

# SUSTAINABLE BUSINESS MODELS

A discussion paper produced by Scottish Enterprise - that aims to be thought provoking and to stimulate debate. It does not necessarily reflect current Scottish Enterprise policy.

## Introduction

This discussion paper aims to challenge the conventional approach to business sustainability – that resource efficiency is the only solution to solving business environmental issues. It explores the following questions:

- Why should business be more sustainable?
- Why are businesses not already sustainable?
- What is a sustainable business?

This paper seeks ways to align the legitimate business profit motive with care for the environment. Only by achieving this will sustainable businesses thrive. The paper outlines the characteristics of a sustainable business model.

The paper also includes inspirational case studies that demonstrate good practice. The symbol on the right will refer you to the relevant case studies at Appendix A.

'beyond  
resource  
efficiency'

## Business sustainability

### What are the drivers for sustainable business practices?

Many drivers in combination provide a strong business case for sustainability.

- **Cost savings** – using less material and energy means reduced costs and less exposure to volatile raw material prices.
- **Customer demand/ loyalty/ trust** – many consumers now alter their buying habits for environmental benefit.
- **Regulations** - increase in Government regulation, standards, green taxes and incentives.
- **Supply chain** - pressure from suppliers to improve efficiency and become more sustainable.
- **Employee recruitment, retention and motivation** – many employees demonstrate greater commitment when they work for environmentally responsible firms.
- **Innovation** – going green requires a commitment to innovation, which can increase profits.
- **Moral issues** - many companies adopt a sustainability position because of the moral imperative to tackle environmental issues.

#### Main drivers:

- cost savings
- customers
- regulations
- supply chain

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These pressures are increasing because of global concerns over access to resources and climate change. In this context, innovative business practices and models can emerge that may not have been viable in the past.

'Business as usual' will not be a viable option since market leaders are already reducing emissions in their products, services and supply chains and are gaining competitive advantage from doing so.

### **Why are all businesses not sustainable already?**

A sustainable business model is one in which the profit motive and environmental benefits are aligned. We make the case that there are structural reasons as to why this is not being achieved. For example in most businesses:

- profits are usually made by increasing the consumption of goods and services;
- there are short term pressures from investors;
- a low purchase price is attractive to consumers, and this may be at the expense of sustainable design and product quality;
- externalities, for example householders left to dispose of products which have not been designed to be recyclable;
- the benefits to consumers of improved design, for example lower energy bills, are not shared with the construction company or manufacturer.

Companies benefit directly from investing in resource efficiency to reduce their own costs, but the alignment between economic and environmental objectives is limited, as companies only benefit indirectly through enhanced reputation from encompassing a wider approach.

To a certain extent, regulations can overcome these structural issues, but these need to be extensive and potentially bureaucratic to be effective.

The sustainable business model outlined in this paper encourages 'responsible consumerism', employee engagement, long-term relationships between customers, business and suppliers and a focus on the needs of customers. All of these should help to provide sustainable economic growth.

**The Scottish Government  
'purpose' is to  
increase  
sustainable  
economic growth**

**What is a sustainable business model?**

A business model is how a company operates. It focuses on how funds flow between customers, business and suppliers. Improving business models requires a focus on the needs of the customer.

Innovation in business models requires a business to change how it interacts with the market. For example, low cost airlines challenged the established business model by cutting out the travel agent and adopting an approach to marginal charges based on seat availability.

The term ‘sustainability’ covers environmental issues, wider corporate social responsibility (CSR), and the long-term continuity and economic survival of business.

A sustainable business model is an approach to offering goods or services that provides financial benefits for the business, helps to improve the natural world and provides social benefits for employees and the local community.

**True sustainability is to enhance the environment, the economy and peoples lives**

**A Sustainable Business Model**

A sustainable business will make profits over the long term whilst not causing environmental damage. The sustainable business model provides a competitive advantage by aligning profit and environmental objectives. The table below, and subsequent pages, describe the ‘building blocks’ of a sustainable business.

**Table 1: The ‘Building Blocks’ of a Sustainable Business Model**

Philosophy	Respect for nature and people	Align customer needs and environmental benefits	Long-term approach	
Strong relationships	Suppliers	Customers	Community	Employees
Sustainable design	Life-cycle analysis	Closed-loop resources	Durability	Biomimicry principles
Hierarchies	Waste	Transport	Energy	Raw materials
	Impact on Biodiversity			
	Provide a service			

## Company philosophy

To be truly sustainable businesses should respect nature and people with the environment being an integral aspect of all operations. Profits are made by meeting customer needs and reducing adverse environmental impacts, perhaps through more efficient production methods or through reduced, or altered, consumption patterns.

Fundamental to sustainability is the freedom to take decisions for the long-term benefit of the business, for example, investing in energy efficiency with relatively long payback periods. This requires trust between managers and investors, and sound financial models that demonstrate the benefits of such an approach.

