accounting must be part of that process.”

His Royal Highness The Prince of Wales

Future proofed decision making

The Prince's Accounting for Sustainability Project (A4S) commissioned research into which types of information may be most effective in driving the integration of environmental and social factors into Board level decision making.

This report:

- Considers the need for organizations to account for their environmental and social impacts
- Presents the findings of the research commissioned by A4S into the use of environmental and social information in decision making (the A4S research)
- Assesses other published work that has been undertaken looking at ways in which environmental and social information is being taken into account by organizations
- Recommends key areas for action

Contents

Summary

The global economy is entering a new era. Issues such as globalization, the over consumption of finite natural resources, rising population and climate change are creating new challenges and opportunities for both the private and public sector.

Organizations need to understand the changing financial and reputational factors that will affect their success in the short, medium and long term, and be able to take these factors into account in the decisions they take today.

"It is difficult for accountants and engineers to deal with these nebulous things."

Chief Financial Officer

A4S commissioned research into the views of Board members and other senior managers of large companies and public sector organizations to explore:

- Whether organizational decision making would be improved by a different or enhanced set of information.
- How data related to environmental and social matters could potentially have the most influence with senior decision makers, including whether these factors should be economically valued.

However, many respondents were not ready for discussions regarding *how* environmental and social factors should be accounted for as they felt the question about *why* these issues are relevant to Board level decision making had not yet been properly answered.

A number of other studies have indicated that the accounting and finance community believe their organizations are already using these types of information, although this may be due to a tendency for individuals and organizations with a focus on sustainability to be more likely to take part in the research.

Overall we found:

- Many organizations are still struggling to understand the implications of environmental and social factors to their strategy, finances and operations. The commercial rationale for incorporating these factors into decision making at Board level has not yet been clearly articulated. The moral case is not enough.
- Although some organizations are starting to incorporate environmental and social information into strategy and decision making, this is often delegated to the Corporate Social Responsibility / Sustainability team (with sometimes limited impact on the wider business) and does not reach Board level.
- There is a need for more robust information, data, methodologies and collection systems to allow more effective integration of environmental and social factors into decision making and strategy — at present, there is not sufficient confidence in information provided.
- The valuation of environmental and social factors in financial terms must be done in a rigorous way using methodologies developed by trusted sources if they are to be widely adopted. Some factors that are commonly understood to have an ethical dimension — such as child labour or worker fatalities — should arguably not be given a financial value. However, where possible, environmental and social factors should be linked to financial metrics in some way such as through mitigation, regulatory or restoration costs so that they resonate more effectively with key decision-makers and can be more easily linked with strategic outcomes.

"If money goes out the door I am interested. If it is a notional cost to society I am not."

Chief Financial Officer

- A few organizations are already convinced of the commercial necessity of responding to significant environmental and social issues and have begun to broaden the information used to set strategic objectives and inform investment decisions. Within these companies, senior leadership is key, with CFOs in some cases being the driving force for change.

The A4S research highlights that there are a number of barriers to overcome before the majority of organizations truly integrate environmental and social factors into decision making, including:

1 **Demonstrate the business case**
There is a need to articulate more clearly the commercial rationale for incorporating social and environmental factors into decision making to help ensure that organizations are aware of the risks to mitigate and the opportunities to grasp over the short, medium and long term.

2 **Speak the right language**
Narratives that are aligned with the needs and 'language' of business need to be developed. These need to be focussed at a sector and organizational level and grounded in commercial understanding.

3 Develop **more robust information**
Organizations should work with existing collaborations to develop commonly agreed methodologies to value environmental and social inputs and impacts in financial terms. These should clearly demonstrate the link to an organization's strategic objectives and financial performance, either directly or via reputational impact. They should work with others to develop a wider set of tools that enable future risk, opportunity and uncertainty to be incorporated into decision making processes.

4 **Bridge the knowledge gap**
The need for skills expansion at Board level and within the finance and accounting community should be recognized and addressed.

5 **Create an enabling environment**
Organizations need to be given clear signals to drive more sustainable behaviour, including the need to align national and global frameworks with business incentives and performance measurement systems.

These results will inform the A4S work programme for 2013 and beyond. High level recommendations to help organizations understand, value and account for non financial information are set out on page 23.

01

The Business Case

Why will the integration of environmental and social information help to future proof decision making?

The global economy is entering a new era

Decision making processes and strategy development have traditionally focussed on the stewardship of financial capital, and the protection of brand value.

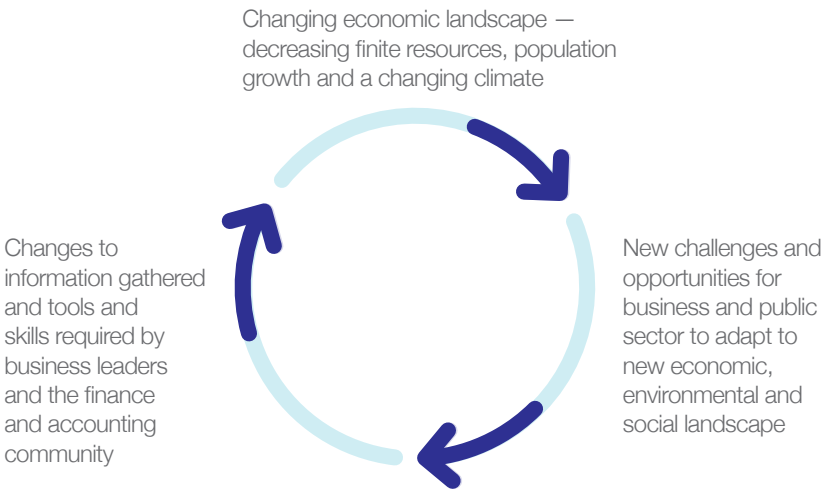
Our global economy depends on an estimated US$21-72 trillion[1] of services provided by the environment — natural capital that is traditionally not accounted for in decision making or profit.

