

THE ROLES OF CORPORATIONS IN INFLUENCING BEHAVIOUR CHANGE TOWARDS SUSTAINABLE PRACTICE

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INTRODUCTION

This paper considers corporate responsibility in diverse contexts and levels within the particular backdrop of sustainable practice. It discusses particular research investigating behaviour change and how corporations can achieve behaviour change from changing industry practices to reaching the value systems of individuals. It describes the latest student research topics in strategic management and business related areas from corporate planning to actions of individuals within companies. The paper provides an insight to the research being undertaken by some of the students from the Master of Sustainable Practice (MSP) Program at RMIT University, Melbourne, Australia.

The MSP is a unique masters program providing a forum for students from diverse backgrounds from technology to the arts to undertake multi-disciplinary research and students carry out research in a wide range of sustainability topics.

Three particular areas of research are summarized:

- A Surveying major corporations querying their strategies and practices in relation to sustainability.
- B Using Information Based Systems to target stakeholders within the agricultural industry to improve sustainable practices.
- C Questioning the role of corporations within the realm of the values and belief systems of individuals.

I. HOW ARE OUR LARGEST COMPANIES DEMONSTRATING CORPORATE RESPONSIBILITY? *

The debate over global warming and apparent changes resulting from climate change has led to an increased awareness around the world of the need for change and adoption of a more sustainable way of life and business operation. There is a growing realization that the available resources of our planet are being consumed at a greater rate than they can be replaced and recent estimates indicate that the world is now consuming resources at the equivalent rate of 1.4 planets each year (according to the Global Footprint Network 2009 Annual Report).

How committed are Australia's largest companies in moving towards a more sustainable future? A sustainability questionnaire has been developed to determine whether Australia's largest companies are committed to sustainability and providing leadership to the Australian community.

The sustainability questionnaire is designed to understand the practices being followed by Australia's largest companies, all of which have international operations. The questions have been designed to understand current sustainability best practice for these companies and establish the standard for other companies to follow. The questionnaire contains 9 sections and includes questions on sustainability strategy, indices and investment, life cycle assessment, environmental impact, renewable energy, supply chain, green purchasing and business impact on society.

The questionnaire was sent to the largest 50 companies on the Australian Stock Exchange (as at 1 March 2010). This questionnaire comprises 50 questions designed in consultation with acknowledged consultants/experts within the sustainability and environment field. The questionnaire was piloted with three companies before being finalized.

The questionnaire has highlighted the following key aspects for those companies responding:

- 95% participate in at least one international sustainability index or program, 65% participate in three or more and 95% participate in the Carbon Disclosure Project
- 85% refer to sustainability in their Company values and 88% incorporate sustainability strategy into their overall company strategy
- 95% view sustainability as a source of competitive advantage
- 85% evaluate costs, benefits and risks of new investments or projects from an environmental and 80% from a social/community perspective
- 75% have set targets for reduction of greenhouse gases and 61% have invested in renewable energy, mainly solar or wind
- 83% have engaged with their suppliers to understand their environmental footprint
- 89% measure and report on employee engagement and diversity within their work force
- 95% record and report on company supported community programmes although only 10% have set and published a target percentage of profit to invest in such programmes
- On average, nearly 5% of energy usage was from renewable sources (this compares with Australian overall average of less than 2% from renewable sources)

Perhaps the most significant of these results is that relating to the involvement with international sustainability indices, especially the Dow Jones Sustainability Index (DJSI), FTSE4Good and Carbon Disclosure Project (CDP). As there is no universal methodology or standard by which companies can judge their performance or understand best practice in relation to environmental and sustainability practices, participation in international sustainability index programmes enables companies to benchmark themselves against set criteria and other sustainability-aware companies.

Involvement with the various programmes represents a considerable investment in time, effort and cost and achievement of the levels set by each index/programme is a clear demonstration of a company's commitment to sustainability.

