



# Business Guide to a Sustainable Supply Chain

## A Practical Guide

NOVEMBER 2003



New Zealand Business Council  
for Sustainable Development

For interactive version go to:  
[www.nzbcSD.org.nz/supplychain](http://www.nzbcSD.org.nz/supplychain)

# Dedicated to making a difference

## WHAT IS THE NEW ZEALAND BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT?

The New Zealand Business Council for Sustainable Development (NZBCSD), established in May 1999, is a coalition of leading businesses united by a shared commitment to sustainable development via the three pillars of economic growth, environmental protection and social progress.

The NZBCSD is a partner organisation to the World Business Council for Sustainable Development, a coalition of over 165 international companies with members drawn from more than 30 countries and 20 major industrial sectors. We also benefit from the WBCSD's global network of 43 national and regional business councils and partner organisations, involving some 1000 business leaders globally.

## OUR MISSION

To provide business leadership as a catalyst for change toward sustainable development, and to promote eco-efficiency, innovation and responsible entrepreneurship.

## OUR AIMS

Our objectives and strategic directions, based on this mission, include:

Business leadership – to be the leading advocate on issues connected with sustainable development.

Policy development – to participate in policy development in order to create a framework that allows business to contribute effectively to sustainable development.

Best practice – to demonstrate business progress in environmental and resource management and corporate social responsibility and to share leading-edge practices among our members.

Global outreach – to contribute to a sustainable future for developing nations and nations in transition.

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## Members

BP Oil New Zealand Ltd  
City Care Ltd  
Cowper Campbell  
DB Breweries Ltd  
Deloitte Touche Tohmatsu  
Fonterra Co-operative Group Ltd  
Griffins Foods Ltd  
Holcim (New Zealand) Ltd  
Hubbard Foods Ltd  
IAG New Zealand Ltd  
Infrastructure Auckland  
Interface Agencies Ltd  
Landcare Research  
Living Earth Ltd  
Meridian Energy Ltd  
Metro Water Ltd  
Mighty River Power Ltd  
Minter Ellison Rudd Watts  
Money Matters (NZ) Ltd  
Morel & Co  
MWH New Zealand Ltd  
NIWA  
Orion New Zealand Ltd  
Palliser Estate Wines of Martinborough Ltd  
Port of Tauranga Ltd  
Ports of Auckland  
PricewaterhouseCoopers  
Richmond Ltd  
Sanford Ltd  
Shell New Zealand Ltd  
Telecom New Zealand Ltd  
The Boston Consulting Group  
The Warehouse Group Ltd  
Toyota New Zealand Ltd  
Transfield Services (New Zealand) Ltd  
Transpower New Zealand Ltd  
Tranz Rail Ltd  
TrustPower Ltd  
Urgent Couriers Ltd  
URS New Zealand Ltd  
Vodafone New Zealand Ltd  
Waste Management N.Z. Ltd  
Watercare Services Ltd  
Westpac

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# Introduction



*Stephen Tindall, Chair, New Zealand Business Council for Sustainable Development and founder of The Warehouse*

We have written this Guide in response to a growing need for all organisations, whether they provide goods or services and whether they are in the public or the private sector, to demonstrate that they operate their business with due consideration for their environmental, social and economic impacts.

## Message from the Chairman

We have an image overseas of a clean, green country with products and services to match. With food and drinks export sales alone in the region of \$14 billion we stand to lose a lot if we can't demonstrate to our customers around the world that we practice what we preach.

All businesses rely on their supply base and customers to survive. Increasingly we are being expected to know that our suppliers are as mindful of their environmental and social responsibilities as we are or should be. This is not always easy to do with local suppliers but it is even harder with suppliers from other countries. However being difficult to do is no excuse because if you don't find out about your own supply chain, someone else might do it for you. These hard lessons have been learned by many companies including Nike, Nestlé, B&Q and others and have prompted them to work towards sustainable supply chains.

There is a compelling business case for companies to work with suppliers to jointly develop products and services which are commercially viable, preserve our environmental resources and look after our workforce and communities. However sustainable development starts at home and at the top. You need to start implementing it in your own organisation before you can start reaching out to suppliers or customers.

We believe this is a real opportunity for New Zealand to capitalise on its brand equity to enter new markets and to show leadership. There are lots of examples in this Guide of companies who are designing sustainable products and services which embrace a 'cradle to grave' approach. There are many initiatives by private and public organisations who are adopting codes of conduct for themselves and their suppliers. These companies want to help their suppliers become more sustainable not just in terms of their environmental and social impacts but also to help them be more economically viable. For a country like ours where 80% of companies are small businesses with less than 20 employees, this is vital.

We can however do much more. I challenge all New Zealand organisations to think about their own opportunities for working with their suppliers and customers to make effective and efficient use of our country's resources. Take a look at the tools in this Guide and ask your team to see how they can use them in your organisation. Above all when you're faced with a purchasing choice, all things being equal, choose the most sustainable one.

**Stephen Tindall**



# Executive Summary

## EXECUTIVE SUMMARY

There is probably not a single New Zealand business that is not both a supplier and a customer.

To be effective, sustainable development must extend from an individual company, both up and down the supply chain, and can be extremely complex. Yet more and more companies are addressing this issue driven by media and Non Governmental Organisation (NGO) campaigns, customer and consumer demand, regulatory frameworks and, as Ab Stevels, Senior Environmental Advisor, Philips suggested at a UK sustainable supply conference: "because some managers are actually part of the human race and want to contribute to it".

## WHATEVER THE REASONS FOR EMBARKING ON THE JOURNEY THE FOCUS AREAS ARE THE SAME:

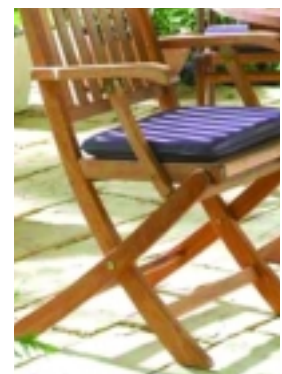
- Improving the performance of the business's own operations
- Ensuring that the goods and services provided by suppliers are sustainable and working with suppliers to increase efficiency and competitiveness.
- Working effectively with customers and sales channels to design sustainable products and services.

In large companies, the supply chain manager has a pivotal role in the process from procurement through to managing the reverse logistics, which can be described as the process of moving goods back through the system with the purpose of finding another use for the products, or for proper disposal. Whilst most New Zealand companies are too small for this to be a dedicated position, recognising what is involved is almost a prerequisite to addressing the issues successfully.

Few organisations make significant progress in sustainable development without the benefit of strong and committed leadership which empowers the management team to include social and environmental considerations alongside the economic ones. Often waste management and resource recovery is left to junior management and considered as 'housekeeping', and purchasing decisions are made without any consideration of the wider issues.

*"Sustainable development is development which meets the needs of the present without compromising the ability of future generations to meet their own needs."*

Brundtland Report:  
Our Common Future, 1987



*What choice of timber?*

Each organisation has its own way of entrenching and demonstrating its commitment. Organisations such as Shell and The Warehouse build specific measures into executive incentive schemes. Several have appointed senior managers with the specific mandate to focus on sustainable development and Sanford has even gone so far as to incorporate the word Sustainable in the company's name.

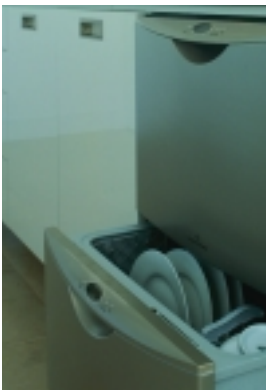


*Recycling at Progressive.*

Having made the decision to get started, organisations follow through with practical initiatives to provide the momentum for the programme. Some examples include The Warehouse's reverse logistics system that recycles almost all retail store wastes, and the efforts made by Progressive Enterprises and Landcare Research to design new facilities that incorporate eco-efficiency and both social and economic considerations.

Generally speaking a company can elect to follow either a conformity-based approach towards improvement or a process management approach. In the conformity-based approach the organisation elects to follow and implement a system based on a framework such as ISO14001, SA8000 or Enviro Mark. In the process management approach the organisation focuses on its own unique priorities and develops a customised approach.

The process management approach works well for global organisations such as Shell and Danone – parent company of Griffins in New Zealand. The smaller organisation with more limited resources may benefit from using an existing framework.



*Product stewardship*

Having made the initial internal efforts, organisations turn towards the improvements which can be achieved by working with suppliers and service providers. This is often done through a Code of Conduct for suppliers, reviewing the purchasing Terms of Trade and conducting surveys and audits. The greatest gains are made though working closely with suppliers to identify those areas where improvements can be made. However, working with its direct suppliers is not sufficient; companies also have to engage with their suppliers' suppliers on a similar basis.



*Collaboration between suppliers reduces vehicle utilisation.*

A further challenge as well as a benefit, lies in working with suppliers and customers to improve the design of products and the processes that connect the business with customers. Whilst this is the least developed area, there has been some significant success in redesigning packaging and in increasing the recyclable content in products as diverse as mobile phones, whiteware and cars.

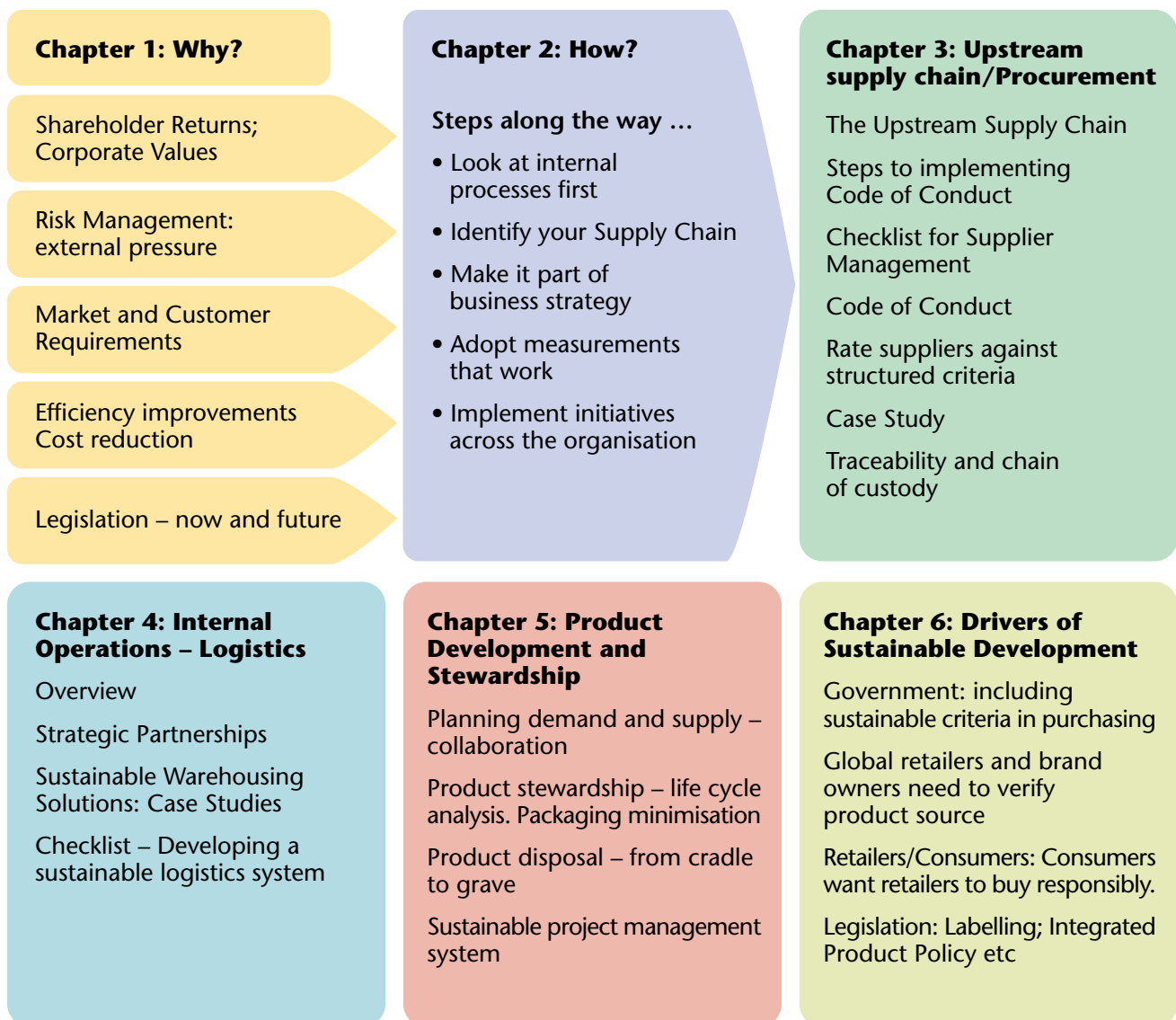
Process collaboration with suppliers and customers in planning, forecasting and replenishment has been shown to deliver improvements in manufacturing and logistics efficiency whilst reducing emissions, road congestion and improving employment stability.



The supply chain provides the focus for any organisation, whether service- or product-based, seeking to improve the social, environmental and economic performance of its operations. Apart from the moral imperative, substantial business benefit can be achieved through a combination of leadership commitment, focused and practical initiatives, and improved systems and processes.

We have designed this Guide to explain why organisations should act, and to provide tools which can be adapted by individual companies to meet their own needs. It includes companies in New Zealand and overseas that are engaged in sustainable development but also identifies (in Chapter 6) what needs to happen to really make a difference. The Guide is divided into six sections which are written for the manager responsible for the specific area:

### THE SUSTAINABLE SUPPLY CHAIN AT A GLANCE



# What is a Sustainable Supply Chain and why is it important?

Shareholder returns;  
Corporate values

Risk management:  
external pressure

Market and customer  
requirements

Efficiency improvements  
Cost reduction

Legislation – now and future

## WHAT IS A SUSTAINABLE SUPPLY CHAIN?

There are numerous definitions of the terms ‘Sustainable’ and ‘Supply Chain’. For the purposes of this Guide we have chosen to use the following simplistic, but practical, definition:

**“Management of raw materials and services from suppliers to manufacturer/ service provider to customer and back with improvement of the social and environmental impacts explicitly considered”.**

The supply chain considers the interactions between a business and its customers and suppliers. The greatest benefits are derived by extending the focus as far as possible upstream towards the raw materials, downstream towards the consumer and then back again as the product and wastes are recycled.

### The Guide focuses on three principal areas:

|   |   |                  |
|---|---|------------------|
| 1 | <b>Procurement:</b> Monitoring the goods and services sourced from external suppliers   | <b>Chapter 3</b> |
| 2 | <b>Internal Operations:</b> The impact of logistics and conversion processes from raw materials through to the consumer and back again. | <b>Chapter 4</b> |
| 3 | <b>Product Development and Stewardship:</b> Working effectively with customers and sales channels.                                      | <b>Chapter 5</b> |



## HOW IS IT CHANGING?

**The emphasis has shifted from the ‘green consumer’ to the ‘responsible retailer’<sup>1</sup>** whereby the retailer/service provider and the brand owner assume responsibility for ensuring that consumers can buy products and services with confidence in their source and manufacture.

**Similarly the relationship between manufacturers and retailers has shifted.**

In the past manufacturers were the drivers of the supply chain, managing the pace at which products were manufactured and distributed. Today it is retailers that drive the agenda and successful manufacturers are those who can meet customer demands for options, styles or features as well as fulfil and deliver orders quickly.