As the challenges and opportunities faced by organizations continue to evolve, driven by factors such as population growth, resource scarcity and economic uncertainty, it is increasingly important for organizations to understand how these issues will impact on their ability to create and maintain value.

The integration of environmental and social factors into management decision making and internal reporting and accounting will help to allow:

- Greater understanding of future risks and opportunities.
- More strategic responses to changing economic, environmental and social conditions.
- Linkages between strategic direction, financial performance and sustainability impacts to be made, therefore driving a better and more sustainable return into the future.

Since the Industrial Revolution we have achieved extraordinary prosperity: many people live longer, and have access to universal education, better healthcare and improved economic opportunities. Global poverty has decreased more in the last 50 years than it did in the previous 500.[2] However, on the debit side, the industrialized world has increased consumption of finite natural resources to such an extent that our collective demands now exceed the planet's capacity to renew itself by some 50 per cent annually.[3] In other words, we are consuming the Earth's capital as if it were income and are showing no signs of slowing down.



The world is changing

Some of the key global macro trends that have an impact on our prosperity and sustainability are set out below. Not only will these shape the way we live in the twenty first century, they will also require organizations to adapt their behaviour and responses to the changing environment.

Population growth:

- The world's population is predicted to rise from 7 billion in 2011 to 9.3 billion by 2050.[4]
- The global middle class is expected to grow from 2 billion to almost 5 billion by 2030, driven mainly by growth in Asia and Africa.[5]
- The transition to urban living will continue, with approximately 70 per cent of people predicted to be living in cities by 2050.[6]

Climate change:

- Climate change and a rise in global temperatures are likely to cause greater weather related volatility, including the risk of heat waves, droughts, floods and other extreme events which can have devastating human and economic impacts.
- In 2011, global natural catastrophe losses cost insurers well in excess of $100 billion, which has knock on consequences for other sectors.[7]

Increasing resource scarcity:

- Rising populations, a changing climate and the way in which we do business as a global economy is placing increasing stress on essential natural resources such as water and agricultural land as well as commodities such as oil, gas, metal and minerals.
- There are currently 700 million people who suffer water scarcity[8] and global demand for water could rise to 40 per cent above estimated levels of accessible and reliable water supply by 2030.[9]
- In order to meet global food demands by 2050, agricultural production will need to increase by 70 per cent from 2005/2007.[10]

Global economic imbalances:

- As the global economy continues to falter, many economies are struggling with low growth rates, high borrowing costs or restricted capital flows.
- Issues such as youth unemployment, which currently stands at 75 million, coupled with an aging population, remain pressing global challenges.[11] Between 2000 and 2050, the proportion of the world's population over 60 years will double from 11 to 22 per cent, from 605 million to 2 billion,[12] with significant consequences for pensions and healthcare costs.
- The danger here is twofold; not only do issues such as high unemployment levels have long term social, political and economic ramifications, but we risk ignoring equally pressuring challenges such as climate change, because they are viewed by many as 'long term' problems.

Reputation and brand:

- Thanks to the internet and the rise of social media sites, organizations are under increasing pressure to meet sophisticated corporate transparency, responsibility and accountability standards.
- A number of scandals in recent years, such as the perceived responsibility of the financial sector for the global downturn, and the numerous environmental and social scandals within the extractives sector, has left consumer trust in business weak, currently standing at an average of 53 per cent.[13]

Legislation and regulation:

- The cost of the external environmental and social impacts of organizations, although not paid for by the organization themselves, are paid for somewhere in the economy — often by society as a whole. Governments are increasingly seeking to drive better internalization of these costs by those responsible. Examples include the introduction of environmental taxes such as those on water use or waste generation, or a price on carbon emissions.

What does this mean for your organization?

Production and consumption paradox:

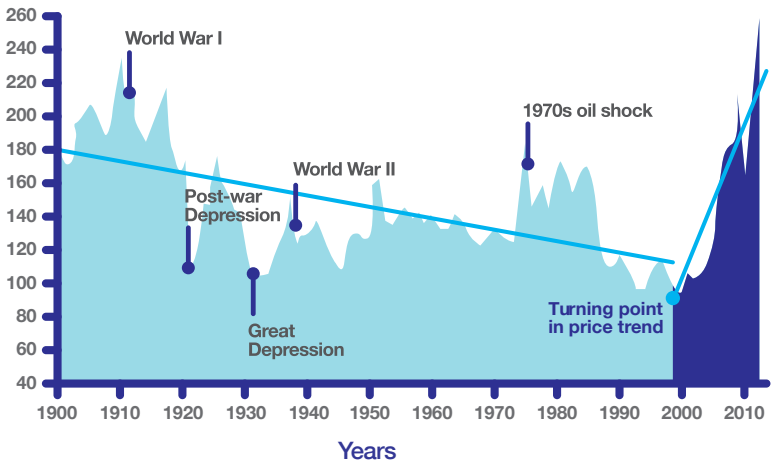
- The rise in global population and living standards will inevitably lead to increases in global consumption rates, driving demand for affordable and convenient goods and services. Although this presents a massive economic opportunity, the resulting strain on the capacity of our natural resources places alarming pressure on raw materials, potentially affecting supply chain security and long term growth potential.

Uncertainty is becoming the 'new normal' dictating the need for much longer planning horizons:

- Organizations need to take action to secure sustainable supply chains, including consideration of future local environmental and social risks.
- Price volatility in commodities (such as fossil fuel) and crops (such as grain and cotton) is increasingly common. For example, droughts in China, Pakistan and the United States have led to a decline in the global average annual production of cotton, resulting in a 90 per cent average price increase over the past four years compared to the preceding four years.[14] Sharp price increases in commodities since 2000 have erased all the real price declines of the twentieth century.

Sharp price increases in commodities since 2000 have erased all the real price declines of the 20th century.