According to Dow Jones Sustainability World Index Guide Book, September 2009, 'Corporate Sustainability is a business approach to create long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments'. The DJSI assessment criteria allocate 33.3% to each of the economic, environmental and social dimensions, although these weightings may differ between industry groups to reflect the sector's specific exposure to certain sustainability trends. The DJSI follow a best-in-class approach and include sustainability leaders from each industry on a global level. There is an annual review of corporate economic, environmental and social performance, assessing issues such as corporate governance, risk management, branding, climate change mitigation, supply chain standards and labour practices.

Launched in 1999, the Dow Jones Sustainability Indexes are the first global indexes tracking the financial performance of the leading sustainability-driven companies worldwide. Based on the cooperation of Dow Jones Indexes, STOXX Limited and SAM they provide asset managers with reliable and objective benchmarks to manage sustainability portfolios. The DJSI World Index comprises 317 companies. Each year, following the review of company by company performance, DJSI announces Global Supersector Leaders. In 2009 there were leaders for 19 different sectors and included two Australian companies as Supersector Leaders. They were Australia and New Zealand Banking Group (Banks) and GPT Group (Real Estate). Other Sector leaders included such companies as Unilever, BMW, Roche, Total, Nokia, TNT and adidas.

The FTSE4Good Index Series (London based) has been designed to measure 'the performance of companies that meet globally recognised corporate responsibility standards, and to facilitate investment in those companies' according to the FTSE Product Brochure 2008. Being a constituent of the FTSE4Good Index Series clearly demonstrates corporate social/environmental responsibility by meeting an independent third party's required standards. FTSE Group (FTSE) is a world-leader in the creation and management of over 120,000 equity, bond and alternative asset class indices. With offices in London, Frankfurt, Hong Kong, Beijing, Boston, Shanghai, Madrid, Paris, New York, San Francisco, Sydney and Tokyo, FTSE Group works with partners and clients in 77 countries worldwide.

Carbon Disclosure Project (CDP) operate the only global climate change reporting system recognizing that climate change is not a problem that exists within national boundaries. 'As the recognized standard for detailed corporate reporting on emissions data and other climate-related disclosure information, the Carbon Disclosure Project is harnessing the power of information and investor activism to encourage a more effective corporate response to climate change'. 'The Carbon Disclosure Project's detailed reporting is helping persuade companies throughout the world to measure, manage, disclose and ultimately reduce their greenhouse gas emissions. No other organization is gathering this type of corporate climate change data and providing it to the marketplace.' (General Ban Ki-moon, CDP 2009 Global 500 Report, 30 June 2009). The Carbon Disclosure Project is an independent not-

for-profit organization holding the largest database of primary corporate climate change information in the world.

The high level of commitment to globally recognised sustainability indices and/or programmes together with other targeted activity confirmed by the responses to various questions within the survey, suggests that Australia's largest companies are demonstrating their commitment to Corporate Responsibility by improving their sustainability and providing leadership within the community. A review of the respective company websites also reveals a significant investment and commitment of resources to reducing the impact on the environment and an improvement in social and community involvement and outcomes. The growing level of transparency from these companies is applauded and to be encouraged.

Despite the positive nature of many of the responses to the questions, there were a number of areas which raised concerns. These included:

- Only 55% of respondents have set water reduction targets, and 50% have targets to reduce waste to landfill
- Only 17% of respondents had reviewed all of the key sites related to their company operations to evaluate risks due to climate change (e.g. rising sea levels, increased impact due to extreme weather)
- Whilst 45% had a green purchasing policy, only 67% of these companies made it publicly available or widely available within the Company and just 22% of these companies knew the percentage of purchases covered by the policy
- Whilst 44% have set a minimum green star rating for new buildings (leased or owned), just 50% of these companies had set the level at 5 stars or above.
- Only 10% of respondents had set a target percentage of sales or profit to invest in community programmes
- 30% plan to become carbon neutral, just 15% within 3 years.

These answers indicate that there are still a number of areas in which a greater commitment would provide benefits to the environment and community.