<sup>1</sup> Alan Knight, Head of Social Responsibility, Kingfisher: ‘How green is my kitchen?’ 2002 Report



**Brent Wollaston, Griffins' Supply Chain Director:** *"Our historic mode of operation has been largely based on buyer/seller-driven relationships. Our supply chain vision now is customer-facing and comprehensive – from crop to consumer. Ultimately we will grow our business by having the products consumers want to buy at the right time in the right place, consistently and cost effectively."*

Whilst the above depicts the classic product-driven supply chain, the service sector is an equally important part of New Zealand industry. Companies selling services are particularly focused on the front end of the supply chain with responsibility for procurement of labour and resources.

## WHY DOES IT MATTER?

In all sectors, quality and costs, the traditional competitive differentiators have become broadly similar across many suppliers. One way in which companies can differentiate themselves, reduce costs and improve service is to consider the environmental, social as well as economic factors relating to their supply chain.

Products and services are global commodities. **A shift in one market or industry can have a huge impact. For example:**

- 1. The Public Sector Tender Process:** The New Zealand Central Government spends **\$2.5 billion** on goods and services each year and Local Government spends a further **\$1.5 billion**.<sup>2</sup> If sustainable development criteria were built into the tendering process this would have a major impact on the supply base.
- 2. Retail Pressure:** The top five grocery retailers in the UK have a 69% market share and have combined sales of **£67 billion**.<sup>3</sup> These supermarket chains have all committed to sustainable procurement practices. New Zealand's food exports to the UK represent **NZ\$1 billion** per annum<sup>4</sup> and are 76% of total exports to this region. This market could decline if suppliers cannot guarantee that they meet their customers' codes of practice, but conversely offers huge opportunities to those producers who build on New Zealand's reputation as a safe source of food.
- 3. Industry Shift by Sector:** New Zealand exports of seafood to the UK were **NZ\$32 million** in 2001 and market growth continues because we can demonstrate to retailers our sustainable fishery practices.

The globalisation of consumption patterns and sourcing and outsourcing are both causing and resulting in complex supply chains. This is compounded by the increasing visibility and scrutiny of 24-hour news and the Internet which publicise potentially 'unsustainable' practice hidden in some supply chains. Organisations need to come to terms with the social and environmental impacts as well as the cost structure of their supply chains and to find ways of managing them.

## Facts about the Global Supply Chain

- 1.** The Food & Beverage industry represents approximately 50% of exports with a value of NZ\$14 billion in 2003.<sup>5</sup> Customers have increased interest in the sustainability of these exports.
- 2.** In 2002 the leading 30 grocers in the world accounted for 33% of global sales, compared with 29% in 1999. Global grocery sales are estimated at US\$3,484 billion. USA's Walmart is by far the world's largest retailer, with France's Carrefour in second place.<sup>6</sup>
- 3.** In Europe the top 30 grocery retailers account for 67% of the total retail sales of Euro 865 billion, with the leading 10 European retailers representing 40% total retail sales.<sup>7</sup> Most of these retailers now examine the sustainability of their supply chain.
- 4.** In New Zealand the grocery market is even more concentrated with two groups holding 83% share.

<sup>2</sup> Based on a procurement template for Local Government, Supremelink Consultants for LGNZ, October 2001

<sup>3</sup> Tesco, Sainsbury, Safeway, Asda, Morrisons

<sup>4</sup> [www.nzte.govt.nz/](http://www.nzte.govt.nz/)

<sup>5</sup> [www.nzte.govt.nz/common/files/stats-may03.xls](http://www.nzte.govt.nz/common/files/stats-may03.xls)

<sup>6</sup> Top 30 Grocery Retailers Worldwide, 2002, M+M Planet Retail.

<sup>7</sup> Top 30 Grocery Retailers in Europe, 2002, M+M Planet Retail.

This includes companies at the beginning of the supply chain, eg. commodities which represent a significant part of our export market; those in the middle, eg. manufacturers and logistics companies; and those at the end, eg. retailers and the public or service sector.

The chart below illustrates some of the issues related in the process:



## BENEFITS OF A SUSTAINABLE SUPPLY CHAIN

Re-evaluating a company's supply chain, from purchasing, planning, and managing the use of materials to shipping and distributing final products, with an emphasis on improving environmental and social performance, has had real benefits for those companies participating in this Guide and others.

## “Dedicated to making a difference”

### Shareholder Returns

Financial performance of Dow Jones Sustainability Index Companies  
July 2003 study: “Sustainability leaders in food sector produce healthy returns”

### Corporate/employee values

July 2003 study “Responsible business attracts the best people”:  
Starbucks – low staff turnover pays

### Risk Management

IAG – managing climate change risk  
Nestle, Nike, Shell – activist/boycott risk

### Market Appeal

Urgent Couriers won business  
with URS and EECA because  
of SDR report

Sanford – Marine Stewardship  
Council certification of  
Hoki fishery

### Investor Appeal

The Warehouse – FTSE4Good Index,  
Storebrands ethical funds

### Efficiency

Christchurch City Council – 25% energy saving.  
Griffins – reduced inventories and vehicle utilisation

## SHAREHOLDER RETURNS: SUSTAINABLE DEVELOPMENT PAYS.

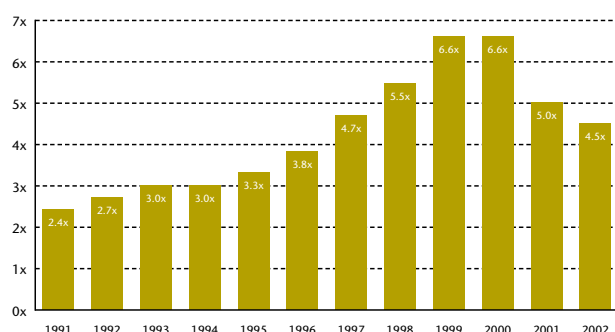
Dow Jones has valued more than 300 companies in relation to their sustainable development in the Dow Jones Sustainability Group Index (DJSI). The index provides evidence that sustainable development pays, with companies in the index outperforming the Dow Jones Group Index. The 2003 annual review of the components of the DJSI found that since September 2002 the DJSI World (in US\$) has outperformed the mainstream market, rising 23.1%, compared with 21.2% for the MSCI<sup>8</sup> and 22.7% for the DJ World Index.<sup>8</sup>

## CORPORATE VALUES

Reputation and brand are among a company's principal assets. One of the parameters that can have a negative influence on corporate reputation and share price is whether the company's supply chain is socially responsible and accountable. The book value of a company is significantly enhanced by investment in its people, environmental impacts and local communities.

### THE IMPORTANCE OF INTANGIBLES

Market to Book ratio for the S & P 500 – 1991 to 2002 (Brand Economics 2002)



<sup>8</sup> Morgan Stanley Capital International; Dow Jones World Index



**Rachel Palmer,  
Sustainable Development  
Manager, Shell:**

*"Any actions which may be seen as inconsistent with Shell Group Business Principles can potentially lead to damage to the Group's reputation and its business. Integration of sustainable development in the business is potentially a source of competitive differentiation, positioning Shell as the Partner of Choice, enabling value growth and thereby increasing Total Shareholder Return."*



*Sanford's prices for 'sustainable Hoki' have increased following accreditation, as retailers and consumers are prepared to pay a premium for certified fish. Unilever have committed to sourcing 100% MSC fish by 2005 with UK retailer Sainsbury setting the same target for 2010.*

## **RISK MANAGEMENT**

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In the mid-1990s, Shell's plans to dispose of the Brent Spar oil rig, and its alleged negative impacts on local communities in Nigeria, brought social and environmental responsibility to the world stage. Shell's journey towards sustainable development commenced with these wake-up calls and started at the top of the organisation. Since then, Shell reviews its sustainable strategy as part of its planning process and has moved from its initial 'Trust me' programme to its current 'Show me' approach.

The growing demand for sustainable products particularly by European retailers and the response by manufacturers are due in part to recognition that one bad story can do lasting damage to a brand. Damage control is more costly than proactively managing an issue.

## **APPEALING TO MARKETS: FINANCIAL BENEFITS: SANFORD SUSTAINABLE SEAFOOD**

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Sanford's business is based on the growth and harvesting of wild fish and shellfish within the sustainable fish quota management system and is entirely dependent upon long-term fish supply. This focus is underpinned by the inclusion of Sustainable in the branding and name.

The Quota Management System (QMS) lies behind New Zealand's reputation as a world leader in sustainable fisheries management. Individual New Zealand companies such as Sanford own the quota and it is therefore treated with the same respect as any other valuable asset. The QMS ensures that New Zealand waters are not over-fished and that New Zealand seafood will be available for generations to come.

More than 90% of New Zealand's seafood – with an annual value of approximately US\$669 million – is exported. The most valuable export species is New Zealand Hoki. In 2001, Hoki exports to the European Union were worth US\$150 million and those to the USA were worth an additional US\$90 million.

In 2001, New Zealand Hoki became the world's first large whitefish stock to achieve Marine Stewardship Council (MSC) certification. This eco-label is independent confirmation that the fishery is being managed according to the sustainability principles and criteria of the MSC.

## APPEALING TO CUSTOMERS: INCREASED SALES AND BRAND SECURITY

Companies embracing sustainable development can benefit from being a first mover in a market. All else being equal, 82% of UK consumers prefer to purchase goods from socially and environmentally responsible companies, according to a 2003 study, and 23% would do so even if this option is more expensive.<sup>9</sup>

## FIRST MOVER: URGENT COURIERS

In December 2002, Urgent Couriers increased its point-to-point courier prices by a flat 10% because low rates were reflected in low salaries for the company's contract drivers. The market followed. Urgent Couriers has also won business because of its principles.

**Steve Bonnici, Managing Director, Urgent Couriers:** *"I have also asked if customers are prepared to pay more for excellent service as a result of our commitment to sustainable development. So far the results have indicated customers would be prepared to pay a premium of 2-3% for our service."*

**URS Triple Bottom Line:** *"We made the decision to switch the bulk of our courier needs to Urgent Couriers on the basis that their service and prices were comparable to our existing provider but that they were also committed to operating in an environmentally and socially responsible manner."*



Steve Bonnici, Managing Director, and Sandy McInnes, Environmental Health and Safety Manager, Urgent Couriers

## INCREASED EFFICIENCY REDUCES COSTS

Driving out inefficiency from processes is good business practice and reduces costs. In the service sector, introducing videoconferencing (phone conferencing) reduces energy consumption and emissions associated with travel; increases productivity and reduces costs. See NZBCSD *Business Guide to Energy Efficiency*, [www.nzbcscd.org.nz/energyefficiency](http://www.nzbcscd.org.nz/energyefficiency)

## LEGISLATION NOW AND FUTURE

Regulatory trends in certain industries and countries support the business case for action. These include electronics product take-back and recycling legislation in the European Union, United States biosecurity requirements and frameworks which support the Kyoto process. There are also a number of emerging intergovernmental supply chain certification schemes such as the ILO Declaration of Principles and Labour Standards which is referred to on page 25.



<sup>9</sup> Social Market Foundation: ref [www.bitc.org.uk](http://www.bitc.org.uk)

# How to implement a sustainable supply chain

## Steps along the way ...

- Look at internal processes first
- Identify your Supply Chain
- Make it part of business strategy
- Adopt measurements that work
- Implement initiatives across the organisation

The sustainable development of products is based on the social, environmental and economic impacts of these goods and services along the supply chain.

The participating organisations may differ in product or service and are at varying stages of the supply chain. However, there are a number of consistent themes, which help drive progress and can be adopted by others.

We have provided a number of tools in this Guide to help companies in planning their own supply chain impact and in implementing change.



## **STEP 1: LOOK AT YOUR INTERNAL PROCESSES FIRST AND MAP YOUR OWN RISKS**

Organisations need to recognise that they have to identify, understand and manage issues within their own organisation before they start working with other organisations in their supply chain to ensure that these issues are successfully managed throughout.

Creating a sustainable supply chain can therefore be a next step for companies that have produced a Sustainable Development Report. Greater detail on how to do this is provided in the NZBCSD *Guide to Sustainable Development Reporting* available in the publications area of the NZBCSD website, [www.nzbcscd.org.nz/sdr](http://www.nzbcscd.org.nz/sdr)

### **Dick Hubbard:**

*"If you're not sustainable yourself how can you demand it of others"*

**If there is one key driver for all of the participating companies it is that sustainable development is driven from the top down within each organisation. If senior management is unconvinced – it won't happen.**

*Select your potential risks from the following chart and assess its level of importance to your business. Note that risks do not need to be certain for them to cause damage to your bottom line. Start with those to which you have given a 4 or 5 rating:*



## Risk Monitor

Environment

Social

Economic

5 is highest risk

| Supply Chain                      | Issue  | Risk  | Examples   | Rating 1-5 |
|-----------------------------------|--|---|--|------------|
| Procurement                       | Sustainable source of raw materials including all components                                 | Chain of custody is uncertain. May result in consumer concern/NGO activity; Ineligibility for public/private tenders    | Retailers request GM-free – foods and non-foods; NGO activity relating to deforestation; UK Govt procuring doors & desks for Whitehall from endangered species |            |
|                                   | Use of chemicals/hazardous substances.   | Product safety scare. Precautionary Principle might be applied in certain countries. Product recall                     | Pesticides in produce. Marks & Spencer ban PVC.  |            |
|                                   | Animal husbandry: Breeding; Feeding; Food supply   | Loss of business because chain of custody cannot be proved  | See Richmond case study – need to demonstrate animal husbandry.  |            |
|                                   | Long-term supply   | Source drying up will threaten economic viability   | Fears for long term-fish supply prompted development of MSC; Maui gas supply; Toyota developed hybrid vehicle recognising diversifying energy supply.          |            |
|                                   | Short-term supply  | Insufficient product to fulfil demand   | NZ police not able to source enough LPG vehicles.  |            |
|                                   | Waste and packaging  | Inefficient use of resources. Cost to business  | Cost of landfill – levies and charges  |            |
|                                   | Labour standards and practices. Conditions do not conform to ILO standards                   | Media scrutiny; boycotts; Loss of business, eg. ineligible for public/private tenders                                   | Overseas labour conditions, eg. Nike; Gap;   |            |
|                                   | Supplier dependence and viability  | Eliminating a supplier from supply base might close their business and cause public outcry                              | Marks & Spencer's decision to move some of its supply base from UK to overseas.  |            |
|                                   | Fair pay for suppliers   | Sustainability of supply base and potential adverse publicity   | Coffee supply; Fair Trade products   |            |
|                                   | Inventory levels   | Negative impact on cash flow  | Companies left with seasonal stock due to inefficient procurement  |            |
|                                   | Local supply or overseas   | Buying local may be more expensive and problems with continuous supply.   | Sainsbury prefer local produce supply – selling \$6bn worth per year   |            |
|                                   | Escalating cost of supply  | Economic viability of product or services   | Increase in fuel costs; Energy costs which cannot be passed on to end consumer   |            |
| Internal Operations               | Water; Air or soil pollution/ Contamination  | Effect on reputation in local and wider community. Cost of remediation and risk of lawsuits                             | Prestige oil spill; Potential effect of any phosphate/nitrates land pollution to 'clean, green NZ' image.  |            |
|                                   | Perceived health impacts from local emissions  | Effect on reputation in local and wider community. Cost of remediation and lawsuits                                     | PCBs; Mobile phone masts; Incinerators   |            |
|                                   | Waste management   | Increased costs of disposal to landfill   | Potential taxation   |            |
|                                   | Work/Life balance of employees; Unsocial hours   | Retention of staff. Additional costs of recruitment. Potentially punitive costs for stress in the workplace or lawsuits | Impact of Occupational Health & Safety Amendment 2003  |            |
|                                   | Labour standards and practices; Pay & conditions   | Staff retention; Strikes; Absenteeism; Claims   | Wal-Mart challenged about trade unions; Strikes  |            |
|                                   | Increased cost of fuel; Energy; Delivery method  | Economic viability of product or services   | Plant closures on temporary basis because of high power costs  |            |
|                                   | Increased delivery times due to congestion   | Increased resource costs; Service delays to customer; Impact on drivers; Road accidents                                 | See Progressive case study.  |            |
|                                   | Inefficient operations/Poor productivity/Cost of overheads                                   | Economic viability of product or services; Higher direct and indirect costs; Effect on competitiveness                  | Companies outsourcing or setting up lower cost operations overseas.  |            |
| Product Development & Stewardship | Impact and efficiency of product in use  | Adverse publicity; Product boycott; Reduction in market share   | Major recall of Firestone tyres because of product fault   |            |
|                                   | Cost or suitability of raw materials increases. Need to find substitutes                     | Financial impact  | Search for alternatives to materials such as PVC.  |            |
|                                   | End-of-life collection and disposal  | Loss of market share; Non-compliance with potential legislation in home or overseas market                              | Mobile phones; Car parts; White goods.   |            |
|                                   | Product traceability; bar codes and labels   | Costly recall if unable to pinpoint batches of product  | Pan Health products recall   |            |
|                                   | Packaging and materials: need to match packaging to product requirements                     | Increased costs from overpackaging; Legislation in some markets relating to takeback systems, eg. bottles, cans         | Returnable levies on bottles in some countries   |            |
|                                   | Customer demand  | Loss of market share  | First mover gains: Shell, Nike   |            |
|                                   | Increased cost of product/service because of increases in raw materials; Energy; Advertising | Market viability; Loss of market share  | Pulp prices effect on the paper industry – can increase the price differential between sustainable and non-sustainable pulp supplies                           |            |
|                                   | Investor Appeal  | Exclusion from ethical indices  | DJSI, FTSE4Good  |            |