## Relationships

Sustainable businesses will gain benefit from engaging employees to work with suppliers, customers and the wider community.

### *Work in Partnership*

Wal-Mart is insisting on higher environmental standards throughout its supply chain. Coca-cola has worked with its suppliers to lightweight its bottles. This focus on collaboration and resource efficiency has business and environmental benefits.

### *Ongoing Relationships*

Companies that engage with consumers around their aspirations for a better future can win customer loyalty and repeat sales. Ariel's 'turn to 30' campaign helped its customers feel good, be better informed, save money and energy and it increased sales of their washing powder.

Similarly, a company that offers extended guarantees or maintenance agreements is likely to design products well and be trusted by the consumer.

### *Community and Social Involvement*

Business can work with Social Enterprises or communities to mutual advantage. The resulting goodwill is good for sales and brand reputation, whilst environmental advantages accrue from, for example, increased recycling. The successful M&S and Oxfam partnership arose from an employee suggestion.

### Related case studies:

- Car clubs
- One Planet Sutton
- pv for free

### Related case studies:

- Larderbytes
- Proctor and Gamble (Ariel)

### Related case studies:

- M&S/ Oxfam
- One Planet

## Sustainable Design

Sustainable design will encourage businesses to understand the wider consequences of decisions. Cost savings and productivity improvements can arise from more efficient use of raw materials, energy, water and waste. Marketing advantages may accrue.

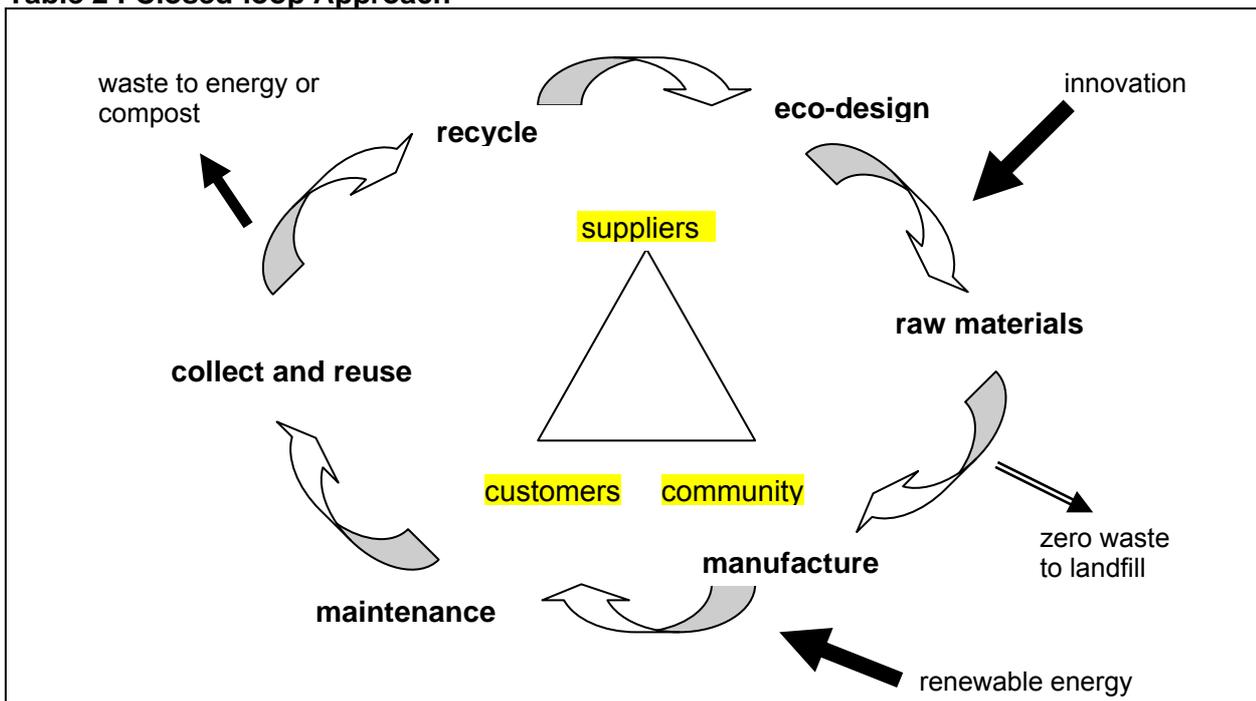
### *Lifecycle approach*

A lifecycle approach encompasses concern about supply chains, manufacturing, the product in use and disposal – also called a [Cradle to Cradle](#) (C2C) approach. It requires sharing information with suppliers and customers and integrating an eco-design and closed-loop approach into specifications when procuring products.