The questionnaire is now being adapted so it can be sent to municipalities within Australia to establish their current sustainability practices. As a large number of municipalities will be surveyed it is hoped that an analysis of results for small, medium and large municipalities and by State can be undertaken. Analysis of these two questionnaires will enable a comparison of sustainability practices in Australia's largest companies and municipalities and highlight any areas of significant difference in practice and commitment.

2. DESIGNING INFORMATION COMMUNICATION FOR CHANGE IN A DIVERSE AND COMPLEX MARKET **

The diversity of facts, opinions and stakeholders about the way forward regarding sustainable agricultural practice is considerable. The industry, with continuing increases in technology, knowledge, services, stakeholders and opinion is becoming more complex, as it matures internationally (Marsh and Pannell 1998; Alex, Zijp et al. 2002; Birner, Davis et al. 2006). To ensure that governments are able to meet their responsibilities in this new and complex operating environment improved methods

offering a range of target specific techniques of stakeholder analysis, project methodology and project planning are required.

Government departments overseeing the agriculture industries have a vital responsibility to ensure that agricultural practices are carried out in the most sustainable manner. To meet this responsibility new techniques are needed to ensure messages of sustainability, water use, profitability and others are delivered in the most effective way as to maximise influence for positive behavioural change within society (Alex, Zijp et al. 2002; Anderson, Feder et al. 2007).

Government departments in this role have a corporate responsibility to effectively communicate with various stakeholders regarding:

- The agricultural industry to ensure an economically viable industry
- The community to ensure a reliable source of fresh and healthy produce
- The land and soil to ensure that the land is farmed and maintained in a manner that it can continue to produce a secure and reliable source of food
- The environment so that no negative impacts are caused due to agricultural practice

Given these responsibilities government authorities continue to invest considerable resources to ensure that the agriculture industries, the land they farm and the environment are all cared for. It is a delicate balance - one which involves dialogue with all stakeholders. Arguably the most critical communication occurs with the farming community. This involves raising awareness and building capability about such things as new technologies, crop selection, climate variability, chemical use, occupational health and safety, sustainable practice and many others.

The development and distribution of information provides powerful processes for influencing societal change (Feder and Umali 1993; Anderson and Feder 2003; Douthwaite, Beaulieu et al. 2009). The ability to effectively match information based change approaches such as advertising, agricultural extension and public workshops to the right stakeholders at the right time continues to be a considerable challenge to public and private organisations (Marsh and Pannell 1998; Fulton, Fulton et al. 2003). The Information Based Instruments (IBI) framework described in this paper is a new method for selecting information based communication approaches that achieve outcomes of behavioural change.

The term Information Based Instruments refers to the many methods of information generation, delivery and utilisation designed to affect the behaviours and practices of people. The concept draws from that of Market Based Instruments (MBIs) which are tools that use market-like approaches to positively influence the behaviour of people (Australian Government 2007). In the same way Information Based Instruments (IBIs) are tools that use information-like approaches to positively influence the behaviour of people.

The concept behind the IBI is not new. For thousands of year's information in the form of knowledge, technology, systems and processes has been used to change the behaviour of people. Science has produced information in the form of new ideas that has changed the way people work, live, think and behave. Consider the impact of the television and the internet. Information in the form of commercial advertising has

been used to mould the way people think and behave, every moment of every day. People buy what they see on TV, they visit the places they hear on the radio, they act the ways the newspapers report.

In order to deal with the great issues of sustainability that face today's population, individuals, corporations and governments the world over will need to dramatically change their behaviour. Issues such as climate change, water scarcity, food security and waste will require massive changes in current thinking and practice if they are to be resolved. It is extremely unlikely that these changes will occur fast enough if left to natural change processes. The change will need a-hurry-on, and a range of interventions will be required, one of which will be the generation, dissemination and utilisation of information that influences peoples behavioural choices.

The Information Based Instruments framework aims to enable government and industry stakeholders to better coordinate information based approaches designed to bring about a change in the way people behave and act. Advertising, formal education, extension, web sites, documentaries and movies are all different forms of Information Based Instruments. They can all be used to present all kinds of information on all kinds of issues in a way specifically designed to change the way people think, behave and act. The power of the IBI framework is that it places the focus of stakeholder engagement on the stakeholder's progression within the change process rather than on their willingness to participate.