## STEP 2: IDENTIFY YOUR SUPPLY CHAIN

How you supply is as important as what you supply. Understand how your supply chain affects the risks which you have identified. It is not enough to just consider your immediate suppliers; you also need to consider their suppliers right back to the raw materials.

First identify what the supply chain means for your organisation and at which point you fit within other supply chains. This is often difficult for companies with particularly complex supply chains. Such companies may find that appointing a supply chain manager with overall responsibility for purchasing and forward and reverse logistics will provide the necessary focus. Large companies such as The Warehouse and Griffins have appointed Supply Chain Directors to ensure board level commitment to 'sustaining' the supply chain.

**Trevor Johnston, Sustainable Development Manager, The Warehouse:** *"Striving to improve the operational efficiency and thus the financial performance of our supply chain is a given in our business. However we are also looking to extend our partnership with suppliers to improve the social and environmental characteristics of our supply chain. This is our long-term vision and we have begun by strengthening our supplier code of conduct in these areas. The simplest early gains have come from reducing unnecessary shipper packaging and associated handling costs, and streamlining and rationalising freight distribution patterns."*

Other companies may not have the resource for a dedicated supply chain manager but might give overall responsibility to an individual to identify its supply base and its relationship with its customers and position the organisation within this framework.

Use the table below to identify potential issues affecting your supply chain and where they might occur in the process. Use the full page matrix at [www.nzbscd.org.nz/supplychain](http://www.nzbscd.org.nz/supplychain) to plot your issues and create a map which you can use to identify priorities and implement change.

|  | SUPPLIER (1st tier/2nd tier/3rd tier etc)         |                         |                        | RETAILER                               |                                    | CONSUMER/USER                    |                               |             |
|--|---|-------------------------|------------------------|--|------------------------------------|----------------------------------|-------------------------------|-------------|
| Issues to Consider<br>(relating to sustainable development issues) | Material<br>Acquisition<br>from primary<br>source | Manufacture/<br>Process | Despatch/<br>Transport | Operations<br>including<br>warehousing | Product<br>design &<br>development | Sales &<br>Market<br>development | Product/<br>Service<br>in use | End of Life |
| <b>General</b>   |   |                         |                        |  |                                    |                                  |                               |             |
| Changing customer expectations                                     |   |                         |                        |  |                                    |                                  |                               |             |
| Adverse media coverage   |   |                         |                        |  |                                    |                                  |                               |             |
| Threat to brand or corporate reputation                            |   |                         |                        |  |                                    |                                  |                               |             |
| Government procurement requirement                                 |   |                         |                        |  |                                    |                                  |                               |             |
| Losing alignment with corporate/employee                           |   |                         |                        |  |                                    |                                  |                               |             |
| No appeal to ethical investors                                     |   |                         |                        |  |                                    |                                  |                               |             |
| <b>Specific Issues</b>   |   |                         |                        |  |                                    |                                  |                               |             |
| Long-term supply of raw materials:                                 |   |                         |                        |  |                                    |                                  |                               |             |
| Use of chemicals/hazardous substances                              |   |                         |                        |  |                                    |                                  |                               |             |
| Animal husbandry   |   |                         |                        |  |                                    |                                  |                               |             |
| Short term access to supply  |   |                         |                        |  |                                    |                                  |                               |             |
| Waste and packaging used   |   |                         |                        |  |                                    |                                  |                               |             |
| Labour standards and practices<br>including unsocial hours         |   |                         |                        |  |                                    |                                  |                               |             |
| Local supply or overseas   |   |                         |                        |  |                                    |                                  |                               |             |
| Water, air or soil pollution/emissions                             |   |                         |                        |  |                                    |                                  |                               |             |
| Transport; fuel; congestion  |   |                         |                        |  |                                    |                                  |                               |             |
| Increase in transport costs  |   |                         |                        |  |                                    |                                  |                               |             |
| Energy utilisation   |   |                         |                        |  |                                    |                                  |                               |             |
| Increased operating costs,<br>eg. energy, fuel, waste disposal     |   |                         |                        |  |                                    |                                  |                               |             |
| Regulatory requirements  |   |                         |                        |  |                                    |                                  |                               |             |

### STEP 3: MAKE SUSTAINABLE DEVELOPMENT PART OF YOUR BUSINESS STRATEGY

Some organisations including Shell and Christchurch City Council have appointed a Sustainable Development Manager. Whilst this can appear to place responsibility in one person's hands, there are clear benefits.

**Ken Lawn, Director of Operations, Christchurch City Council:** *"Our sustainable development manager acts as a 'conscience' for our organisation and drives the internal activities so that sustainability is mainstream throughout the Council."*

Make Sustainable Development a Key Performance Indicator (KPI) for your Organisation at all levels from the Board to junior management.

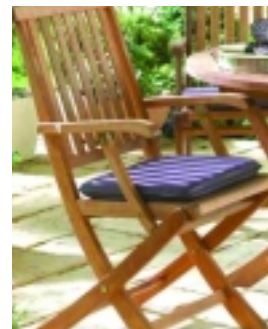
**Roland Pechtold, General Manager NZ and Pacific Islands, Shell Gas:** *"Sustainable development is a KPI for Board and Management and has comparable weight on our balanced score card as financial success."*

KPIs are useful to measure and monitor performance whether quantitative or qualitative, eg. cost reduction from improved waste management; deliveries in full, on time (DIFOT); staff satisfaction rating for companies as good employers; and energy savings. Other examples of KPI's are provided in the Code of Conduct, p21.

### STEP 4: ADOPT MEASUREMENT TOOLS WHICH WORK FOR YOUR ORGANISATION

These include written policies and communications materials, prequalification of suppliers (using social, environmental and economic criteria), purchasing guidelines and supplier partnerships. These are developed further in Chapter 3.

Managers often lack appropriate decision-making tools to help them assess the risks and benefits associated with managing their suppliers. For many companies there is a process to achieve regulatory compliance, through risk management, to long-term sustainable development strategies:



### CONFORMITY APPROACH

Building a chain of custody to identify the origin of raw materials and resources and the conditions at the point of origin through to manufacturing and subsequent delivery to customer can prove daunting without a systematic approach. There are systems including ISO14001, SA8000, AA1000 and Enviro-Mark<sup>10</sup> which help companies to manage this process. These systems can be integrated with existing HACCP;<sup>11</sup> Occupational Health and Safety or Quality Management Systems.

In addition, category-specific systems have been created to meet the needs of specific industry sectors. A few examples are forestry certification including the forestry stewardship certification (FSC)<sup>12</sup> or the Marine Stewardship Council MSC<sup>13</sup> sustainable seafood accreditation.

The method chosen needs to be practical or they will not be sustained. The Warehouse initially set out to source all of its timber from FSC forests, however, by setting a more realistic target to buy to Tropical Forest Trust standard, it has been able to achieve 100% compliance.

<sup>10</sup> ISO 14001 is an environmental management system; SA8000 is a social responsibility accreditation system based on International Labour Organisation standards; AA1000 is a social and ethical accounting, auditing and reporting standard; Enviro-Mark is described more fully on page 18.

<sup>11</sup> HACCP: Hazard Analysis Critical Control Points is a product safety system.

<sup>12</sup> FSC Trademark identifies products coming from FSC certified forests [www.fsc.org](http://www.fsc.org)

<sup>13</sup> MSC Trademark: [www.msc.org/](http://www.msc.org/)



Each business needs to judge what systems suit the size and scope of their supply chain. The Enviro-Mark system is a web-based framework which is being used by The Warehouse as well as a number of its suppliers and can be applied to all businesses whatever their size. (See Case Study p18.)

## PROCESS MANAGEMENT APPROACH

For some companies, the cost and resource required to ensure compliance has led to a customised approach. This may also be driven by a belief that many compliance programmes focus on commonly purchased goods or try to fit companies into a 'mould'. In addition, current low demand for some types of 'greener' goods means 'eco-labels' may not be recognised, causing confusion as to which is best.

Nevertheless process management can be as rigorous as 'off the shelf' conformity systems. Global organisations including Shell and Danone have established their own Environmental Management Systems and their own Supplier Standards and operate to these codes in New Zealand.

## STEP 5: IDENTIFY INITIATIVES THROUGHOUT THE ORGANISATION WHICH CAN GET EVERYONE INVOLVED INTERNALLY AND EXTERNALLY

These may range from a zero waste policy (see NZBCSD *Industry Guide to Zero Waste* [www.nzbcscd.org.nz/zerowaste](http://www.nzbcscd.org.nz/zerowaste)) to energy efficiency (see NZBCSD *Business Guide to Energy Efficiency* [www.nzbcscd.org.nz/energyefficiency](http://www.nzbcscd.org.nz/energyefficiency)).

The initiative needs to be driven from the top but will only succeed if everyone is involved. Use your relationship with suppliers or customers to progress sustainable development thinking across the supply chain.

**Dick Hubbard:** *"we'll know that we are succeeding when sustainable development is right through the company and our suppliers are in tune with us."*

**Suppliers:** include sustainable development criteria in setting Supplier Code of Conduct. Start with a handful of suppliers and some easily defined principles. See Chapter 3.

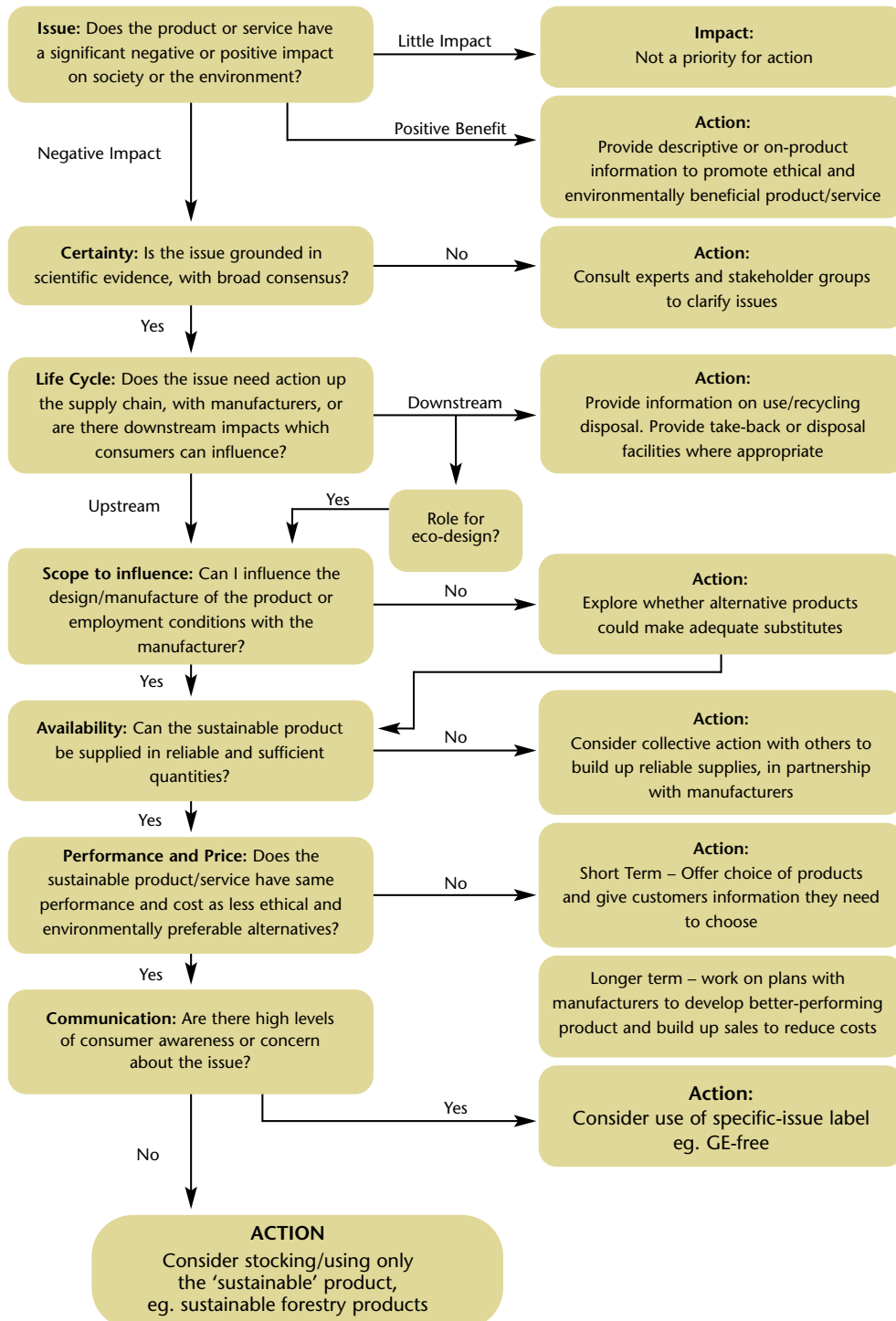
**Customers:** influence customers to reward sustainable suppliers. **Stan Pope, National Procurement Manager, NZ Police:** *"Vendors need to explain why their products or services are more sustainable. If they don't tell us, we don't know."*

Hubbards and Urgent Couriers use newsletters to educate their customers about sustainable development. Mercury Energy include information with their bills.