McKinsey Commodity Price Index (years 1999-2001 = 100). Based on arithmetic average of 4 commodity sub-indices: food, non-food agricultural items, metals, and energy; 2011 prices based on average of first eight months of 2011.[15]



Climate adaptation:

- Organizations need to consider climate adaptation plans that integrate solutions-based approaches to climate risks and challenges into long term business strategies and forecasts. Such plans are already being adopted in a number of the most impacted sectors.

Product and service innovation:

- Innovative organizations are moving beyond implementing internal sustainability initiatives that target specific issues such as carbon reduction or community investment. Instead, they are investing in products and services to meet twenty first century demands. For example, GE's flagship Ecomagination programme aims to make profitable, environmentally efficient products and has generated revenues of $105 billion since its launch in 2005.[16]

Operational efficiencies:

- As the cost of energy and other resources continue to rise, good energy management can result in savings of 5 to 25 per cent, with typical payback periods of two years or less, across a diverse range of companies.[17]
- Savings can come from staff travel, operating vehicle fleets, logistics and distribution systems, under-utilized assets, or energy and water use from buildings.

Reputation and brand:

- In today's information rich society, misdemeanours can no longer be swept under the carpet and bad behaviour can have not only reputational but also financial repercussions for organizations.

Legislation and regulation:

- Organizations are increasingly being forced to account for their impacts through legislation and regulation. Those that act to reduce these external impacts will therefore reduce future regulatory risks.

02

The Current Position

Where are organizations along this journey?

The A4S research:

Integrating environmental and social factors into decision making

The translation of environmental and social impacts into the language of accountancy is a rapidly evolving area. A wide range of organizations are conducting work to develop methodologies and approaches that measure and value environmental and social impacts. This will provide a more complete view of the true costs and benefits of an organization's activities and enable them to understand better the risks and opportunities faced. However, little of this work to date has investigated what kind of information will drive the greatest change in behaviours and be of most value in organizational decision making, including whether describing environmental and social factors in financial terms is an important part of the answer.

A4S commissioned research that set out to understand whether organizational decision making would be improved by a different set of information, and to assess the attitude of key decision makers — Board members and senior management — to different types of environmental and social information.

Key findings

1. There is a growing recognition of the changing business landscape and a potential need for changes to decision making processes and strategic objectives to reflect new risks and opportunities.
2. The business case for the inclusion of environmental and social factors at Board level is not yet clear, particularly for many CFOs, due to uncertainty around the relevance of these issues to their organization.
3. Environmental and social information is often assumed to have been formally considered by the CSR / Sustainability team (with sometimes limited impact on the wider business) before decisions reach Board level. Information is typically presented as traditional sustainability data e.g. tonnes of carbon — with little alignment to strategic objectives or financial information.
4. Scepticism over the quality and robustness of many types of environmental and social data is preventing more widespread use.
5. A belief among respondents that expressing many environmental and social factors in financial terms can be counter-productive as data can be viewed as unreliable, spurious or unethical.
6. A perception that action can be left to successors who will understand these issues more fully.

> "These issues are sorted out below Board level as part of new investment approval. You need to filter out the stuff not relevant to the Board."
>
> Senior Management

How the research was conducted

A series of qualitative interviews and discussions with Board members and other senior managers of large companies and public sector organizations were undertaken.

Between October 2011 and May 2012, the research team interviewed 58 Chairmen, Chief Executive Officers (CEOs), Chief Finance Officers (CFOs), other Board members and senior management.

The study was conducted by a highly experienced social research team led by Sir Robert Worcester, Founder of MORI, with assistance from Futerra Sustainability Communications.

In order to gauge respondents' reactions to different types of environmental and social data and methods of presentation, most interviews centred on a hypothetical investment scenario which included a simplified set of information that might typically be used when making an investment decision, supplemented by various types of environmental and social data.

As well as key financial information, respondents were given a range of different types and formats of environmental and social information and data in turn, from descriptive information to quantitative metrics and data that put a monetary value on the predicted environmental and social impacts. Reactions to an 'integrated' profit and loss account (P&L), where the 'full societal cost' of environmental and social impacts were included in the financial P&L, were also tested.

The key risks and opportunities presented in the scenario included:

- An energy, water and waste-intensive manufacturing process that involved the use of a toxic chemical
- Health and safety risks for workers
- A supply chain involving countries with a high risk of corruption and child labour
- Decreased consumer spending
- New employment opportunities

The interviews focussed on the integration of environmental and social information in internal decision making rather than external financial or sustainability reporting.

This section reflects A4S's interpretation of the findings of this research. The detailed results are set out in 'Integrating Environmental and Social Factors into Organizations' Key Decision Making: A Qualitative Survey for A4S of Board Level and Other Senior Managers' Views', which is available from www.accountingforsustainability.org

To what extent are respondents comfortable integrating environmental and social factors into decision making?

Financial performance and metrics are, as expected, usually paramount in decision making — but often reputational risk is also a central concern. Subjective and qualitative factors, as well as 'gut feel', play a significant role.

For some respondents, environmental and social issues are at least starting to affect the context of key decisions — but the extent of this varies by sector and individual organization.

"Ethical breaches can collapse the company in no time."

Chief Financial Officer

On several issues, such as biodiversity, interviewees struggled with the relevance of the issue to the interview scenario and their organization, their confidence in the data provided, and their own understanding of the issue. Some expressed their belief that the negative impacts on biodiversity arising from the hypothetical investment scenario would not have any immediate impact on the profitability of the company — nor contribute to its reputational stature.

Respondents — particularly CEOs and Chairmen — often expected that current corporate social responsibility, or governance, policies would mean that those preparing investment proposals or management accounts would prioritize appropriately and incorporate any environmental and social factors that might be expected to have a material effect on decisions made by the Board. However, a potential disconnect between this expectation and the extent and rigour with which such factors are considered by those preparing materials for consideration by Boards was found.

Some Boards have begun to take action to improve their decision making, such as seeking non-executive directors who bring credibility on broader ethical, social and environmental matters to the table. These members can be an important part of the solution to drive better decision making.