The Information Based Instrument framework is a combination of the Transtheoretical Model of behaviour change (Table 1) and the Public Participation Spectrum (

Table 2). A brief description of these two models is provided below. The IBI framework has two corner stone assumptions that link these two models:

- That information can be used to influence behaviour just as economic and financial drivers are used in Market Based Instruments.
- The stage that an individual, group or population is at regarding the change process of specific issues correlates to their stake in participation.

In considering the Transtheoretical Model (Table 1), also known as the Stages of Change model of behaviour change, we can obtain a great insight into the effectiveness of change programs by focusing on the progress of stakeholders in the change process. The Transtheoretical Model was developed by James Prochaska and colleagues, during the 1980s and 1990s. The model posits that behaviour change involves progress through six stages of change

(Prochaska and Velicer 1997; Lezin 2007). The model has been extensively applied in the field of health particularly regarding to addiction. While not explicitly designed with broader behaviour change programs in mind, the theory has considerable merit to offer this field of thinking.

A description of the six phases of the Transtheoretical model is provided here:

Table 1: Transtheoretical change model (Prochaska and Velicer 1997; Lezin 2007)

Pre-Contemplation:	Changing behaviour has not been considered; person may not realise that change is possible or that it might be of interest to them.
Contemplation:	Something happens to prompt the person to start thinking about change – perhaps hearing that someone has made changes – or something else has changed – resulting in the need for further change.
Preparation:	Person prepares to undertake the desired change – requires gathering information, finding out how to achieve the change, ascertaining skills necessary, deciding when change should take place – may include talking with others to see how they feel about the likely change, considering impact change will have and who will be affected
Action:	People make changes, acting on previous decisions, experience, information, new skills and motivations for making the change.
Maintenance:	Practice required for the new behaviour to be consistently maintained, incorporated into the repertoire of behaviours available to a person at any one time. In some cases the maintenance phase is never left. People need to consciously maintain the behaviour.
Termination	When the person can maintain the behaviour in an ongoing basis without conscious effort. In some cases the thought of returning to the previous behaviour is repulsive and in others, the behaviour change stage is never realised.

The Public Participation Spectrum (

Table 2) developed by International Association for Public Participation (IAP2), provides a guide to the kinds of information approaches that are useful based on the required involvement of stakeholders. The IAP2 states a number of core values around the idea that better decisions are made when stakeholders participate in the decision making process. The Public Participation Spectrum is commonly used in by governments in considering the decision processes employed (IAP2 2007). The spectrum is described here:

Table 2: IAP2 Spectrum (IAP2 2004)

Public Participation	Participatory Goal	Example Techniques
Inform	To provide the public with balanced and objective information to assist them in understanding the problems, alternatives, opportunities and/or solutions.	<ul style="list-style-type: none"> • Fact sheets • Web Sites • Open houses
Consult	To obtain public feedback on analysis, alternatives and/or decisions.	<ul style="list-style-type: none"> • Public comment • Focus groups • Public meetings
Involve	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	<ul style="list-style-type: none"> • Workshops • Polling
Collaborate	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	<ul style="list-style-type: none"> • Citizen Advisory Committees • Participatory decision-making
Empower	To place final decision-making in the hands of the public.	<ul style="list-style-type: none"> • Citizen juries • Ballots

		<ul style="list-style-type: none"> Delegated decisions
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The IBI works on the basis that the progression of behavioural change by individuals is parallel to their willingness to participate in change programs and decision making processes. Through the IBI we can identify that as people move through the change process the more corporations and governments must give up control to the people to ensure that such change is sustained.