### Tips for Getting Started: Project Planning Process

1. Decide what the supply chain means for your organisation
2. Choose a pilot project(s) which will provide early success and win the 'hearts and minds' of employees
3. Identify available resource – internal and/or external
4. Agree timescale for initial project
5. Use the Model for Decision Making on the opposite page to progress your project

## SUSTAINING THE SUPPLY CHAIN: SUGGESTED MODEL FOR DECISION MAKING<sup>14</sup>



**Consider issues from more than one point of view.**

Social, Environmental and Economic factors may conflict and the decision is not always simple. What choice would you make in the following cases?

**Hubbards** found the selection of outer carton board more difficult than they expected. They had a choice between New Zealand radiata pine, resulting in local jobs and involving sustainable forestry, versus Australian recycled board which needed to be imported but was substantially cheaper and did not use virgin fibre. Hubbards carried out their own life-cycle analysis and selected the recycled option.

**City Care** thought long and hard about their choice of fuel supplier. They selected a higher sulphur diesel instead of a lower sulphur alternative because the fuel supplier is closer to their sites and the former cost \$350,000 less per annum. Lower costs mean they can employ more people. Whilst this solution has a social and economic upside for the company, this is weighed against the environmental downside of six tonnes of SO<sub>2</sub> emission.

<sup>14</sup> Amended for use from a model produced according to Department for Environment, Food & Rural Affairs, UK. Crown Copyright 2002.

# The upstream supply chain – purchasing

Procurement  
The upstream supply chain  
Steps to implementing Code of Conduct  
Checklist for supplier management  
Code of Conduct  
Rate suppliers against structured criteria  
Case study  
Traceability and chain of custody

In the 1990s a number of companies, largely in the USA and Europe, developed their own ethical guidelines or Code of Conduct. A Code of Conduct is a document that presents a number of social and environmental standards and principles that the company itself and its suppliers or contractors are expected to observe.

Subsequently companies have realised that these standards have no actual effect unless the company's business partners are monitored and required to follow them. This has led organisations to include clauses relating to conduct in the terms and conditions of supply. By signing such contracts, business partners agree to comply with the company's Code of Conduct; for example, that they will not use child labour in production or that they will follow health and safety standards. Inevitably companies recognise that a signature does not verify action and internal or external monitors need to visit suppliers to determine whether their social and environmental conditions are in accordance with the company's requirements.

Criteria which companies might consider as preference are provided with KPIs on page 21.



Before and after packaging

## The Warehouse

The Warehouse published revised Terms of Trade in 2002 which incorporated specific Social and Environmental performance requirements. The company has begun a process of educating suppliers about these expectations and conducting a limited number of factory audits to verify compliance.

It has also revised its packaging guide and has begun re-specifying packaging based on the guide through a series of product audits and exception reporting at the company's distribution centres. Easy wins which resulted in high volume packaging reductions include eliminating unnecessary plastic carbon strapping and inner plastic bag liners.

The Warehouse helped co-ordinate a group of 10 New Zealand manufacturers through the Enviro-Mark system of integrated Health, Safety and Environmental Management (HSE) facilitated by Landcare Research. The project aims to improve HSE management and reduce costs through eco-efficiency.

The Enviro-Mark NZ process is web-based and has five standards of certification based on the ISO 14001 system:

- **Bronze:** Compliance with the most commonly applicable HSE legislation
- **Silver:** In-house HSE policy based on environmental impacts assessment
- **Gold:** Monitoring of objectives to demonstrate continuous improvement
- **Platinum:** Control of organisation's activities with operational documentation
- **Diamond:** Continuous improvement driven by internal audit programme.

## Steps to Implementing a Code of Conduct for Suppliers

| Steps   | Action  | Method   |
|---------|---|--|
| Step 1  | Establish core team   | Board member to lead; others to include Purchasing; Quality/Environment; HR<br>Consider involving stakeholders including suppliers, NGOs and customers in discussion as appropriate.   |
| Step 2  | Select key domestic suppliers   | Identify top 10 suppliers; Top 20% by value; Concentrate on particular sector, eg. The Warehouse started with timber.  |
| Step 3  | Select key global suppliers   | As above. Global suppliers may drive best practice because they supply multiple markets but may also pose most risk because of diversity of supply chain.  |
| Step 4  | Prioritise other suppliers by assessing your own key risks                          | Use Risk Monitor toolkit Chapter 2, page 13.<br>Identify those products which have high profile with NGOs or have had significant media coverage, eg. forestry, specific chemicals, country of origin might be associated with child labour or human rights.<br>Remember that your supplier is likely to buy raw materials from other suppliers.   |
| Step 5  | Develop Code of Conduct for suppliers   | Refer Chapter 3: Code of Conduct for Suppliers, page 21.<br>A. New suppliers and contracts, consider which criteria will be part of the decision-making process. Establish criteria which are prerequisite of any contract. What are your minimum requirements?<br>B. Existing Suppliers. Include in annual review.  |
| Step 6  | Collaborate with suppliers:<br>Provide self-audit tool to suppliers with guidelines | Ask suppliers to review their own performance against the Code of Conduct on page 22 and to work with you to find market winners for both companies.<br>Provide ongoing support to suppliers.  |
| Step 7  | Empower your buying team  | Ensure that the person making purchasing decisions is sufficiently senior to be listened to by the Board. Make sure they understand the wider implications of purchasing decisions by setting for example, joint targets with Marketing.<br>If buyer is 'rewarded' on the basis of cost savings then they may not be looking at sustainable development or brand image.                                  |
| Step 8  | Set parameters for acceptance/improvement   | Define what would force you to 'walk away' from a supplier.  |
| Step 9  | Monitor suppliers   | Evaluate suppliers against criteria, eg. Chapter 3, page 22.<br>Each company will set a different starting point for their suppliers.<br>Appoint internal or external resource depending on size of operation.<br>Monitoring should involve interview and visit. Know the questions to ask. These might relate to your risk areas identified on page 13 of Chapter 2. Document progress and communicate. |
| Step 10 | Award excellence  | Introduce internal awards process or recommend best practice for external awards.  |



Use the following checklist to identify areas which need attention.

Refer to the examples of companies addressing the issue or the toolkits in the Guide.



Changing supplier relationships takes time and commitment. B&Q, UK's largest DIY and Garden Centre chain started developing its code of conduct for suppliers at the beginning of the 1990s. Implementing the code across its global supply base is an ongoing process which requires resource to manage. However it is not just large global players that are working with their suppliers to ensure sustainable goods and services. Paradigm is a small New Zealand graphic design and print company which started encouraging suppliers towards lower impact environmental solutions from 1989, such as recycled and totally chlorine-free papers, and vegetable oil-based inks.

| Question   | References page #                              |
|--|--|
| <b>Supplier Management; Purchasing Materials</b>   |  |
| <b>1.</b> Do you have a code of conduct/standards of engagement for suppliers?   | Code of Conduct, page 21                       |
| <b>2.</b> Do you set targets for suppliers?  | Code of Conduct, page 21                       |
| <b>3.</b> Do you assess existing suppliers against defined criteria?   | Evaluation criteria, page 22                   |
| <b>4.</b> Do you assess new suppliers against defined criteria?  | Evaluation criteria, page 22                   |
| <b>5.</b> Do you require your suppliers to have external certification?  | Case Study: The Warehouse, page 18             |
| <b>6.</b> Do you work with your suppliers to develop greener solutions/reduce packaging waste/conduct LCAs?  | Sustaining the Supply Chain. Page 17           |
| <b>7.</b> Do you audit your suppliers?   | Chapter 2: Step 4, page 15                     |
| <b>8.</b> Have you selected suppliers because of their sustainable standards?  | Case Study: Christchurch City Council, page 24 |
| <b>9.</b> Have you de-selected suppliers because of their environmental or ethical behaviour?  |  |
| <b>10.</b> Do you observe, use external validation and test documentation to validate your suppliers' response, for example re: forestry, third world practices, chemicals management? | Demonstrating Chain of Custody, page 26        |
| <b>11.</b> Do you collate and record measurements and data?  | Eg. Enviro-Mark                                |
| <b>12.</b> Have you increased/decreased your procurement team because of initiating sustainable procurement procedures?  |  |
| <b>13.</b> Do you have packaging guidelines?   | Case Study: The Warehouse, page 18             |
| <b>14.</b> Is Procurement a Board function?  | Chapter 2: Step 3, page 15                     |

## Code of conduct

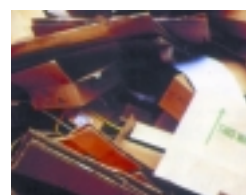
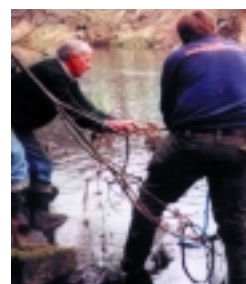
| Principle   | Criteria   | Examples  | Performance Indicators   | Regulatory Framework  |
|---|--|---|--|---|
| 1. Employer Practices                                       | Comply with Local and International Labour Standards   | <ul style="list-style-type: none"> <li>• 48 hour max. normal work week</li> <li>• Wage is above legal minimum</li> <li>• Freedom of Association</li> <li>• Security of Contracts</li> <li>• Equal Opportunities: Race &amp; Culture; Age; Gender &amp; Sexuality; Disability</li> <li>• Training &amp; Development Programme</li> </ul>   | Staff Retention;<br>Reputation as 'good employer'<br>Pays in the median/upper quartile;<br>Diversity of employees % against the industry/local norm<br>HR Policy/ Company Benefits reflect work/life balance, eg. childcare; tele-working; leave of absence policy       |   |
| 2. Health & Safety  | Commitment to Health and Safety which meets minimum legal requirements   | <ul style="list-style-type: none"> <li>• Health &amp; Safety Policy</li> <li>• Active participation of employees</li> <li>• Employee health monitoring</li> <li>• Training</li> <li>• Contractor Management Policy</li> </ul>   | Number of Lost Time Incidents or Medically Reportable Incidents;<br>ACC accreditation;<br>NZS4801 accreditation;<br>Records demonstrate safe workplace   | Health & Safety Employment Amendment Act (May 2003)   |
| 3. Working Conditions for factories in developing countries | Comply with International Labor Standards and where local standards are higher to local standards  | <ul style="list-style-type: none"> <li>• No children under 15 in full time labour</li> <li>• No use of forced or compulsory labour</li> <li>• Does not engage in discriminatory practices</li> <li>• Freedom of Association and right to collective bargaining</li> <li>• Health care &amp; Safety at work</li> <li>• Normal work week is 48 hours or less</li> <li>• No wage is lower than the applicable legal minimum</li> </ul> | Employees are provided with drinking water, clean toilets in adequate numbers; adequate ventilation and emergency exits;<br>Employees receive pay slip;<br>Accreditation to SA8000; Supplier has been audited by external body or customer                               | Human Rights Act Local Legislation  |
| 4. Governance   | Demonstrates commitment at Board level   | <ul style="list-style-type: none"> <li>• Corporate Policy</li> <li>• Inclusion of sustainable development targets in CEO's performance review and remuneration</li> <li>• Whistle Blower Policy</li> </ul>  | Corporate Policy; Transparent KPIs;<br>Sustainable Development Report;<br>No public record of fraudulent activity  | Companies Act 1993; Locally applicable Corporate Law including Anti-Trust & Anti Corruption legislation |
| 5. Environmental Responsibility: Energy efficiency          | Company complies with existing and pending national and international legislation on the energy efficiency of products and the energy use of buildings it operates | <ul style="list-style-type: none"> <li>• Emissions &amp; Energy Reporting</li> <li>• Reduce energy by x% p.a.</li> <li>• Reduce vehicle emissions by x% p.a.</li> <li>• Energy efficient design of products and buildings</li> <li>• Consider viability of renewable energies</li> </ul>  | Carbon Footprint reported as tonnes of CO <sub>2</sub> net emissions;<br>ISO14001; Enviro-Mark Labelling showing energy efficiency<br>Environmental Choice   | Resource Management Act (1991)  |
| 6. Environmental Responsibility: Eco-efficiency             | Products and production procedures which maximise eco-efficiency   | <ul style="list-style-type: none"> <li>• Recyclable content of product is reviewed and audited</li> <li>• No over-packaging, Use of reusable trays/shippers</li> <li>• Recover x% waste for recycling</li> <li>• Increase timber products sourced from sustainably certified forests by x% p.a.</li> <li>• Consider sustainable sourcing of raw materials</li> <li>• Reduce water consumption by x%</li> </ul>                      | Reduction in waste to landfill year on year<br>Packaging Policy<br>Product Life Cycle analysis<br>Profit from waste to energy system<br>Set target for waste management<br>FSC or other external accreditation, eg. MSC, or other accreditation<br>Water usage by person | Landfill Costs/Levies<br>Proposed NZ Packaged Goods Accord 2004<br>NZ Waste Strategy                    |
| 7. Hazardous Substances/chemicals/GMOs                      | Comply with existing and pending chemicals-related legislation. This might include legislation on product ingredients, product labelling and product disposal      | <ul style="list-style-type: none"> <li>• Measures environmental impact of materials and processes</li> <li>• Identifies and acts on potential areas of concern</li> </ul>   | Hazardous Chemicals register<br>Validate any adverse public concern by NGOs or other stakeholder<br>Transparent Labelling<br>Environmental Choice  | HSNO Act 2001 New Organisms and Other Matters Bill, (currently before Parliament)                       |
| 8. Supplier Management                                      | Commitment to local economies and reduced transport costs<br>Supplier relationships  | <ul style="list-style-type: none"> <li>• Conduct review of supply base taking into account product source</li> <li>• Support economic sustainability of suppliers.</li> </ul>   | Programme to monitor local sourcing; Reduced transport costs;<br>Work with key suppliers to ensure procurement policy does not unreasonably threaten supplier viability  |   |