What forms of information are being used and which types of data, if available, would assist organizations to integrate environmental and social factors into decision making?

Certain types of environmental and social measurements and valuations have a higher perceived relevance to business decision making than others. Typically, narrative or numeric information is used, such as risk ratings or tonnes of carbon emitted.

"The credibility of the numbers is the problem, not the credibility of having positive social factors in the P&L."

Chief Executive

Most respondents emphasized that the source of the data is key to whether they would feel comfortable using the information. Respondents listed key people in their own sector as the most reliable source because of their relevance and insight. Industry bodies were also highly rated by some, although their practical effectiveness was regarded as variable. A number of other information sources were mentioned, including central government and government agencies, consultants, think tanks and business organizations — with differing views expressed about the advantages and drawbacks of each. Some say campaigning NGOs offer their organization a useful external perspective, though respective priorities may differ.

"Almost the only non-financial factor that the Board leads on is corporate reputation …Apart from that one, every single decision has to be financially-based."

Senior Manager

Overall, there was a view that social factors are hard, even impossible, to measure, but a belief that environmental factors are becoming easier to quantify (as typified by carbon, waste and water),

albeit with considerable scepticism over the quality and robustness of many types of data, particularly biodiversity.

Regarding economic valuation of environmental and social impacts, different information and data were considered to have differing credibility and robustness. For example, respondents felt most comfortable with carbon pricing, which was widely seen as relevant, tangible and applicable across sectors (although few raised the issue that current carbon prices are arbitrary and reflect only a small proportion of the true societal cost). In contrast, there was extreme reluctance towards the quantification, and particularly economic valuation, of negative impacts of certain social issues, such as child labour, and a view that accounting for morally sensitive issues could imply these impacts are condoned.

> "I am very interested personally but it's a long way off: it [integration into a P&L] will not happen in my lifetime. The Corporate Responsibility Head would love it — but the Finance Director would hate it."
>
> Chief Executive

If wider impacts are going to be accounted for, many business leaders found mitigation, regulatory or restoration costs to be most relevant. However they felt that comparable, robust, relevant and accurate information is lacking.

Although there was considerable scepticism towards 'full societal cost' valuation, there was recognition that there may be benefits in expressing environmental and social factors in financial terms, in particular as a single unit of measurement would more easily enable comparisons to be made, if the data were credible.

The research suggests that the quality of the information available is more important than the type, with respondents noting that they are used to taking different sets of information and processing them in different ways. Most respondents appeared sceptical of full cost data when it was presented as integrated into a financial profit and loss account.

> "The Holy Grail is a well being impact: our contribution per unit of planetary impact. But that is incredibly difficult to grapple with."
>
> Chief Executive

Attitudes to different types of information

Respondents displayed a range of attitudes to different types and formats of information and its integration in decision making.

Qualitative or narrative information

Subjective, can be anecdotal; heavily reliant on judgement

- Used by all respondents (including CFOs) to some degree and highly valued by CEOs and Chairmen.
- Respondents comfortable with the use of environmental and social data in this format.
- Majority thought that this information was already being used in the business, with the exception of 'more complex' issues such as biodiversity.
- Not always robust, particularly as there can be a tendency for anecdotes to be used.
- Often used when other data is unavailable.
- Some respondents mentioned that an 'act of faith' is required, as often the information they would like to see in order to make a decision is not available.

Quantitative or numeric data

Largely objective, often expressed as quantity, change or comparison

- The most widespread form of environmental and social data that respondents thought was used within their organizations.
- Accordingly, most targets are explained in quantitative terms, but are not linked to the wider business financial and strategic objectives. Some noted that numerical targets can create distorted incentives, and the narrow focus may restrict wider innovation.
- It was felt important to put numeric data in context, whether in terms of the organization as a whole or drawing out the local implications, such as water scarcity in a particular region.

Monetary data

Expressed in financial terms e.g., a carbon price, value at risk or full societal costs/benefits

- There was a high degree of nervousness around expressing environmental and social factors in financial terms. Very few respondents reported using this kind of data within their organizations.
- Can be seen as meaningless and lacking in credibility, or even morally inappropriate.
- This credibility gap is undermining the potential benefits of using a consistent measurement unit for a range of impacts ('comparing apples with apples').
- Regulation will be required for consistent integration of external costs into decision making, e.g. a carbon price would be necessary before companies begin to account for a proportion of the 'full societal cost' of their carbon footprint.
- Of the different types of monetary data presented, respondents found mitigation, restoration or potential future regulatory costs most appropriate where data is available — in other words, only where there is a likelihood of a real cost hitting the P&L.

What will drive change?

There was agreement of the need to demonstrate the business case before environmental and social factors could routinely be incorporated into decision making. However, there was broad consensus that this would need to be coupled with a more commercial information set, both in terms of the data and the language used.

Several drivers of, and barriers to, further change emerged from the interviews — overcoming the barriers and optimizing the drivers will not be a simple task, but it is an urgent one.

What are the barriers to change?

A perception that the business case is not yet clear

- The 'business case' for incorporating environmental and social factors into decision making was not yet felt to be clear. In part this is because the timing and gravity of the impacts are often uncertain and there is a lack of previous experience of these issues.
- Even where facts are well articulated, well known and supported by strong evidence, there is a perception that more evidence for the business case is required before action should be taken.

Reliance on generational change

- Many respondents anticipated that their successors will be more committed to the integration of environmental and social factors into decision making. This implies acceptance of the relevance of these issues, but also a sense of a 'wait and see' mentality.

Reputational risk

- If an issue is considered to be a potential reputational risk, the impression given by many respondents was that the easier short term route may be to not engage with it. However, this can create blind spots in decision making and also lead to future larger reputational and wider risks.

First mover disadvantage

- Respondents accepted that a pioneering position can present opportunities, but pointed out that a culture of risk aversion means that many prefer to adopt a 'you go first' attitude.

What will drive change?