Related case study:

- Steelcase/ Vitsoe

**Table 2 : Closed-loop Approach**



### *Durability*

Long-life consumer goods such as washing machines or cars can be designed to be durable and reliable. Upgrades can be provided by changing one part, rather than replacement through planned obsolescence. Return goods to the manufacturer on disposal for reuse or recycling. Initiatives to maintain customer contact throughout the product's useful life may result in repeat sales.

Related case studies:

- Interface
- Steelcase/ Vitsoe

It may not be practical to design durability into certain fashion and technological goods, particularly if there is a rapid rate of innovation (eg mobile phones). The focus of eco-design should be on recyclability.

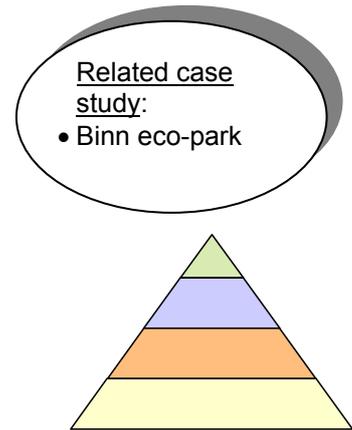
Products of consumption are single-use or short-life items (eg food, detergents and packaging). The focus should be on using organically based materials that are biodegradable after use.

*Biomimicry*

Biomimicry is a specialist design technique that seeks sustainable solutions by copying nature. Nature has had millions of years to evolve, so we can often copy nature to design sustainable solutions that solve energy, transport, waste and recycling issues.

**Hierarchies**

A sustainable business will design the business to minimise waste, transport, energy and raw materials to accrue cost savings and environmental benefits.



**Table 3: The four sustainable hierarchies**

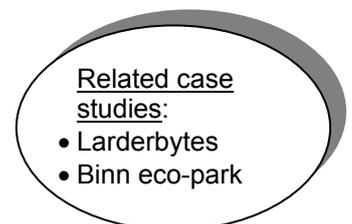
	<b>Waste</b>	<b>Transport</b>	<b>Energy</b>	<b>Raw materials</b>
↑ Increasingly sustainable	prevent/ minimise	travel less	use less	use less
	reuse	walk or cycle	conserve energy	recycled materials
	like for like recycling	public transport	energy efficiency	renewable resources
	downcycling (lower quality)	commercial transport	renewable generation	non-renewable resources
	energy recovery	multiple occupancy private transport	lower carbon generation	non-renewable and toxic
	landfill disposal	single occupancy private transport	high carbon generation	non-renewable, toxic, non-recyclable

*Waste*

Using eco-design principles it is possible to implement a closed-loop approach including a zero waste to landfill policy. Design products using materials that are recyclable or compostable and in a manner that facilitates future reuse or recycling of the raw materials.

*Transport*

The aspiration should be to provide goods and services on a local basis where possible, albeit in a globally competitive world, it will be more



carbon efficient to produce certain goods in bulk and transport them, rather than to produce everything at a local level.

Co-location is the principle of using geographic proximity for competitive advantage. The business and environmental benefits arise from reduced transport requirements for suppliers, customers and/or employees commuting. Co-location can also take advantage of renewable energy sources, for example, an aluminium smelter next to a hydroelectric plant or the re-use of waste heat to grow tomatoes.

### *Energy*

The aspiration should be to source all energy from renewable or low carbon sources. Energy demands should be minimised because all energy generation has some environmental impact. This twin track approach may also help to provide energy security. Design products to minimise the requirement for energy, water and other consumables when in use.

Case study:  
• Proctor and Gamble (Ariel)

### *Raw Materials*

Environmental screening of chemicals in raw materials will help to reduce any risks arising from toxins and other hazards. This approach may lead to fewer raw materials being sourced; resulting in manufacturing efficiencies, fewer waste disposal problems and products that will be easier to recycle.

Related case study:  
• Interface

Minimise the use of non-renewable resources such as oil and minerals. Products made from natural raw materials (wood, corn starch, cotton, bioplastics etc) are biodegradable. However, not all natural materials are sustainable and harvesting can have a high environmental impact. Synthetic materials can be used if they have a lower life-cycle analysis impact than natural materials – particularly if the materials are easily recyclable.

### **Biodiversity**

A sustainable business will ensure that its activities protect or enhance nature. This requires a long-term approach and a business model that places a value on nature. The potential business benefits include cost savings, staff morale, marketing advantages and enhancing corporate reputation.

### ***Provide a service***

A service (or leasing) based model may be appropriate where both the company and the consumer can benefit from improved product design and durability. The manufacturer makes more money by designing the goods

Related case studies  
• Car clubs  
• Interface

to be reliable, durable and easily reused or recycled at the end of the lease. The environmental benefits flow from these principles.