**Evaluation of suppliers against criteria**

| Principle   | Grading & criteria<br>(1-5 with 1 best practice)   |  |   |
|---|--|--|---|
|   | 1  | 2  | 3   |
| Good Employer Practices   | Remuneration and work practices exceed norm  | Positive employee relations including provision of reasonable living wage  | Provides Minimum wage. Commits to programme of objectives   |
| Health & Safety   | Active commitment to H&S with investment in physical/mental well being, injury prevention and rehabilitation. Complies with ACC tertiary scheme  | Demonstrates Commitment to H&S which exceeds legal requirements. Complies with ACC secondary scheme  | Demonstrates commitment to H&S which complies with ACC primary scheme   |
| Working Conditions for factories in developing countries  | Supplier is involved in supply chains where clear and obvious welfare benefits are provided to workers, their families and the community. This may include healthcare, education and housing.  | The supplier makes regular visits to the factories and has provided sufficient evidence that the working conditions and H&S are good (in comparison to country norm). Meets ILO standards. 'When in Rome do as the best Romans do'.  | Supplier has an understanding of the issues and knows the sources of the products but has little awareness of the actual working conditions because they have not been audited.   |
| Governance  | History of transparent reporting on social, environmental and economic impacts & performance. Commitment demonstrated at Board level.  | Transparent report of social, environmental and economic impacts with future commitments. Inclusion of sustainable development targets in management performance reviews.  | Commits to balancing social, environmental and economic impacts   |
| Environmental Responsibility: Awareness of the environmental issues associated with products and operations | Supplier's environmental policy shows advanced understanding of their operations and products' entire lifecycle and a systematic environmental management system such as ISO14001.   | Supplier has a thorough understanding of the key impacts of their products' lifecycle and a systematic programme to address them plus an action plan with specific targets.  | Supplier has identified the key issues and has a framework policy in place with commitment to specific objectives   |
| Environmental Responsibility: Eco Efficiency. Packaging & Environmental Claims                              | Supplier is actively involved in innovative initiatives to reduce the amount of packaging used. Packaging is totally recyclable. Use of post consumer recycled material is standard. Reusable trays and pallets are used for shipment. | Where possible only one material is used, if two are used they are separable. If plastic is used it is marked with the relevant SPI code. Labels can be removed. Packaging material contains some post-consumer recycled material. Any environmental claims are informative, relevant and substantiated. Inks, paints, dyes and adhesives are water-based. | No over-packaging occurs. Packaging is deemed to be essential, ie. for fragile items or small separable parts. Packaging should be recycled. Despite the availability of post consumer waste, a high percentage of virgin material is used. All plastics marked SPI code3, 6 or 7 should be avoided including polystyrene |
| Hazardous Substances/ Chemicals & GMOs  | Supplier is well ahead of any legislation and has developed appropriate ways to deal with concerns about chemicals and GMOs  | Has a radar that identifies concerns and the products it sells or has sold. Complies with all existing and pending legislation   | Complies with existing legislation, eg. product ingredients, product labelling, product disposal and any chemicals used in the business   |
| Supplier Management: Local Supply base – raw materials supply   | Demonstrates commitment to local economies and reduced transport costs. Carried out review of supply base taking into account sourcing of product  | Has identified and selected those suppliers which meet requirements from local supply base. Supports economic sustainability of suppliers.   | Considers geography in supplier decision making.  |
| Actions taken to address impacts and implement their policy   | Supplier is able to demonstrate significant progress against their own and customer targets and innovates for future progress  | Supplier is able to demonstrate real progress against specific targets and deadlines   | Supplier has taken some action to address some of their environmental impacts   |

NB: The above are based on a compilation of Terms and Conditions with particular reference to B&Q's QUEST system – 'How green is my Patio' *Redesigning Resources*, 2003, The Warehouse Packaging Code; International Labour Organisation Standards

| 4   | 5  | Examples   |
|---|--|--|
| Provides minimum wage   | No commitment to socially responsible business   | Comparison with other businesses. Aims to be in upper/median quartile  |
| Meets legal requirements  | Does not meet legal requirements   | Records, Database and reporting mechanisms. Employee health monitoring. Active participation of employees              |
| Supplier demonstrates insufficient understanding of the supply chain to be confident there are no ethical concerns  | There is a poor understanding of the supply chain and sources of supplier and the supplier shows no inclination to improve its knowledge base                                    | See International Labour Organisation's standards on page 25   |
| No obvious transparency   | No commitment to monitoring social or environmental impacts  | Corporate Policy; Sustainable Development Report; Public records and media reports                                     |
| Supplier has failed to provide a policy statement which includes a proper assessment of the environmental issues.   | Supplier shows no inclination to make any meaningful commitment to environmental issues  | Energy Management; Product life cycle analysis. Cleaner production, waste minimization policy; Energy efficient labels |
| Products are over packaged and difficult to recycle. There is no use of recycled material. There are environmental claims on the packaging which are inaccurate or may mislead. | Products are excessively packaged and the packaging is extremely difficult to recycle. The packaging has misleading claims. The supplier has not acted to address these problems | Packaging audit; environmental labeling  |
| Supplier unable to provide adequate details relating to all chemicals and GMOs used in product  | Supplier unable to provide details of chemicals and GMOs in use and shows no concern relating to chemicals in use  | Labels; provision of information about chemicals used; use of alternatives.  |
| Does not consider location – price is principal driver  | No clear picture of supplier base  | Profile of supply base and evidence of supplier management   |
| Supplier has taken very limited action to implement their environmental policy  | Supplier has consistently failed to tackle their key environmental issues  | Improvement against previous year  |



PHOTOS COURTESY B&amp;Q



**Richard Lauder, City Care  
Chief Executive says:**

*"For some years now City Care has understood the benefits of striving to reduce negative environmental effects from our business and improving our social impact. And we have had faith that our major client group in Local Government would eventually understand the full impact of their procurement practices and start rewarding for good behaviour from their suppliers. Christchurch City Council's new procurement policy provides a good example for similar initiatives from other Local Authorities and Central Government departments."*



**Case Study: City Care and Christchurch City Council: Ethical Procurement**

The supply chain is a series of interconnected relationships. Introducing social and environmental principles in one part of the chain in isolation may make that part less commercially competitive. This has been the experience of City Care until recently.

City Care is in the business of construction, maintenance and management of roads, parks, waste and other facilities and employs 500 people based in Christchurch, Auckland and Tauranga. The company is committed to sustainable development and has sought to lead by example but recognises that in the price-driven industry in which they operate, this can put them at a disadvantage if the value of sustainable practices is not recognised throughout the supply chain.

In 2001, Christchurch City Council awarded a cleaning contract to a lowest-price tenderer because the selection process was substantially price driven. The Council later realised that its own tender processes were producing poor community outcomes in high-labour-content tenders, as they were rewarding companies that had the lowest wage rates, at the expense of companies whose employees had better terms and conditions.

On review of this event, Christchurch City Council found it was restricted by Transfund rules and its own procurement policy, and set about a review of its terms and conditions to establish how they could incorporate sustainable development principles.

As a result the Council will be considering introducing the framework established by The Redesigning Resources group as a basis for its future tender process on specific and agreed projects. It is proposed that Contractors will be asked to supply and validate information relating to energy efficiency, good employer practices, eco-efficiency, hazardous substances, health & safety, local supply base, accountability and governance. This will give companies like City Care who can demonstrate good practice via their Triple Bottom Line report, accreditation to ISO14001 and NZS 4801 a potential advantage in the selection process.

**Ken Lawn, Director of Operations at Christchurch City Council:** *"Unless sustainable development criteria are added into the procurement process by local authorities like Christchurch City Council, there will never be a level playing field. We commit in our Annual Report 2003 to taking into consideration social and environmental impacts when making decisions to create a sustainable city for the future, and so introducing this into our procurement policy where possible has to make sense."*

## FUNDAMENTAL SOCIAL PRINCIPLES

The seven social principles below refer to the international labour standards defined by the International Labour Organisation (ILO)

### 1. Child labour:

The company does not, in any case, employ children aged under 15.

If the law sets a higher minimum working age or compulsory schooling is to a higher age, it is this limit that applies.

Educational programmes and training care not included in this limitation.

### 2. Forced labour:

The company does not use forced or compulsory labour, meaning any work or service performed under threat or that is not consented to by the person concerned.

### 3. Discrimination:

With due regard for applicable law, the company refuses to engage in any discriminatory practices. Discrimination means any distinction, exclusion or preference limiting equality of opportunity or treatment. It may be based on race, color, sex, sexual orientation, religion, political opinion, age, nationality, family obligations or other considerations.

### 4. Freedom of association and right to collective bargaining:

The company recognises and respects employees' freedom of association and their right to freely choose their representatives.

The company also recognises employees' right to collective bargaining.

The company ensures that employee representatives do not suffer any discrimination.

### 5. Health and safety at work:

The company ensures that the workplace and its environment do not endanger the physical integrity or health of employees.

Action to reduce the causes of accidents and improve working conditions is the object of ongoing programmes.

Sanitary equipment, canteens and housing provided to employees are built and maintained in accordance with applicable legal requirements.

As a minimum, the company must provide employees with drinking water, clean toilets in adequate numbers, adequate ventilation, emergency exits, proper lighting and access to medical treatment.

### 6. Working hours:

The company must ensure that applicable legal restrictions on working hours are complied with.

The normal working week is 48 hours at most.

Overtime is on a voluntary basis.

Employees have at least one day off each week, except in exceptional circumstances and for a limited period.

### 7 Pay:

The company ensures that:

- no wage is lower than the applicable legal minimum
- all employees receive a pay slip
- employees receive a decent wage relative to country
- wage rates for overtime are in all cases higher than for normal hours



PHOTOS COURTESY B&Q

“How much tropical timber does B&Q stock?” asked a Sunday Newspaper. “I don’t know”, said B&Q. The response: “If you don’t know, you don’t care.”

### DEMONSTRATING CHAIN OF CUSTODY.

New Zealand imports NZ\$32.1 billion worth of products and exports goods to the value of NZ\$29.2 billion.<sup>15</sup> There can be long and often complex supply chains involved in getting goods from farm to fork or forest to table. One of the main drivers for demonstrating a chain of custody has been product safety; however, organisations have also recognised the benefit of understanding their environmental and social impacts before someone else (eg. NGO or media) investigates on their behalf.

The meat industry represents 13% of New Zealand exports<sup>16</sup> and most meat packers have responded to international market demand to provide traceability back to the farm. This claim is further substantiated by a farmer-driven initiative, initially involving 30 North Island farmers, known as Green Project Farm Assurance Programmes which provide a management tool that promotes animal welfare, enhanced environmental standards and social responsibility.<sup>17</sup>

Assurance will increasingly be a prerequisite for trade as the development of Euro-Retailer Produce Working Group (EUREP), a body responsible for the development of a number of assurance schemes for overseas producers, demonstrates. For example, Safeway UK is in the process of rolling out EUREP standards in the fresh produce and livestock sectors and expects fresh produce suppliers to be fully compliant by 2005, and for a significant proportion of its fresh meat suppliers to be operating to the EUREP Livestock standards by 2008.<sup>18</sup>

#### Richmond Meats have also introduced their own Sustainable Meat Programme:

**Rod Pearce, Director Richmond Foods:**  
*“Sustainable farming practices are a business imperative. We recognised this ahead of certification being required of us and have developed this programme to future-proof New Zealand livestock farming against the anticipated requirements of the World markets.”*



<sup>15</sup> Source: Statistics New Zealand, end June 2003

<sup>16</sup> Source: Statistics New Zealand, end June 2003

<sup>17</sup> Reference: Project Green website

<sup>18</sup> Reference: [www.safeway.co.uk](http://www.safeway.co.uk)



# Internal Operations: Logistics

## OVERVIEW

The Institute of Logistics and Transport defines logistics as: *“Ensuring that the right products reach the right place in the right quantity at the right time to satisfy consumer demand.”*

Physical distribution involves transport and storage at all stages either using a company’s own resources or by outsourcing to a third party contractor. Once known as warehousing and distribution the sector has metamorphosed through logistics to become part of supply chain management. This encompasses inbound delivery of raw materials and the distribution of finished products out to market, and cuts across internal organisational lines as well as international boundaries, reaching out to both customers and suppliers.

Sixty-one percent of New Zealand’s domestic distribution is by road, with 13% by rail and 26% by coastal shipping.<sup>19</sup> Sea plays an important role in transport within New Zealand not just in the crossings over the Cook Strait, but also a regular, popular container service between the major ports. Significantly, road freight accounts for 91% of freight transport energy used compared to 4% energy used by rail freight and 5% for coastal shipping.

Whether raw materials or product are shipped internally within New Zealand or imported from overseas, there are social and environmental impacts which need to be considered. A reduction in the number of articulated vehicles on the road will reduce fuel usage and emissions and helps alleviate congestion. This can be achieved by improving vehicle utilisation and scheduling trips to less populated areas either by collaborating with other suppliers or using a third party operator.

**Strategic partnerships** between suppliers and their customers and vice versa can address many of the potential obstacles and create significant value for both parties. Suppliers can also partner with other suppliers to share warehouses and fleets.

Whoever operates the vehicle, fuel represents a significant operating cost for many companies and it is worth considering the total life-cycle costs and impacts of running a vehicle rather than just comparing kilometres per litre used. For example, City Care selected their fuel supplier based on a range of criteria including close proximity of their facilities to fuel supply and the NZ Police have introduced approximately 400 LPG vehicles into their car fleet.

### Overview

Strategic partnerships

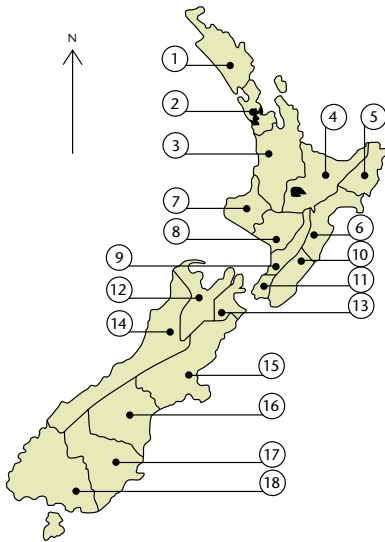
Sustainable warehousing  
Solutions: case studies

Checklist – developing a sustainable logistics system



<sup>19</sup> [www.greensorg.nz](http://www.greensorg.nz)





60 billion kilometres per year are travelled on Europe's roads by empty trucks at an estimated cost of US\$48 billion. (Neil Kinnock – European Commissioner for Transport 1999). The amount of empty vehicles on NZ's roads is also likely to be significant. Target your distribution zones to maximise vehicle fill, and minimise fuel and running costs. Plot deliveries and frequencies on the adjacent grid and then work with your suppliers, customers and with other companies to try to fill vehicles in both directions.

The key components of the physical supply chain and associated sustainability issues/opportunities are characterised in the diagram below.

The checklist on page 31 provides a more detailed list of considerations.

| Physical Supply Chain                | Raw Materials  | Manufacturing Plant   | Warehouse   | Transport   | Distribution Centre   |
|--------------------------------------|--|---|---|---|---|
| Physical aspects of Supply Chain     | Crops and Commodities<br>Imports<br>Manufactured<br>Internal Transfers   | Assembly<br>Processing<br>Manufacture   | Temperature Regime<br>In house or Third Party<br>Storage: Pallet & packaging: pallet configurations   | Road, rail, sea, air<br>In house: Third Party: Customer collect on store-returning vehicles   | Automated versus manual: Design and layout<br>Picking optimisation<br>Vehicle choice and utilisation  |
| Sustainability issues/ Opportunities | Raw Material Waste<br>Dependence of local economy on traditional agriculture<br>Local jobs<br>Fuel use<br>Internal resources | Waste created<br>Energy use<br>Water pollution<br>Emissions<br>Safety<br>Health impacts eg reduce manual handling: noise levels<br>Productivity | Energy use<br>Reduce packaging waste<br>Social impact of long/unsocial hours<br>Repetitive handling<br>Pay and conditions<br>Inventory management | Fuel usage<br>Emissions<br>Noise<br>Impact on transport infrastructure<br>Full loads in both directions where feasible<br>Work life balance<br>Road accidents | Scheduling: Improve traffic flows<br>Reusable tays and pallets<br>Reverse logistics<br>Unsocial hours – round the clock shifts<br>Economies of scale from buying direct from supplier |

**The following case studies illustrate some of the ways in which New Zealand companies are addressing their social, economic and environmental impacts and benefits derived from doing this.**



Share operations with others to reduce vehicles, emissions and costs

#### THE MANUFACTURER/SHARED-USER SOLUTION

Griffins Foods manufactures high volume, low weight products such as potato chips and biscuits, thus making warehousing and transportation of the product a costly exercise. The company subcontracts its warehousing operations to Toll Logistics, and, together with other manufacturers who share the warehouse facility (Kelloggs and Carter Holt Harvey,) has worked with Toll to maximise warehouse utilisation and optimise transportation loading through projects such as standardising carton configurations, identifying optimum pallet heights etc.