Demonstrate the business case
Better articulate the commercial rationale to help ensure that organizations are aware of the risks to mitigate and the opportunities to grasp over the short, medium and long term.

What are the barriers to change?	What will drive change?
Terminology is not aligned to business • Environmental and social initiatives often use vocabulary which business leaders are not familiar with and does not easily translate into commercial language. These include terms such as 'externalities' and such ill-defined or all-embracing concepts, such as 'sustainability' and 'biodiversity'.	**Speak the right language** Develop narratives that are aligned with the needs and 'language' of business. These need to be focussed at a sector and organizational level and grounded in commercial understanding.
Need for trusted sources • In order to be used, information needs to come from familiar, trusted sources. This is especially pertinent for accounting and finance representatives with a professional responsibility to base decisions on relevant and reliable data sources. Respondents expressed a desire for industry bodies to play a part in developing common standards for valuing environmental and social factors. **Need for more robust information** • Currently, respondents are sceptical about much of the information and data presented on environmental and social factors. These misgivings are evident among a wide range of respondents: Chairmen, CEOs and CFOs alike. Respondents expressed a need for concise, recognizable information. **Need for transparent metrics** • Respondents felt it important to know both the positive and negative implications of action across all areas of their business and society if they were to use environmental and social metrics.	**Develop more robust information** Work with existing collaborations to develop commonly agreed methodologies to value environmental and social inputs and impacts in financial terms that link to strategic objectives and wider financials, either directly or via reputational impact. Work with others to develop a wider set of tools that enable future risk, opportunity and uncertainty to be incorporated into decision making processes.
Knowledge gap • Respondents often struggled to understand how several of the environmental and social risks and impacts translate into the corporate arena and specifically to their sector and organization. Some acknowledge the need for improved corporate understanding of environmental and social risks.	**Bridge the knowledge gap** Recognize and address the need for skills expansion at Board level and within the finance and accounting community.
Policy inconsistency • Many respondents believed that without regulation and legislation, decision making processes will not change. However, there was a general desire to avoid policy directives on environmental and social issues, with concerns regarding administrative burdens.	**Create an enabling environment** Align business incentives with national and global goals and frameworks.

What has other research found?

A number of other recent studies have considered attitudes to environmental and social factors in decision making.

To what extent are respondents comfortable integrating environmental and social factors into decision making?

Various surveys have been conducted that consider whether the incorporation of environmental and social factors into decision making by the finance and accounting community is widespread. These surveys often focus on specific themes, for example, natural capital rather than broader environmental and social factors, but can provide some insight into the use of these factors by organizations.

At face value, the A4S research implies a less optimistic picture than other studies. However, this may be reflective of the challenges faced by such studies — of limited response rates where participants may choose to participate based on a professional or personal interest in sustainability, and so the findings may not completely reflect market attitudes.

Other research suggests that the integration of environmental and social information is growing in use but is by no means widespread, for example:

- 49 per cent of more than 200 global accountancy professionals had identified natural capital as a current material issue for their business. However, 34 per cent of respondents in sectors with 'high' biodiversity and ecosystems services impact or dependencies have never considered natural capital issues within their business risk evaluation (see Box 1).
- 26 per cent of Australian companies surveyed routinely include sustainability impacts in their capital investment decisions to some degree (see Box 2).
- More than half of companies surveyed in the US, Canada and the UK thought that they considered 'sustainability' in investment decisions to some extent (see Box 3).

BOX 1

Is natural capital a material issue?

Natural capital is an economic metaphor for the limited stocks of physical and biological resources found on earth. A study published by the Association of Chartered Certified Accountants (ACCA), Fauna & Flora International and KPMG in November 2012 indicated that, of more than 200 accountancy professionals:

- 49% had identified natural capital as a current material issue for their business and linked it to operational, regulatory, reputational and financial risks.
- 77% of respondents had identified natural capital as a significant business risk in the past, and 25% had identified such risks 'often' or 'always' within a business risk evaluation.
- One third had never experienced material natural capital issues although 32% of these respondents are based in companies considered to be at high risk from a natural capital perspective.

Notably, the survey had a response rate of less than 1%, compared to a typical response of 3% for similar surveys. This may be indicative of a perceived lack of relevance of natural capital to many professionals in the accountancy community.

"Indiscriminate draw down of natural capital poses a risk to our business today and much more so in the future. The severe under valuation and degradation of Natural Capital constitute a real challenge to businesses in general, in achieving longer term strategic objectives."

James Singh, Executive Vice President & Chief Financial Officer (recently retired), Nestlé

Is natural capital a material issue? ACCA, Fauna & Flora International and KPMG, 2012

BOX 2

Are sustainability impacts included in capital investment decisions?

Preliminary research by CPA Australia, prepared in collaboration with the University of Melbourne and based on a survey of CFOs from the 100 largest Australian companies and interviews with a range of other organizations in November 2011, found:

- Around a quarter of respondents routinely included sustainability impacts in their capital investment decisions driven by a desire to enhance corporate reputation. These impacts were viewed quite widely including 'sustainability risk', 'competitive advantage', 'community impacts' and 'employee engagement'.
- Over half of CFO respondents claimed they did not downplay qualitative data in favour of quantitative analysis. The preference for qualitative data was more evident with social than environmental factors.
- Carbon and water accounting were the dominant sustainability themes that motivated financial capital appraisal experimentation.
- 40% of CFO respondents claimed they would not necessarily reject projects with negative net present values where sustainability benefits were identified.

It should be noted that this survey had a 15% response rate and is therefore a very small sample size.

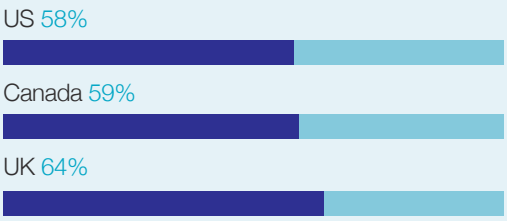
The influence and impact of sustainability issues on capital investment decisions — the preliminary findings on current practices around the integration of sustainability issues in investment decisions, CPA Australia, prepared in collaboration with the University of Melbourne, November 2011

BOX 3

Is sustainability considered in evaluating new investment decisions?