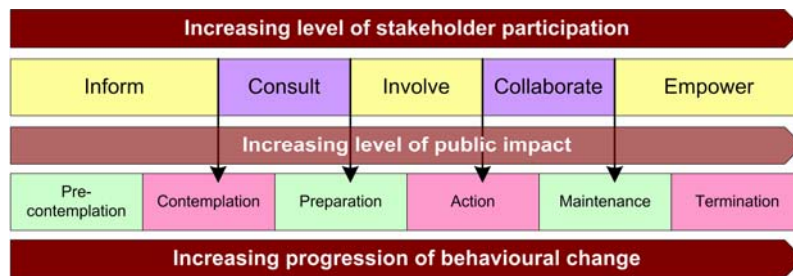


Figure 1: IBI Framework

By understanding the progression of behavioural change we can map to the level of stakeholder participation that is likely to have maximum impact.

Table 3: IBI Framework to medium mapping

Stage of behavioural change	IAP2 PPS	Information Medium Examples
Pre-Contemplation	Inform	<ul style="list-style-type: none"> TV and radio advertising Factsheets Web pages
Contemplation	Inform - Consult	<ul style="list-style-type: none"> TV and radio advertising Web pages; Focus groups; Surveys;
Preparation	Consult – Involve	<ul style="list-style-type: none"> Focus groups; Public meetings; Workshops;
Action	Involve – Collaborate	<ul style="list-style-type: none"> Workshops; Citizen advisory groups; Committees;
Maintenance	Collaborate - Empower	<ul style="list-style-type: none"> Citizen advisory groups; Committees; Management

		committees
Termination	Empower	<ul style="list-style-type: none"> • Management committees • Support groups • Conferences

The IBI reduces the complexity of selecting voluntary information based behaviour change approaches by focusing on an understanding of the position of stakeholders regarding their stage of change as per the Transtheoretical model. If this can be effectively done by way of market research, situational analysis and stakeholder consultation then selecting the appropriate information based intervention becomes considerably easier and more targeted. This approach will lead to improved effectiveness of the behaviour change program implementation and higher return on investment for program investors.

3. CORPORATE RESPONSIBILITY AND VALUE CHANGE ***

This research looks at how organisations can encourage their employees to value sustainability, and practical measures to support staff adopt more sustainable practices. The potential barriers to implementing behaviour change processes will also be addressed. Finally, it will examine motivating staff by recognising their achievements and supporting their adaptation to the new practices.

Value Change

The values of an organisation may be stated in corporate policy and promotional literature (e.g., sustainability indicators), but communicating these to staff and having staff align with them can be challenging. All employees will have their own value systems. An individual's values and belief system are constructed through social interactions within peer groups. An individual chooses what to believe based on what fits best with his/her personal world view. People generally will not do something unless it is of benefit to them, or fits within their value systems (Marshall 2010; Seligman et al 1996).

It can be very difficult to change someone's values; it may require a catalyst that has a powerful emotional effect on them. Life-changing experiences can lead to value change. These experiences are often personal; such as loss of family/friend, or the birth of a child. However, another way to generate an emotional response, which can provoke value change, is through inspirational material such as art and documentaries (e.g., 'An Inconvenient Truth') (Ison et al 2009; McKenzie-Mohr 1999; Guggenheim 2006).

The notion of 'sustainability' may be seen as an ideal by some people, not something they have time to achieve. Due to the busy lifestyles in our society, individuals can tend to prioritise their immediate physiological and esteem needs. People may not see the connection between making a sustainable choice now, and how that will affect the safety and wellbeing of them (and their peers) in the future. For example, as the film 'An Inconvenient Truth' illustrated, climate change can bring real physical dangers. It can be difficult to convey the sense of urgency around sustainability issues

and keep staff reminded of their impact on the 'bigger picture' (Huitt 2007; Guggenheim 2006; Marshall 2010).

Some important points when encouraging behaviour change in staff are identifying:

- What keeps people from taking action?
- How do you keep people motivated?

Barriers

There can be many barriers to staff adopting and maintaining sustainable practices. Levels of behavioural change can also vary; sometimes an individual may adopt a new behaviour, but only apply the behaviour 50% of the time. Alternatively, someone may start acting differently, but give it up when circumstances change (e.g., changing roles) (McKenzie-Mohr 1999; Transtheoretical Model, 2010).