Transportation is also on a shared-user basis allowing for load optimisation where possible. Griffins works closely with its principal transport provider (Provincial Freightlines) to optimise

drop sequences and delivery cycles. There are also plans to further enhance IT capabilities in the area of Transportation Management to enable improved transport efficiencies, thus reducing the impact on the environment, as well as reducing costs.

Griffins has also undertaken trials with Frucor Beverages to top-stow product above heavy beverage pallets, thus enabling maximum container volume loading without exceeding weight restrictions.

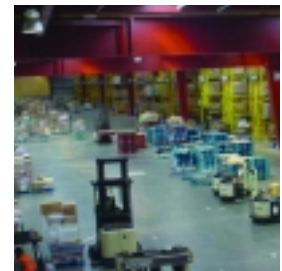
### THE GROCERY RETAILER: PROGRESSIVE ENTERPRISES SUSTAINABLE DESIGN

Progressive Enterprises' NZ\$28 million Distribution Centre (DC) at Mangere, South Auckland, is the size of 10 rugby fields and operates 24 hours-per-day seven days-per-week, distributing to 153 supermarkets in the North Island. Each week 700,000 cartons of groceries are distributed, requiring 120 trucks in and 130 trucks out each day.

Introducing round-the-clock distribution means Progressive can schedule deliveries to improve traffic flows at the DC, which also reduces congestion from the peaks. To manage this process, Progressive is increasingly controlling its supply chain by buying direct from the factory. This improves vehicle utilisation because primary distribution can be carried on store-returning vehicles and supplier collections can be combined where possible with a minimal amount of cross-docking at the DC. For international suppliers, particularly from Australia, Progressive brings product directly into its own network, cutting out additional storage, cross-docking and an extra transport link.

The construction project not only increased the floor space and height of the existing building but turned the orientation around by 90 degrees so that the truck traffic to and from the facility is away from a residential area on the site boundary, reducing noise pollution via a specially constructed wall. The DC also includes a recycling facility for both the distribution centre and the stores it supplies.

Design buildings with consideration for traffic flows and neighbours



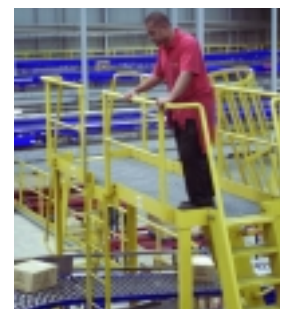
### GENERAL MERCHANDISE: THE WAREHOUSE

The Warehouse is New Zealand's largest mixed retailer and has two distribution centres, one in the North Island (NIDC) and a new South Island facility (SIDC). The SIDC will improve the movement of stock to South Island stores, and potentially the southern part of the North Island, resulting in substantial savings in transport costs from reduced kilometres.

The SIDC occupies 32,750 square metres, has space for approximately 400 containers and has positions for 12,168 pallets stored up to 10.2 metres high. The 850-metre long automated storage system consists of positive sortation and accumulation conveyors. Sensors relay movement and dimension information to the computer control centre. Cartons pass beneath an overhead scanner at the rate of 80 per minute and bar-code label information is read instantly for directing these to one of ten despatch lanes. Shrink-wrapped pallets are loaded on to trucks within the building. Rapid action doors minimise time for the approach or departure of delivery vehicles and control exposure to weather elements thus reducing energy costs.

Automation typically eliminates the need for repetitive work. Good preparation will also ensure accuracy and less waste. At first glance, energy usage may be higher, but many operations can be run in darkness.

Automated systems reduce repetitive work and can be run in darkness to offset increased energy usage. Design is vital to minimise resource impacts.





## REVERSE LOGISTICS

Reverse logistics is one of the least understood and least studied aspects of the supply chain. In some businesses, the level of returns is so low that little time and effort is invested in making it work as efficiently as the major picking or storage operations. Well-managed operations operate a credit process and move equipment and product returns back into stock or elsewhere as quickly as possible. The mail order industry can receive up to 50% of all goods ordered back as returns. To achieve this it is essential that they have organised processes to quality-check products back into stock and credit the customer. This same process is increasingly applied to handling equipment and packaging waste.

## THE WAREHOUSE

All New Zealand stores sort their waste into either recyclable content or landfill. This involves separating waste into paper, cardboard, soft plastic, polystyrene, hard plastic, strapping, glass, wood, damaged stock, plastic bottles, cans and landfill at every store and returning this to one of three Warehouse recycling centres established in Auckland, Christchurch and Wellington.<sup>20</sup> All returned goods and waste for recycling are transported to these dedicated sites on store returning vehicles where a specialist team conducts any further sorting required and arranges for sale of recyclable products and landfill disposal. The logistics of this process are still being refined and key performance indicators (KPIs) are being introduced for store management to support these practices and to ensure landfill is minimised.

## THIRD PARTY LOGISTICS PROVIDER

Third Party Operators can deliver environmental benefits as well as cost efficiencies.

It may make sense for some manufacturers and even retailers to outsource their warehousing or distribution because they do not have sufficient internal resources or more specifically there is no specialist core competency. Managed well, such partnerships can result in cost reduction, increased efficiency and significant improvement in customer satisfaction. Leading third party logistics companies incorporate environmental and social criteria as standard within their service offering. Tibbett & Britten Group's partnership with UK grocery retailer Sainsbury spans 30 years and environmental management has become a fundamental part of both companies' management system. Tibbett & Britten has published an Energy and Environmental Checklist for warehouse design and refurbishment which ranges from Insulation to Rainwater Recovery.<sup>21</sup>



### Craig Evans, General Manager Supply Chain of Mainfreight:

*"Our customers expect consideration of the environment as a given so, for example, our Distribution Centres are landscaped, we recycle all waste packaging and we recycle all our water and use it to wash our vehicles."*

<sup>20</sup> [www.nzbcscd.org.nz](http://www.nzbcscd.org.nz). Zero Waste Guide has more details of The Warehouse and other waste management schemes.

<sup>21</sup> Tibbett & Britten Environmental Case Study Number 3

## Developing a sustainable logistics system

The following checklist comprises a series of questions to be considered as part of the review process of your logistics system.

Colour codes reflect principle benefits/ impacts but there is overlap.

**GREEN: Environmental and Economic** **RED: Social and Economic**

|                            |   |
|----------------------------|---|
| <b>Inwards Goods</b>       | <p>Do you control supplier deliveries?</p> <p>Do you use despatch vehicles to bring in products?</p> <p>Are vehicle appointments scheduled to minimise idle time?</p> <p>Are pallet configurations making best use of pallet cube?</p> <p>Do you specify reusable pallets, trays, cartons?</p> <p>Have you considered using rail for inbound shipments?</p> <p>Do you work with other suppliers to combine shipments and take advantage of mixing heavy and light products on the same vehicle?</p>   |
| <b>Stock Put-away</b>      | <p>Is this organised by zone to maximise efficient working?</p> <p>Are cartons per pallet making full use of available height in racking?</p> <p>Have you carried out a cost/benefit analysis for automated versus manual systems?</p>  |
| <b>Stock Replenishment</b> | <p>Do you use quiet, smooth-riding equipment?</p> <p>Do you consider employee's work/life balance when setting shifts for Stock Management?</p>   |
| <b>Picking</b>             | <p>Has the pick face been recently evaluated to minimise travelling distance?</p> <p>Is the Mechanical Handling Equipment (MHE) specifically designed for picking to minimise the risk of injury?</p> <p>Have you asked whether the extra space needed for wave/line picking or the extra labour resources for store picking is a better use of resources?</p> <p>Do you minimise the amount of shrink wrap needed for picked pallets?</p> <p>Is the carton packaging recyclable?</p> <p>Do you recycle cardboard packaging?</p>  |
| <b>Despatch</b>            | <p>Do you maximise the size of the vehicle cube by combining heavy and light/small and large products on the same vehicle?</p> <p>Have you considered changing the vehicle specification to increase volume?<sup>22</sup></p> <p>Are Inwards Goods vehicles being used for despatch too?</p> <p>Do you have spare capacity on vehicles which could be filled by co-operating with another supplier to same customer or by reducing the number of deliveries?</p> <p>Do you have a vehicle washing policy to reduce water consumption?</p> <p>Have you considered alternative fuels?</p> <p>Do you use computerised route planning?</p> <p>How often do you service your vehicles?</p> <p>Do you bring waste, products, pallets, packaging back through the system?</p> <p>Do you use vehicle/trailer swaps to reduce need for drivers to overnight?</p> <p>Do you schedule deliveries where possible to avoid congestion?</p> |
| <b>General</b>             | <p>Have you built energy efficiency into warehouse design?</p> <p>Have you carried out an energy audit?</p> <p>Is there an opportunity to share resources with other suppliers or to outsource to a multi-user facility?</p> <p>Is your warehouse/DC in the right place?</p> <p>How is temperature controlled?</p> <p>Do you have insulated doors?</p> <p>Have you considered shift patterns and attempted to reduce anti-social hours?</p> <p>Have you considered noise pollution in the design?</p> <p>Have you evaluated which sort of MHE you should be using based on its energy source, ie. gas/diesel/electric? [Consult your MHE supplier for advice].</p> <p>What fuel are you using and have you considered alternatives?</p> <p>Is your warehouse laid out to minimise pallet handling?</p> <p>Do you recycle pallets and packaging?</p>   |

<sup>22</sup> Consider whether standard cube size vehicles are the best use of your transport fleet when evaluated against the type of product you carry. For example, if you manufacture polystyrene which is a high cube but very light product, it makes sense to ship it in a vehicle with as large an internal body volume as possible. The reverse is the case for a heavy product like steel.





# Product Development and Stewardship

Planning demand and supply – collaboration

Product stewardship – life cycle analysis. Packaging minimisation

Product disposal – from cradle to grave

Sustainable project management system

The opportunities for reducing social, environmental and economic impacts in a company's interactions with its customers and sales channels generally lie in three areas:

- **Improving the processes for efficiently getting the product or service to the consumer – including planning demand and supply**
- **Product stewardship which adopts a 'cradle to grave' approach**
- **Improving the design of the product or service as part of product stewardship.**

Success is dependent on supply chain partnerships between suppliers and their customers.

## 1. PLANNING DEMAND AND SUPPLY

### The Relationship between Manufacturers and Retailers



*Delivering customer service*

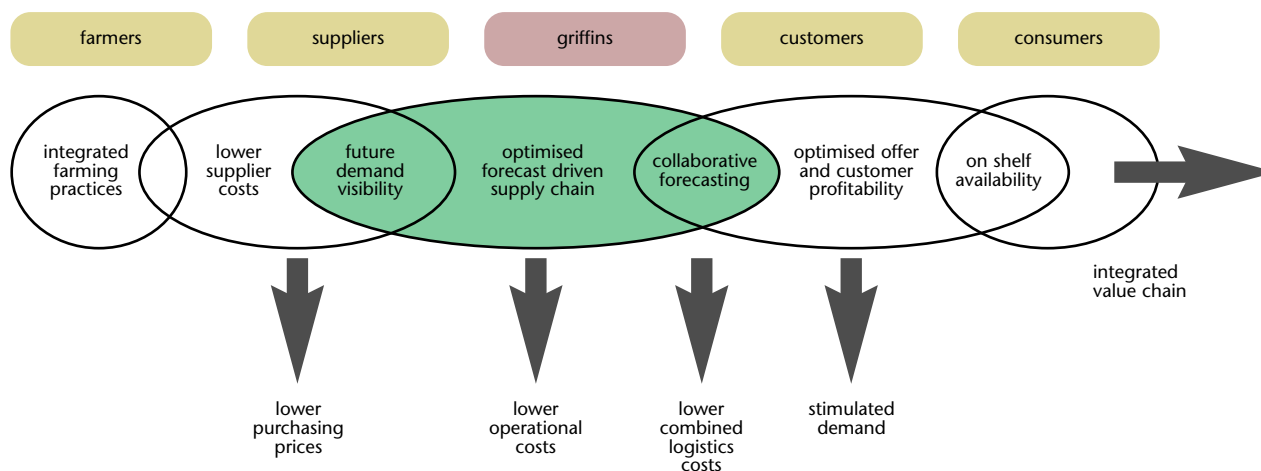
Increasing consolidation in the retail market whether in the grocery sector, general merchandise, white goods or DIY has changed the dynamics of the supply chain from manufacturer driven to retailer led. Small manufacturers have always had to tailor their production to the needs of their customers however large and often global brands have had significant bargaining power with their retail customers. Global retailing now competes with global manufacturing and the smart players have recognised the need for a collaborative approach which starts with what the consumer wants to buy rather than what the shop wants to sell or the manufacturer wants to make.

Global manufacturers including Danone and Fonterra have all put in place 'customer facing' organizations, which produce to demand and involve collaboration between the manufacturer and the retailer often in several geographies to stimulate and satisfy consumer demand. This market driven approach redefines the way companies manufacture, distribute, promote and sell products by focusing on consumers, customers and the supply chain so that all information and logistics are linked throughout the organization to deliver the most preferred product at the lowest cost.

Responsive manufacturing requires a supply chain system, which will capture product sold and ensure that production is geared to meet that need. It is an integral part of a sustainable supply chain because it drives out inefficiency. Griffins have revised their supply chain to better respond to consumer and customer demand as depicted on the following diagram.

## Griffin's Model Supply Chain

Revised supply chain vision is customer facing and comprehensive (from crop to consumer)



The detailed consideration of Supply Chain strategy and Supply Chain Management systems is beyond the scope of this guide. However streamlining the supply chain and implementing advanced supply chain management systems can improve supply chain performance by as much as 5-25%<sup>23</sup> with substantial impact on key performance indicators including emissions, resource use and employment stability.

### Ensuring supplier behaviour meets market demand.

Collaborative effort is imperative to achieve success. For example, Fonterra is working with the New Zealand Ministry of Agriculture & Forestry, the Ministry for the Environment and Environment Waikato (representing regional councils) to achieve clean, healthy water in dairying areas. Their goal is to minimise the impact of dairying on streams, rivers, lakes and wetlands so they are suitable for fish, drinking by stock and swimming. Fonterra is also working with its supplier shareholders to promote the adoption of environmentally sustainable farming practices under its 'Market Focused' programme. The company assists with identification of issues and solutions at farm level, helping individual farmers to develop practical solutions and adopt practices of the highest standard. This programme is designed to focus the dairy industry's attention on the perceptions of consumers around the world, and to protect New Zealand's clean, green image.<sup>24</sup>

This is vital because there is clear evidence that consumer preference is moving towards more sustainable products and services both in New Zealand and in our export markets.

### The growing importance of product traceability.

Concerns about product safety are the largest driver in changing consumer demand. Traceability from 'farm to fork' is fundamental to consumer confidence and this is increasingly recognised by legislation.



<sup>23</sup> *Designing and managing the supply chain*, David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi

<sup>24</sup> Fonterra Annual Report 2002-2003



European farmers will be subject to strict new levels of accountability, including regular on-farm audits which will be published and inspections by European Union officials and ultimately electronic tagging which could follow a carcass to the processing plant and track it through the boning room.

Japan, one of New Zealand's top beef export markets, is adopting tighter traceability rules after a number of BSE (mad cow disease) scares. The law now requires each locally raised animal to have a 10-digit identification number which will be displayed on the beef labels in supermarkets. Information on the history of that individual animal can be checked through the identification number. It is likely to give a major boost to beef sales in a country where 80 per cent of housewives surveyed last year remain uneasy about the safety of beef. New Zealand's traceability systems can track back to a batch of around 200 animals within hours. Some processing plants are also saving DNA samples from each animal for up to two years.