A sample of members from the American Institute of Certified Public Accountants (AICPA), Chartered Institute of Management Accountants (CIMA) and Chartered Accountants of Canada (CICA) were asked whether sustainability is considered by their company in evaluating any new investment decisions, including capital or other investments.

The majority of the 717 respondents from large companies (>1,000 employees) said their organizations take sustainability into consideration, as follows:



The response rate for the survey, for large companies, was 6%.

Evolution of corporate sustainability practices: Perspectives from the UK, US and Canada, CIMA, CICA and AICPA, December 2010

What forms of information are being used and which types of data, if available, would assist organizations to integrate environmental and social factors into decision making?

The A4S research confirmed that certain types of information have a higher perceived relevance to business decision making than others. Furthermore that different information was considered to have different levels of credibility and robustness. A key concern, however, was the availability of *relevant* and *reliable* information.

The A4S research indicated that determining, measuring and gathering appropriate data is an area of considerable difficulty. However, a Deloitte survey (see Box 4) of 250 CFOs in 14 countries, found that only 14 per cent of CFOs interviewed indicated that they had access to 'inadequate or no' management information on sustainability related business challenges, implying a perception that the information that is believed to be required is available within most organizations.

Although the Deloitte results are encouraging, research carried out by MIT Sloan Management Review and the Boston Consulting Group (see Box 5), showed respondents found that some costs and benefits are harder to measure than others — for example, it is easier to make a business case for energy savings than for quantifying the value of a social project. Roberta Bowman at Duke Energy explained: "*What I wrestle through, and what we work with as a management team on a day to day basis, is giving real value to some of the softer costs of business that may not necessarily be valued by the financial community*."

The MIT-BCG research mentioned a 'leap of faith' required by businesses when embarking on sustainability change programmes before the business case is fully proven with the relevant supporting data — while 'embracers' are working to develop the kind of quantification that will help link their sustainability activities to the bottom line, they also demonstrate a characteristic not seen among 'cautious adopters' — the readiness to take a leap of faith. Among those interviewed as part of the A4S research, many interviewees also referred to the 'leap of faith' necessary to begin gathering and using data, particularly social data, over a relatively long period of time before it becomes apparent how relevant this is to the business.

BOX 4

Is management information available for sustainability issues?

A Deloitte survey published in 2012 of 250 CFOs in 14 countries found that:

- 49% of CFOs saw a 'significant' link between sustainability performance and financial performance.
- In response to the question 'How would you describe the management information you receive on sustainability related business challenges?':
  - 12% of CFOs had access to 'excellent' information
  - 37% had access to 'good' information
  - 37% had access to 'adequate' information
  - 14% had access to 'inadequate' or 'no' information.

Sustainability: CFOs are coming to the table
Deloitte, 2012

BOX 5

Are companies accounting for sustainability?

A report prepared by MIT Sloan Management Review and the Boston Consulting Group in 2011 divided companies into sustainability strategy leaders ('embracers') and those expanding their sustainability commitments less aggressively ('cautious adopters').

While even embracer companies still struggle to measure financially the more intangible benefits of sustainability strategies (such as employee engagement, innovation and stakeholder appeal), these companies are nevertheless assigning value to intangible factors when forming strategies and making decisions.

Sustainability: The 'Embracers' seize advantage
MIT Sloan Management Review and the Boston Consulting Group, 2011

What will drive change?

- There are many alarming studies on the predicted economic impacts of environmental and social changes that show that business as usual is unsustainable, but the implications of this at a sector or organizational level are often not clear.

"Companies won't be able to value or substantiate such issues on their own. They will need help from the government."

Chief Financial Officer

- In many organizations, Boards and senior management have not bought in to the need to widen decision making parameters — the business case for incorporating environmental and social factors into decision making has not yet been clearly articulated in language that makes sense.
- Some environmental and social impacts that were previously unaccounted for are already becoming real costs or benefits to the organization, for example, the rising price of agricultural commodities. This trend is likely to continue.

The moral case is not enough

- If senior management are to integrate environmental and social factors effectively into decision making, there is a need for more robust data and methodologies in order to increase management confidence in the information.
- Although financial information remains the primary focus for decision making, there is a belief that expressing environmental and social factors in financial terms can sometimes be counter-productive if the information is viewed as 'unreliable' or 'spurious'. Some factors — such as child labour or the risk of workers' deaths — should arguably not be valued. However factors should be put into the context of overall strategic objectives and should be linked to financial metrics in some way, such as through mitigation, regulatory or restoration costs.

What do these results mean in terms of action?

The A4S research highlights the urgent need for change in order to integrate environmental and social factors into decision making:

1. **Demonstrate the business case**
   Better articulate the commercial rationale for incorporating social and environmental factors into decision making to help ensure that organizations are aware of the risks to mitigate and the opportunities to grasp over the short, medium and long term.
2. **Speak the right language**
   Develop narratives that are aligned with the needs and 'language' of business. These need to be focussed at a sector and organizational level and grounded in commercial understanding.
3. **Develop more robust information**
   Work with existing collaborations to develop commonly agreed methodologies to value environmental and social inputs and impacts in financial terms that link to strategic objectives and wider financials, either directly or via reputational impact. Work with others to develop a wider set of tools that enable future risk, opportunity and uncertainty to be incorporated into decision making processes.
4. **Bridge the knowledge gap**
   Recognize and address the need for skills expansion at Board level and within the finance and accounting community.
5. **Create an enabling environment**
   Align business incentives with national and global goals and frameworks.

03

The Way Forward

What next?

What is A4S doing?

As a result of the findings in this report, as well as our conversations with many companies and other organizations, A4S is working on a number of initiatives to help create a sustainable economy and to help organizations embed sustainability into their decision making.