The following tables examine some common barriers and suggested solutions. The barriers have been categorised as *external* and *internal/personal*.

External: These barriers can be overcome by external processes, and the solutions to these can be less complex.

Internal/personal: These barriers can be less easy to overcome, as can they involve a combination of personal habits, values and psychology.

Table 4 – External barriers and their solutions

External Barriers	Solution/Requirements
Lack of time to change	Allocate time, prioritise importance of change
Requires money	Allocate funds
Its easier to conform to social norms than be innovative	Behavioural change strategies can be used to change the social norms (McKenzie-Mohr 1999, Social Norms 2010; Diffusion of Innovations 2010)

Table 5 – Internal barriers and their solutions

Internal/Personal Barriers	Solution/Requirements
Habits are hard to break, people prefer to continue doing things the way they usually do (inertia)	Training & education – emphasise benefits of new practices
Don't understand the urgency of the problem	Training & education (also relevant literature, websites & documentaries)
Need further education on what action to take	Training & education (also relevant literature, websites & documentaries)
Disempowerment – if the majority doesn't care, why should an individual – what difference can one person make?	Group work & team building exercises that demonstrate collaborative effectiveness (e.g., tree planting)
Uncertainty about the science / accuracy	Training & education (also relevant literature, websites & documentaries)

Promoting sustainability

There are various ways to help inspire staff to be more engaged in sustainable practices. These can include: celebrating sustainability events, integrating sustainability in performance appraisal processes, including staff in environmental reporting processes and communicating the value of sustainable practices to staff.

Firstly, to engage staff in environmental activities refer to the local and international events that celebrate sustainable/environmental themes, and then incorporate some of these into corporate calendars, for example:

- Organise activities for World Environment Day (e.g., guest speakers at lunchtime (World Environment Day 2010))
- Encourage teams to participate in 'National Tree day' and plant trees in a local area (National Tree day 2010)
- Encourage staff to ride or walk to work during 'Ride/Walk to work' days (e.g., organise free breakfast for all that participate (Walk to Work 2010; Ride to Work 2010))
- Organise activities during local Fair Trade fortnight (e.g., Fair Trade afternoon teas - some Fair Trade organisations support this by providing posters, fliers and contacts of where to purchase supplies (Fair Trade 2010)).

Participating in these activities can make staff feel more empowered and happy to work for an organisation that has environmental and social values, and actively demonstrates this (McKenzie-Mohr 1999; Seligman 1996).

Secondly, the employee performance review process could include a criterion for 'sustainability contribution'. This can help formalise 'sustainability' as a key indicator which can be measured and demonstrated. To support this, an 'environment committee' could be set up where employees help organise activities to promote sustainability. Staff can be encouraged to join these committees, and a set time per week can be allocated for this contribution.

Thirdly, the organisation's communication channels can be used to promote the 'environment committee', the activities/events, and any websites or documentaries on sustainability that are relevant. This could involve coordinating staff viewing sessions for sustainability themed documentaries such as 'Food, Inc.' (Kenner 2008).

Finally, the 'environmental committee' could be involved in corporate activities such as environmental reporting (e.g., waste auditing). This can help empower staff by giving them a task which has measurable results. Communicating the results from the environmental reporting in a clear and concise fashion to all staff can help them understand the importance of the action taken (Marshall 2010).

Achievements

Acknowledging the positive achievements of employees is an important part of the process for successful behaviour change implementation. By setting goals with manageable timeframes (e.g., 3 months / 6 months), positive results can be seen by staff and used to encourage continuing engagement in sustainable activities. Initially it

can be best to focus on the easy options (the 'low hanging fruit'), this way more results can be seen by staff more quickly (McKenzie-Mohr 1999).

Maximising activities with the available resources is a good way to demonstrate what is possible, which should make sustainable action in the future easier to implement. Real, measurable results are something to celebrate and communicate to employees in a way that makes them feel valued and encouraged that they were involved in these worthwhile initiatives (McKenzie-Mohr 1999).

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