## 2. PRODUCT STEWARDSHIP



All products have the potential to cause environmental degradation, whether from their manufacturing, use or disposal. For example, a washing machine has environmental impacts through the materials it is made of – such as steel and plastic – the energy, water and detergents consumed during its use and its end-of-life disposal.

In fact, generating electricity for all the appliances in the average New Zealand home produces about five tonnes of climate-changing carbon dioxide (CO<sub>2</sub>) every year – as much as two small cars.

New Zealanders would save about \$9 million on annual energy bills and stop nearly 38,000 tonnes of harmful greenhouse gases entering the atmosphere if we could lift the rating of every household appliance by just half a star. That would do as much for the environment as taking 12,000 cars off the road.<sup>25</sup>



*Interface Agencies floor coverings (see page 36).*

However, existing environmental product-related policies have tended to focus on large point sources of pollution, such as industrial emissions and waste management issues, rather than the products themselves and how they contribute to environmental degradation at other points in their life cycles. Measures have also tended to look at the chosen phases in isolation.

Product stewardship is a product-centred approach to environmental protection and social consideration. It requires those in the product life cycle, including manufacturers, retailers, users, and disposers, to share responsibility for reducing the environmental impacts of products and improving the quality of life of those using them.

Product manufacturers can and must take on new responsibilities to reduce the environmental footprint of their products. However, real change cannot be achieved by producers acting alone: retailers, consumers, and the existing waste management infrastructure need to work together to find the most efficient and cost-effective solution.

<sup>25</sup> [www.eeca.govt.nz/default2.asp](http://www.eeca.govt.nz/default2.asp)

### Role of Businesses in Product Stewardship

In many cases, manufacturers have the greatest ability, and therefore the greatest responsibility, to reduce the environmental impacts of their products. Product stewardship also represents a substantial business opportunity. By rethinking their products, their relationships with the supply chain, and the ultimate customer, some manufacturers are dramatically increasing their productivity, reducing costs, fostering product and market innovation, and providing customers with more value at less environmental impact. Reducing use of toxic substances, designing for reuse and recyclability, and creating take-back programmes are just a few of the many opportunities for companies to become better environmental stewards of their products.

### Role of Retailers in Product Stewardship

As the sector with the closest ties to consumers, retailers are an important part of product stewardship. They can influence by preferring product providers who offer greater environmental performance, educating the consumer on how to choose environmentally preferable products and enabling consumer return of products for recycling.

### Role of Consumers in Product Stewardship

All products are designed with a consumer in mind. Ultimately, it is the consumer who makes the choice between competing products and who must use and dispose of products responsibly. Without consumer engagement in product stewardship, there is no closing of the loop. This means encouraging them to select products responsibly, to use products safely and efficiently and to recycle products that they no longer need.

### Role of Local and National Government in Product Stewardship

Ultimately households will only recycle product if facilities are provided to them and the system is easy to use. The Government also has a major opportunity via its procurement policy to promote change. Incorporating environmental and social performance standards into the Calls for Tender process will have a major impact on product stewardship.

## 3. PRODUCT DESIGN: IMPROVING THE DESIGN OF THE PRODUCT AND ITS PACKAGING

The life cycle of a product covers the whole supply chain from the extraction of natural resources, through design, manufacture, assembly, marketing, distribution, sale and use, to their eventual disposal as waste. This process involves designers, industry, marketing people, retailers and consumers.

There has been a rapid increase in consumer products partly due to an increase in disposable income and smaller households. For example, in 2002 there were approximately 2.4 million cars in New Zealand with 1.17 licensed drivers for each car.<sup>26</sup> Products also come in more shapes and sizes as a result of rapid innovation and global trade patterns, and are becoming increasingly complex.



### The Ultimate Eco-car

*Toyota has been actively developing new technologies from the perspective of achieving energy security and diversifying energy sources, necessitated by the dwindling supply of petroleum resources. In 1997, Toyota first announced the completion of a new hybrid system for use in cars which combines a gas engine and an electric motor. Prius, the first mass-produced hybrid passenger vehicle in the world, was launched in Japan. Building on the original hybrid system, Toyota has developed a new Prius car which incorporates the practicality of a conventional 2.4-litre car with the environmental performance of a sub-one-litre car.*

<sup>26</sup> LTSA statistics



### Proposed New Zealand Packaged Goods Accord 2004

The government-industry proposed packaged goods accord is scheduled for signing in March 2004 and states that if a voluntary approach to improving the sustainability of packaging does not provide sufficient gains in design, packaging waste reduction and adoption of product stewardship the government will consider mandatory regulatory measures. The accord requires brand owners and retailers/importers to assume and accept the primary responsibility for product stewardship over the full packaging life cycle and supply chain initiatives to foster markets for sustainably produced packaged goods, including greater utilization of recovered packaging materials. This marks a significant change from the previous Accord which focused primarily on the packaging manufacturer. The NZ Packaged Goods Accord can be viewed at [www.packaging.org.nz](http://www.packaging.org.nz)

Introducing a life-cycle approach to product development helps companies analyse their environmental impacts and to concentrate on those areas where they can bring the greatest benefits; however 'invention is often not enough on its own. For example, Interface Agencies have designed floor coverings which can be 'unzippered' to allow nylon components to be recycled; however there are no recycling facilities in Australasia for nylon products at present.<sup>27</sup>

**Whether companies make or sell products or services, every business can incorporate sustainable development into its own creative process. Service industries often have a major impact in terms of office space and travel budgets.**

Landcare Research's new 4,000-square-metre Research and Development building located at the Tamaki campus in Glen Innes, Auckland, is designed to be the most sustainable in New Zealand and to influence the architecture and construction industries.

The building is constructed to have a low energy consumption and CO<sub>2</sub> footprint incorporating alternative technologies such as solar power, composting toilets, wetlands for waste treatment and will be retrofitted with energy-reducing systems such as fuel cell sources. Landcare Research adopted an innovative procurement method, used in the UK government tender process whereby the project is designed in phases. The overriding objective was to educate contractors through the design process, and to achieve this Landcare Research used the expertise of Dr Robert Vale<sup>28</sup> from the University of Auckland's School of Architecture.

**Dr Andy Pearce, Chief Executive Officer, Landcare Research:** *"The building is designed to reflect its South Pacific location and be of a reasonable cost so that it can be emulated. We spent more time and effort on the design process and whilst the construction costs are comparable with conventional buildings we will benefit substantially from reduced running costs."*



<sup>27</sup> Interface Agencies Triple Bottom Line Report, 2001

<sup>28</sup> Professor Brenda Vale and Dr Robert Vale provide an independent peer review on the process.

## PRODUCT DISPOSAL – FROM CRADLE TO GRAVE

New Zealand puts 3.5 million tonnes of waste annually into its landfills<sup>29</sup> which equates to approximately one tonne of lost potential resources for every New Zealander. Identifying ways to reuse products or their constituent parts is a challenge for all industry.

There are a number of initiatives by manufacturers to drive ‘take-back’ and reuse of products and parts.

### It doesn’t need to cost the earth...

Fisher & Paykel has been operating a whiteware take-back scheme since 1993, giving dealerships and service centres an alternative to landfilling. The company has agreements with most of its North Island dealerships and has extended this to South Island to take back old appliances for dismantling and recycling. Fisher & Paykel processes around 25,000 appliances annually with approximately 75% materials re-used or recycled by weight. It recovers 1,600 tonnes of materials, including aluminium, stainless steel, copper, steel, plastics, packaging, electric cable, compressors, glass and circuit boards. Refrigerants are removed from freezers and refrigerators. With sales of recyclable materials and internal savings from the reuse of packaging material, the take-back centre made over \$500,000 in 2000.<sup>30</sup>

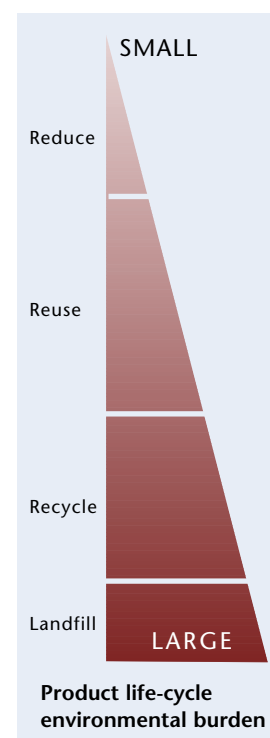
Vodafone has launched a nationwide mobile phone recycling campaign to reduce the amount of mobile waste each year. In conjunction with Nokia, equipment is collected in New Zealand and shipped to Singapore where certified recycler, Citiraya, recycles the equipment.

## SUSTAINABLE PROJECT MANAGEMENT SYSTEM – TOOLKIT FOR COMPANIES

Over the past decade many companies have introduced their own product development process to systemise decision making. Sustainable development needs to be built into the processes so that decisions are made in full knowledge of the environmental and social impacts of product development, design and build, or market development.

In smaller organisations the design-to-market process is much shorter and decisions are taken by a smaller group of people. This is often one of the dilemmas when small companies are acquired by larger organisations as the very ‘entrepreneurship’ which made the company attractive in the first place can be stifled within the larger enterprise.

A reliable Project Development Process provides a toolkit for companies to prioritise projects including new product development. The following model illustrates the stages which might be considered in the design of a product or facility and at which points sustainable development could be factored into the process.



*Design for repair, extended life and recycling.*

<sup>29</sup> Ministry for the Environment

<sup>30</sup> *The New Zealand Waste Strategy*, Ministry for the Environment; Fisher & Paykel

**Product Design Concept Development – Checklist**

|   | Project leader | Product development | Marketing | Marketing research | Process development/operations | Engineering | Planning | Packaging & distribution | Purchasing | Finance | Customer management | Sustainable development | Legal |
|---|----------------|---------------------|-----------|--------------------|--------------------------------|-------------|----------|--------------------------|------------|---------|---------------------|-------------------------|-------|
| <b>1</b> Clarify and define project objectives/success criteria                   | ✓              | X                   | X         |                    | X                              | X           | X        |                          |            | X       | X                   | X                       |       |
| <b>2</b> Develop and research product concepts                                    |                | X                   | ✓         | X                  |                                |             |          |                          |            |         |                     |                         |       |
| <b>2</b> Develop a product brief which fits concept statements                    |                | X                   | ✓         |                    |                                |             |          |                          |            |         |                     |                         |       |
| <b>3</b> Develop process/manufacturing concept and document                       |                | ✓                   |           |                    | X                              | X           |          |                          |            |         |                     |                         |       |
| <b>4</b> Develop initial product sample   |                | ✓                   | X         | X                  | X                              |             |          |                          |            |         |                     |                         |       |
| <b>8</b> Assess initial volumes, consumer feedback and positioning                |                |                     | ✓         |                    |                                |             |          |                          |            |         | X                   |                         |       |
| <b>9</b> Design pilot equipment requirements                                      |                | ✓                   |           |                    | X                              | X           |          |                          |            |         |                     |                         |       |
| <b>10</b> Produce samples   |                | ✓                   |           |                    | x                              |             |          |                          |            |         |                     |                         |       |
| <b>11</b> Test product with target consumers                                      |                | x                   | ✓         | x                  |                                |             |          |                          |            |         |                     | X                       |       |
| <b>12</b> Identify potential materials supply requirements                        |                | ✓                   |           |                    | X                              |             | X        | X                        | X          |         |                     | X                       | X     |
| <b>13</b> Identify potential suppliers  |                |                     |           |                    |                                |             |          |                          | ✓          |         |                     | X                       |       |
| <b>14</b> Perform initial capacity analysis/timings                               |                |                     |           |                    | X                              |             | ✓        |                          |            |         |                     |                         |       |
| <b>15</b> Determine product design impact on packaging/palletization/distribution |                | X                   | X         |                    | X                              |             | X        | ✓                        |            |         | X                   | X                       |       |
| <b>16</b> Attempt preliminary financial returns/pricing                           |                |                     | ✓         |                    |                                |             |          |                          |            | X       | X                   |                         |       |
| <b>17</b> Conduct initial pricing analysis  |                |                     | ✓         |                    |                                |             |          |                          |            | X       | X                   |                         |       |
| <b>18</b> Assess preliminary business impact timing implications                  | ✓              | X                   | X         |                    | X                              | X           | X        | X                        | X          | X       | X                   |                         |       |
| <b>19</b> Conduct consumer research as appropriate                                |                |                     | ✓         | X                  |                                |             |          |                          |            |         |                     |                         |       |
| <b>20</b> Obtain investigational safety clearances                                |                | ✓                   |           |                    |                                |             |          |                          |            |         |                     |                         |       |
| <b>21</b> Develop and review initial product claims                               |                | X                   | ✓         |                    |                                |             |          |                          |            |         |                     |                         | X     |
| <b>22</b> Identify equipment required for manufacturing process                   |                | X                   |           |                    | X                              | ✓           | X        |                          |            |         |                     |                         |       |
| <b>23</b> Determine initial capital costs/time frame                              |                |                     |           |                    |                                | ✓           |          |                          |            |         |                     |                         |       |
| <b>24</b> Determine engineering resource required                                 |                |                     |           |                    |                                | ✓           |          |                          |            |         |                     |                         |       |
| <b>25</b> Determine if consumer test results meet success criteria                |                | X                   | ✓         | X                  |                                |             |          |                          |            |         |                     |                         |       |
| <b>26</b> Review project against sustainability criteria                          | X              | X                   | X         |                    | X                              | X           |          |                          |            |         |                     | ✓                       | X     |
| <b>27</b> Submit project to Board for approval                                    |                | ✓                   | X         |                    | X                              |             |          |                          |            |         |                     |                         | X     |

NB: This list is not developed necessarily in time order.

Key: X Likely involvement ✓ Lead function

# Drivers of sustainable development

As the businesses and Crown entities in this Guide have illustrated there are real commercial benefits for seeking sustainable development throughout the supply chain. As outlined in Chapter 2, organisations including local and national Government need first to address their own internal procedures before starting to attempt to influence others.

The scope of this Guide does not allow for a comprehensive review of global supply chain initiatives; however, there are two principal groups driving the sustainable supply chain:

1. **Government leading by example and providing a framework for sustainable development.**
2. **Retailers and Brand Owners making it happen.**

Government: including sustainable criteria in purchasing

Global retailers and brand owners need to verify product source

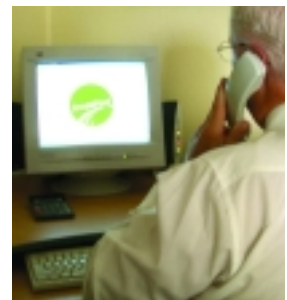
Retailers/Consumers: consumers want retailers to buy responsibly.

Legislation: labelling; integrated product policy etc

## 1. GOVERNMENT STRATEGY

Governments have a major opportunity and responsibility to influence the supply chain because of their own procurement budgets. New Zealand's Central Government spends \$2.5 billion and Local Government \$1.5 billion per year on goods and services. The Ministry for the Environment is developing a cross-government project to help minimise the environmental impact of Central Government operations, and encourage and facilitate eco-efficient procurement and reporting of operational environmental performance. The project will later be extended to Local Government. It is likely that this project will, to some extent, stimulate green demand from the public sector.