What will drive change?	A4S actions
Demonstrate the business case Better articulate the commercial rationale for incorporating social and environmental factors into decision making to help ensure that organizations are aware of the risks to mitigate and the opportunities to grasp over the short, medium and long term.	• Develop a business simulation that demonstrates the risks of unsustainable business models and how embedding sustainability within strategic decision making processes can deliver commercial benefits. • Collate compelling case studies and 'killer facts' that demonstrate the business case for the change needed within organizations to embed sustainability into their decision making. Translate these into the language of business and communicate in an engaging manner. • Recognize those organizations that are already demonstrating these behaviours, for example through the Finance for the Future Awards set up in conjunction with NatWest and ICAEW to recognize organizations that are seeking to embed sustainability into their business model through leadership of their finance teams. **www.financeforthefuture.co.uk**
Speak the right language Develop narratives that are aligned with the needs and 'language' of business. These need to be focussed at a sector and organizational level and grounded in commercial understanding.	• Collaborate with the accounting and finance community, including the A4S Accounting Bodies Network, which reaches almost two million accountants and accounting students worldwide, to develop material that is aligned with the 'language' of business.

What will drive change?	A4S actions
Develop more robust information Work with existing collaborations to develop commonly agreed methodologies to value environmental and social inputs and impacts in financial terms. Work with others to develop a wider set of tools that enable future risk, opportunity and uncertainty to be incorporated into decision making processes.	• Assist the finance community in incorporating sustainability into capital investment appraisals by working with a small number of companies to develop a practical methodology that can be widely adopted. • Build consensus and strengthen collaboration between initiatives looking to develop methodologies that calculate the economic value of an organization's impacts on natural and social capital, for example through the TEEB (The Economics of Ecosystems and Biodiversity) for Business Coalition. • Set up an international CFO leadership network that can help CFOs to share experiences and work together to develop the tools required.
Bridge the knowledge gap Recognize and address the need for skills expansion at Board level and within the finance and accounting community.	• Develop a training programme for CFOs to explore the benefits of embedding sustainability into business models and the role of the CFO in bringing environmental and social factors into the equation for decision making, in collaboration with The Cambridge Programme for Sustainability Leadership. • Work with the A4S Accounting Bodies Network to develop material and resources to inform the development of professional syllabuses.
Create an enabling environment Align business incentives with national and global goals and frameworks.	• Develop linkages between the decision making systems at a corporate, national and global level by convening a working group of relevant stakeholders. • Consider how the taxation system can be used to promote more sustainable behaviours. • Work with the financial community, including investors, analysts and businesses, to help to drive a more sustainable financial system including more sustainable capital markets.

If you and your organization would like to contribute to the work on these projects please contact A4S at accountingforsustainability@royal.gsx.gov.uk

What can you and your organization do?

Actions to take now

Environmental and social factors are already having a material impact on business. In the near future, governments, NGOs and others are likely to be working to encourage — or legislate — the incorporation of environmental and social factors into decision making. To be ready to adapt to this change, your organization should start planning now.

What will drive change?	Actions to take now
Demonstrate the business case Show the commercial rationale for incorporating social and environmental factors into decision making to help ensure that organizations are aware of the risks to mitigate and the opportunities to grasp over the short, medium and long term.	• Challenge the sustainability of your business model and its capacity to sustain value through assessing and understanding key risks and opportunities. • Identify the opportunities for how sustainability can drive your business growth and operational excellence, such as reducing energy costs and new market opportunities. • Create a cross disciplinary team, including the CFO and heads of lines of business, to establish a business case for action for each of the priority areas.
Develop more robust information Develop concise, recognizable measures and methodologies for environmental and social factors. Where possible, clearly demonstrate the link to an organization's finances (either directly or via reputational impact).	• Develop relevant business measurement systems and metrics that are linked to financial performance where possible and are aligned with strategic objectives. • Examine current data sources and management information systems to make sure the right information is being used and analysed within your organization and is linked to relevant decision making processes. • Collaborate with industry groups where data is not available within your organization.
Bridge the knowledge gap Recognize and address the need for skills expansion at Board level and within the finance and accounting community for a sustainable economy.	• Consider training needs at various levels within your organization, including for senior management and the Board, to 'future proof' their skill sets.

Looking for inspiration?

There are several examples of innovative companies taking action. Read about the experiences of three — Danone, South West Water and PUMA, the finalists for the 2012 Finance for the Future Awards in the large business category — in the case studies.

DANONE

New decision making criteria

What?

Danone, the global food company providing fresh dairy products, bottled water and both medical and baby nutritional products, introduced a new Nature Division in 2008. This is taking Danone along a journey of accounting for environmental and social factors in addition to financial results.

The Division reports directly to the company's CFO, and is applying financial disciplines to the way environmental data is measured and managed. KPIs on projects now always include environmental measures, and Danone has worked with SAP, the software provider, to expand the group's financial management system to include monthly carbon footprint data at an individual product level.

The group has introduced a new capital expenditure category, 'Green CAPEX', that allows for investing in new projects that show a high environmental interest but have a financial payback period that is longer than that usually accepted by the group.

Changes to decision making are incentivised by, for example, the inclusion of carbon as a KPI in the calculation of management bonuses.

Why?

"*The whole idea was that we should have one department that put nature at the heart of the business*" says Laura Palmeiro, Vice-President of Finance, Nature. "*There are many long-term benefits, for example, you start efficiency processes you had never thought of before. And we even make money out of it*."

"*We really believe the information will be extremely useful. There will be rules and legislation in the future and we will be better placed to deal with that. It also builds a reputational advantage — we get credit for doing this*."

SOUTH WEST WATER

Long term decision making

What?

South West Water, the licensed water and sewerage provider for over 1.65m residents in the South West of the UK, launched its flagship environmental programme, Upstream Thinking, in 2006. Working with third parties, the project aims to reduce capital expenditure on water treatment plants through working with the local environment, land owners and land users to improve both water quality and catchment areas. This required thinking about the business in a different way that included the environmental costs and benefits as well as simply the financials, and drew upon skills across the company from financial governance, project management, legal, tax and treasury.

Why?

"*Our operating costs were increasing and, as well as improving the standard technology, we also decided to work 'upstream' with local landowners and land users to encourage better upstream management to reduce downstream costs to try and prevent some of that work through better upstream management. This offers a much better long term payback than the more conventional methods*", explains Susan Davy, Finance and Regulatory Director.

The regulator, Ofwat, approved the £9.1 million plan for investment between 2010 and 2015, which offers an estimated benefit to cost ratio of 65:1. The project provides improvements to the environment, whilst also offering operational benefits to South West Water by improving natural storage of water and reduction in pollutants, and so saving the cost of building large-scale new filtration facilities with their associated chemical and energy implications.

"*We were so used to working at our assets, like treatment works for example, on our land. Instead, we started working with third parties and outside our asset base. There is a big gain for the community, and there will be long term impacts within the company. Previously, South West Water relied on engineering decisions rather than decisions that included environmental and social factors.*"

PUMA

Valuing the environmental externalities in the supply chain

What?

Global Sport-lifestyle Company, PUMA, became the first major multinational to develop and issue an Environmental Profit and Loss account (E P&L) in 2011. The E P&L analyses and puts a monetary value on key environmental impacts that arise due to PUMA's business from the production of raw materials through to the point of sale. The PUMA E P&L revealed that the monetary value on the company's environmental impacts was €145 million in 2010 — only €8 million of the total derived from PUMA's core operations while the remaining €137 million fell upon its supply chain.

Jochen Zeitz, Director of PPR and Chairman of the Board's sustainable development committee, who conceived the E P&L while CEO and Chairman of PUMA explains, "*To put it simply, the E P&L is a means of placing a monetary value on environmental impacts throughout the entire value chain of a given business. It addresses the cost of business to nature by accounting for the ecosystem services a business depends upon to operate, and it includes the cost of direct and indirect negative impacts on the environment.*"

In 2012, PUMA extended the corporate E P&L to product level and published a Product E P&L, comparing two products PUMA considers to be more sustainable against two of its conventional products from raw materials and production processes to consumer use and disposal. The company did so to ascertain whether their efforts to become a more sustainable company and develop more sustainable products are making a positive difference, and to arm the consumer with the knowledge to make better, more informed decisions in their purchasing.

Why?

Jochen Zeitz, explains, "*We understand the importance of healthy ecosystems to the future of our business. We have embarked on a journey to develop an enterprise and supply chain wide view of our environmental impacts in monetary terms, so that we could take these impacts into account strategically and embed them in our business decision making processes.*"

"*Our E P&L is a tool to provide a more holistic and all encompassing view of managing the business more sustainably. Its primary purpose is to show managers and stakeholders where in our operations and supply chain these impacts occur, as well as their magnitude. It serves as a metric to measure and monitor the footprint of the company.*"

Acknowledgements

Sir Robert Worcester, Founder of MORI and his former MORI colleagues Michele Corrado, John Leaman, Roger Stubbs and Mark Gill, aided by Kerry Colville

Futerra Sustainability Communications, including Solitaire Townsend and Wren Aigaki-Lander

The A4S Integrated Value working group — Chris Tuppen (Chair), Roger Adams, David Aeron-Thomas, Nancy Kamp-Roelands and Alan McGill, with assistance from James Spurgeon

All those who participated in the research as interviewees

UK Department for Environment, Food and Rural Affairs (Defra), which funded the research

The A4S Team — Jessica Fries (Executive Chairman), Sarah Nolleth (Project Director), Debbie Ailes, Charlotte Masiello-Riome, Jeremy Osborn (formerly of A4S), Bethan Walker and Matty Yates

1

UNEP (2010), 'Dead Planet, Living Planet: Biodiversity and Ecosystem Restration for Sustainable Development'.

2

Peter Diamandis and Steven Kotler (2012), 'Abundance'

3

WWF (2012) 'Living Planet Report 2012'

4

UN (2011), 'World population prospects, the 2010 Revision'

5

OECD Publishing (2012), 'Perspectives on Global Development 2012: Social Cohesion in a Shifting World'

6

UN (2012), 'World urbanization prospects, The 2011 Revision'

7

Ceres, (2012) 'Stormy Future For U.S. Property/Casualty Insurers: the Growing Costs and risks of extreme Weather events', www.ceres.org/resources/reports/stormy-future/view

8

UN Water for Life, www.un.org/waterforlifedecade/scarcity.shtml

9

McKinsey & Company (2009) '2030 Water Resources Group: Charting our water future'

10

FAO (2009), 'Global agriculture towards 2050'

11

International Labour Organizations, Geneva, (2011), www.ilo.org/global/topics/youth-employment

12

World Health Organization, (2012), www.who.int/ageing.en

13

Edelman Trust Barometer (2012) http://trust.edelman.com/trust-download/global-results

14

TEEB for Business Coalition (2012), 'Natural capital at risk: a study of the top 100 business impacts'

15

Source: Grilli and Yung; Pfaffenzeller; World Bank; International Monetary Fund; Organization for Economic Co-operation and Development Statistics; UN Food and Agriculture Organization; UN Comtrade; Ellen Mac Arthur Foundation (2012), 'Towards the Circular Economy: The limits of linear consumption'

16

GE (2011), 'Ecomagination Annual report'

17

Carbon Trust (2011), 'Energy Management: A comprehensive guide to controlling energy use'

The Prince's Accounting for Sustainability Project
Clarence House
London SW1A 1BA

www.accountingforsustainability.org
accountingforsustainability@royal.gsx.gov.uk

futerra
sustainability
communications

The design of this document has been supported by Futerra Sustainability Communications
www.futerra.co.uk

Printed on 100% FSC recycled paper.

If you have finished with this report and no longer wish to retain it, please pass it on to other interested parties or recycle it. Thank you.