Crown entities such as Transit with their \$0.5 billion budget have set specific KPIs for sustainable development and are grappling with how best to introduce sustainable development criteria into their procurement policies.



**Government action is fundamental in getting business to embed environmental and social objectives into their culture and practices and to make this 'mainstream'.**



However, pre-selection systems tend to accept 'just enough' as the pass mark and then allow the next phase of the tender process to be awarded primarily on a cost basis which does not reward those companies 'making a real difference'.

**We recommend that the public sector adopts a Code of Conduct for suppliers, with specific objectives which need to be met based on those outlined in Chapter 3, to really generate momentum in New Zealand.**

This objective appears consistent with European strategic thinking around public procurement, which represents 12% of the European Community's GDP. The EC Green Paper recognises the need to examine Community public procurement law and its possibilities for giving preference to environmentally-friendly products. This proposal includes publication of a practical handbook on best practice with Life Cycle Assessment in 2005 and the development of a Commission action programme for greening its procurement in 2006.

In June 2003, The European Commission adopted a Communication on Integrated Product Policy (IPP)<sup>30</sup>, outlining its strategy for reducing the environmental impact caused by products. The Commission will take a number of actions to stimulate continuous improvement in the environmental performance of products throughout their whole life cycle and will work towards identifying those products with the greatest potential for environmental improvement, collaborating with industry, business and consumers to green those products. This proposal, however, does not include legislation.

## **INCENTIVES**

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There are a whole variety of tools – both voluntary and mandatory – which can be used to embed sustainable development in everyday business. These include measures such as economic instruments, substance bans, voluntary agreements, environmental labelling and product design guidelines.

Some of these are being used in New Zealand to drive the agenda but there is scope for more to be done. See chart over page.

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<sup>30</sup> <http://europa.eu.int/comm/environment/ipp/ippcommunication.htm>

| Driving Sustainable Buying practices | Global Activity   | Current New Zealand Measures or Initiatives   |
|--------------------------------------|---|---|
| Consumer Awareness Instruments       | Consumer education;<br>Information campaigns<br>Guidance for purchasers<br>(Internet procurement Guides;<br>Advice Centres)   | ARC Big Clean Up, MfE/ARC Reduce your Rubbish campaign ( <a href="http://www.reducerubbish.govt.nz">www.reducerubbish.govt.nz</a> );<br>Target Zero<br>( <a href="http://www.ccc.govt.nz/TargetZero/Sectors/GreenWorkplaceGuide.pdf">www.ccc.govt.nz/TargetZero/Sectors/GreenWorkplaceGuide.pdf</a> – see p31 onward); Many individual councils have waste reduction/management resources and/or staff. |
| Voluntary Information Instruments    | National Eco Label schemes, eg. Blue Angel (Germany); Terra Choice (Canada)<br>Sector labels, eg. VOC paint; FSC, Fair Trade, MSC, Blue Angel<br>Environmental Management Systems | Environmental Choice Label initiated and endorsed by Government; <sup>31</sup> BioGro, Demeter, Agriquality Organic Standards<br><br>Forest Stewardship Certification, Marine Stewardship Council; Sustainable Forestry Certification<br><br>ISO14001; EnviroMark, Green Globe 21   |
| Compulsory Information Instruments   | EU Energy Rating Labels, new car CO <sub>2</sub> labels<br><br>Compulsory declaration of contents or information on use of disposal   | Energy Efficiency (Energy Using Products Regulations 2001) <sup>32</sup> require an energy label for: <ul style="list-style-type: none"> <li>• Fridges and freezers</li> <li>• Washing machines and dryers</li> <li>• Air conditioners and heat pumps</li> <li>• Dishwashers</li> </ul>   |
| Economic Instruments                 | Using economic incentives to drive change: Taxes and charges, subsidies for better products, deposit refund schemes, etc.<br><br>Public procurement                               | Resource Management Act 1991<br>Hazardous Substances and New Organisms Act 1996<br>Ozone Layer Protection Act<br>Climate Change Response Bill<br><br>User-pays rubbish systems operated by various councils   |
| Product Bans                         | Minimum energy performance standards  | EECA  |

However, as elsewhere, behavioural change is also dependent upon suppliers working together with government departments to drive change. On capital expenditure projects, for example, if suppliers can demonstrate full life-cycle costs of installing a more eco-efficient building or photo-copier, this can provide the buyer with justification for a potentially higher initial outlay.

<sup>31</sup> Environmental Choice NZ currently has criteria relating to: hand-washing detergents, laundry detergents, dish-washing detergents, carpets, recycled plastic products, paints, lubricating oil, lead-free batteries, copiers, thermal insulation, paperboard products and newsprint-derived products. See [www.enviro-choice.org.nz/](http://www.enviro-choice.org.nz/)

<sup>32</sup> [www.eeca.govt.nz/content/MEPS/LabellingRegulations.pdf](http://www.eeca.govt.nz/content/MEPS/LabellingRegulations.pdf)

Local authorities can make choices to structure their contracts so that they provide sustainable livelihoods, communities and families

## 2. LOCAL GOVERNMENT

At local level, there are a number of City Councils that are embarking on their own sustainable development journey. Christchurch City Council is mentioned in Chapter 3. Auckland Regional Council have appointed an experienced Sustainable Procurement Project Manager to incorporate social and environmental criteria alongside economic ones in their future tender procedures.

Each Council can make a considerable impact if it changes its own practices and its procurement policy. North Shore City Council has a proposed capital expenditure programme of around \$76 million for the 2003-2004 year. The Council has started to include environmental considerations for supplied products which is being trialled in their printed stationery tender process. The Council has also developed, together with Landcare Research, a customised programme called BusinessCare Enviro-Mark for local businesses to achieve the Enviro-Mark Gold level and a range of environmental objectives within two years of joining the programme.

For the public sector in particular the devil is in the detail because introducing considerations wider than price and health and safety into the selection process can become a political debate in their own right. However, many participants in this study voiced the same message: *"Local authorities influence local communities. They can make choices to structure their contracts so that they provide sustainable livelihoods, communities and families."*

## 3. MARKET FORCES: SELLING SUSTAINABLE PRODUCTS

80% consumers have a general desire to do the right thing but very few look at labels.

New Zealand's export market is dependent upon global consumer practices and there is growing demand for sustainable products in Europe and to a lesser extent USA<sup>33</sup> driven by retailers and brand owners rather than end-consumers.

Retailer and brand owner leadership is changing the supply chain in Europe with a clear decision by some to do the research on their products so that consumers know that they can 'trust' them to have a sustainable procurement policy. The top 10 European grocery retailers share 40% of the market and increasingly prefer to select products with a demonstrable chain of custody and/or certification, and require their suppliers of goods and services to comply with terms of trade which extend beyond service and price.



Nestlé, Unilever and Danone working on supplier codes through Sustainable Agriculture Initiative (SAI)

Research commissioned by Department of the Environment Transport & The Regions (UK) has found that consumer focus groups *"erred on the side of 'laissez faire' rather than stricter control of environmental factors"*, preferring to let market forces drive an increase in the availability of 'green' products.<sup>34</sup>

However, most New Zealand consumers do not currently "go out of their way to shop at businesses with good environmental policies", according to a survey commissioned by The Warehouse in 2002.<sup>35</sup> Seventy per cent of respondents did not rate retailers, suppliers or products more highly if those products are made in a more environmentally-friendly manner. That said, consumers want to purchase products which they can trust, and expect retailers and suppliers to behave responsibly.

<sup>33</sup> Study by Jo Hume, Operations Manager, NZBCSD in July 2003 as part of Churchill Fellowship

<sup>34</sup> Department for Environment, Food & Rural Affairs: *Action for Greener Products* April 2002

<sup>35</sup> 'What ought one to do?' December 2002, *The Warehouse Triple Bottom Line Report*

In short, global retailers and brand owners have a huge influence on the supply chain and their policy decisions will drive change across the market. This inevitably will impact on New Zealand manufacturers who will need to demonstrate that they meet these terms of trade in order to do business.

Some examples of global procurement decisions which have far-reaching impact are:

| Policy Decision   | Driver  | Impact   |
|---|---|--|
| <b>Remove</b><br>eg. GMOs from products (Sainsbury, Tesco, B&Q).<br><br>Tesco remove Antarctic Sea Bass after NGO campaign.<br><br>Non-animal Testing, eg. Body Shop.   | High level of pressure from NGO's and consumer reluctance to purchase product with GM content. All mainstream UK retailers.<br><br>Corporate Policy, part of brand.     | Manufacturers need to demonstrate chain of custody to sell products. Irrespective of legislation – if customer will not buy, retailers will not buy.           |
| <b>Set Targets to Remove</b><br>eg. Sainsbury's aim to source only sustainable fishery products by 2010.<br><br>Sustainable meat and fresh produce supply. Safeway Eurepgap compliance target: produce by 2005; meat by 2007. | NGO pressure & need to maintain sustainable fisheries industry.<br>Certification of content.<br><br>Traceability and food safety scares, eg. BSE; chemicals etc.        | Promotes MSC labelling.<br>Sets goals and drives competitor agenda.<br>Shortage of MSC product.<br><br>Promotes accreditation systems.<br>Reduces supply base. |
| <b>Offer Alternatives Alongside</b><br>eg sustainable coffee production. Water-based alongside conventional paints. Forest Certification Products.  | Supply and demand issues. Main barrier may be price driven. Consumer awareness is not high and needs developing. Consumers want choice. May be forthcoming legislation. | Starts education process for consumers.<br>Shortage of product: encourage suppliers to seek accreditation to meet demand.                                      |



Green marketing to overseas markets





## LINKS AND RESOURCES

A number of local and international organisations are working on many of the issues covered in these guidelines. This section is not intended to provide an exhaustive list of organisations and sources of information, many of which are referred to by footnote through the report, but to highlight a range of currently available resources.

| ORGANISATION  | SERVICE  | CONTACT DETAILS  |
|---|--|--|
| BRANZ   | Sustainable Building design  | <a href="http://www.branz.co.nz">www.branz.co.nz</a>   |
| Department for Environment, Food & Rural Affairs, UK:<br>Action for greener products  | Provides tool box for strategy developed for UK market   | <a href="http://www.defra.gov.uk">www.defra.gov.uk</a>   |
| Non governmental organisations: Greenpeace, Friends of the Earth; Planetark; World Wide Fund for Nature; Rainforest Action Group                | NGO's campaigning about various social and environmental issues  | <a href="http://www.greenpeace.org.nz">www.greenpeace.org.nz</a><br><a href="http://www.foe.org">www.foe.org</a><br><a href="http://www.planetark.org">www.planetark.org</a><br><a href="http://www.wwf.org">www.wwf.org</a><br><a href="http://www.ran.org">www.ran.org</a> |
| Kingfisher's suite of sustainable development reports: <i>Being a better trading neighbour; How green is my patio? How green is my kitchen?</i> | Global Retailer demonstrates development and implementation of supply chain code of conduct over period of years | <a href="http://www.kingfisher.co.uk/index.cfm?section=English&amp;area=Environment_and_society">www.kingfisher.co.uk/index.cfm?section=English&amp;area=Environment_and_society</a>   |
| Enviro-Mark NZ  | Integrated Health, Safety and Environmental Management   | <a href="http://www.landcareresearch.co.nz">www.landcareresearch.co.nz</a>   |
| Bureau Veritas NZ   | Health, Safety, Social and Environmental Management: ISO 14001; HACCP; SA8000                                    | <a href="http://www.bvnewzealand.com/09_certification_service.asp">www.bvnewzealand.com/09_certification_service.asp</a>   |
| EUREP   | European producers' assurance scheme   | <a href="http://www.eurep.org/sites/index_e.html">www.eurep.org/sites/index_e.html</a>   |
| Green Project   | NZ Farm Assurance Programme  | <a href="http://www.projectgreen.co.nz">www.projectgreen.co.nz</a>   |
| Logistics and Transport NZ  | Professional association for the logistics industry  | <a href="http://www.ltnz.org.nz">www.ltnz.org.nz</a>   |
| Ministry for the Environment  | Proposed NZ Packaged Goods Accord 2004   | <a href="http://www.packaging.org.nz">www.packaging.org.nz</a>   |

**GLOSSARY**

|                                 |  |
|---------------------------------|--|
| Procurement                     | Also known as purchasing   |
| Logistics                       | Ensuring that the right products reach the right place in the right quantity at the right time to satisfy consumer demand  |
| Sustainable supply chain        | Management of raw materials and services from suppliers to manufacturer/ service provider to customer and back with improvement of social and environmental impacts explicitly considered.   |
| Conformity based framework      | Organisation conforms to a system based on a framework such as ISO 14001, SA8000 or Enviro-Mark  |
| Responsible retailing           | The retailer/service provider and the brand owner assume responsibility for ensuring that consumers can buy products and services with confidence in their source and manufacture  |
| Risk management                 | Proactively identifying and managing issues which might compromise the health and safety of employees, customers or the community or that threaten to destroy public trust in the organisation despite a company's long-standing reputation            |
| Sustainable development report  | A sustainable development report provides the shop window where business can display their triple bottom line (social, environmental and economic) performance.  |
| Precautionary principle         | The essence of the precautionary approach is: "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" |
| Code of conduct                 | Presents social and environmental standards and principles that a company, its suppliers and contractors are expected to observe. Terms of Trade are terms and conditions which a company sets for its suppliers as a prerequisite for doing business. |
| Key performance indicator (KPI) | Also known as Key Performance Objective (KPO): qualitative and quantitative measures which might be set for an organisation, each department and each manager  |
| Eco-efficiency                  | Eco-efficiency is a management strategy that links financial and environmental performance to create more value with less ecological impact. The term was coined by the WBCSD.   |
| Whistle blower policy           | Protection from retaliation for employees who report suspected improper corporate action.  |

|                              |  |
|------------------------------|--|
| Chain of custody             | <p>This is accomplished by having verifiable documentation indicating the raw materials and sequence of processes for each product and the sequence of locations where they were stored (including dates and times). For a proven chain of custody to occur:</p> <ul style="list-style-type: none"> <li>• the evidence is accounted for at all times</li> <li>• the passage of evidence from one party to the next is fully documented</li> <li>• the passage of evidence from one location to the next is fully documented</li> </ul> |
| Shared user/multi user       | More than one company combining distribution or storage to achieve economies of scale.   |
| Cross docking                | In a cross-docking system, pallets of material are received on one dock, broken down into customer specified loads while still on the dock and transferred to outbound trucks. Items are not placed in slots for storage   |
| Reverse logistics            | The process of moving goods back through the system with the purpose of finding another use for the products or for proper disposal.   |
| Customer facing organisation | Companies which produce to demand and involve collaboration between the manufacturer and the retailer to stimulate and satisfy demand.   |
| Product life cycle           | Consideration of all process inputs including pre-processing of raw materials; processing steps and delivery to the end user, as well as the usage and disposal of the product.  |
| Product stewardship          | Product stewardship is a product-centered approach to environmental protection. Also known as extended product responsibility (EPR), product stewardship calls on those in the product life cycle – manufacturers, retailers, users, and disposers – to share responsibility for reducing the environmental impacts of products.   |
| GMO's                        | Genetically Modified Organisms   |
| Packaged Goods Accord        | Voluntary packaging agreement. The principal parties are MfE, NZ Packaging Council on behalf of brandowners, retailers, importers and packaging manufacturers.   |

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## **DISCLAIMER**

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