Where improved design can lead to lower energy running costs, a long term service contract, and/ or a partnership approach can have mutual benefits. For example, 'green' property leases allow the benefits from improvements in energy efficiency to be shared between landlords and tenants. The Better Business Partnership provides guidance on how to adopt [green leases](#).

#### **Sustainable Business Model - Case Study**

[Interface Flor](#) aim to be a fully sustainable company by 2020. They manufacture carpet tiles and offer a leasing option to customers. They have reduced chemical use, increased the proportion of recycled raw materials and improved the durability of their product. The innovative random design of carpet tiles enables an individually damaged tile to be replaced. They have a take back scheme for the end of useful life and can recycle old tiles.

This focus on environmental sustainability has reduced costs and enhanced their reputation. The leasing model means that Interface gain direct financial benefit from improving the durability of their products.

## Next Steps

### **Why should I adopt a sustainable business model?**

Government regulation, consumer demand and supplier push are combining with a strong environmental imperative to create a 'perfect storm' that is driving sustainability in business.

The advantages of adopting a sustainable business model stem from connecting to increasingly eco-conscious customers and your ability to differentiate your business from your competitors. Additionally, your employees are more likely to be motivated working within an environmentally responsible work culture.

Failure to adapt to these changing circumstances could leave your business exposed to volatile fuel prices, disruptions to the supply of raw materials and increased competition from your competitors who are taking advantage of new sustainable business opportunities.

### **How do I transform my business to a sustainable business model?**

There is no single methodology, however, the steps outlined below may help you on this journey:

- undertake a lifecycle analysis of your existing products or services to highlight key environmental issues;
- map the flow of funds between the customer, your business and your suppliers – covering manufacturing, design, research, service support, profits and overheads;

then set up a facilitated, brainstorming workshop:

- Focus on the needs of your customer – what are the outcomes that the customer and other beneficiaries need?;
- Consider your rivals and adjacent markets – are there any different ways of providing the service to your existing or new customers?;
- Consider the energy, waste, resource use and transport hierarchies;
- How can you align economic and environmental objectives?;
- Does your financial model (paybacks, rate of return etc) facilitate or hinder long-term sustainable decisions?;
- Draw a flowchart of the most environmentally efficient method of providing your service – this is the basis of your new business model.

Successful innovation requires a culture of risk taking, whilst transformational change rarely comes from successful incumbents. It is often possible to penetrate and disrupt adjacent markets using skills that you already possess.

**“a culture of risk taking”**

Once a new model is agreed, strong leadership is required to share your new goals with your stakeholders. Staff performance assessment and incentives should include sustainability objectives. This will help to drive through the changes.

## What can Scottish Enterprise offer me?

[Scottish Enterprise](#) may be able to help you through these changes. Please contact your Account Manager or our Helpline on 0845 607 8787.

[Scottish Enterprise](#) offers many sustainable and low carbon services to businesses. These include organisational development, company strategy, innovation, resource efficiency, LEAN manufacturing and promoting the development of renewable energy.

## APPENDIX A

### Inspiring Case Studies (in alphabetical order)

Case studies	Sustainability concepts demonstrated
<p>Binn <a href="#">Eco-park</a>, Glenfarg</p> <p>An integrated vision encompassing sustainable waste management, generate renewable energy and food production – gaining the maximum environmental value out of waste.</p>	<ul style="list-style-type: none"> <li>• co-location</li> <li>• waste hierarchy</li> <li>• biomimicry principles</li> <li>• sustainable economic growth</li> </ul>
<p>Car Clubs (eg <a href="#">City Car Club</a>)</p> <p>Car Clubs offer members the opportunity to rent cars by the hour.</p> <p><a href="#">Riversimple</a> aim to design a hydrogen fuelled car and lease it with fuel costs <i>included</i> in the leasing charge.</p>	<ul style="list-style-type: none"> <li>• service (leasing) model</li> <li>• reduces demand for travel – behaviour change</li> <li>• manufacturer takes on responsibility for energy during product use, providing the maximum incentive to design efficiently</li> <li>• outcomes driven – focus on needs of customer (mobility, rather than a private car)</li> </ul>
<p><a href="#">Larderbytes.com</a></p> <p>An e-shopping facility for locally sourced food products delivered to the home.</p>	<ul style="list-style-type: none"> <li>• localism, reduced transport</li> <li>• healthier food</li> <li>• waste hierarchy</li> <li>• relationship with consumers</li> </ul>
<p>M&amp;S and Oxfam <a href="#">Clothes Exchange</a></p> <p>A partnership agreement – donate used M&amp;S clothing and soft furnishings to Oxfam and receive a £5 voucher off your next purchase of over £35.</p>	<ul style="list-style-type: none"> <li>• partnership relationships</li> <li>• increased reuse/ recycling</li> <li>• corporate social responsibility</li> </ul>
<p><a href="#">One Planet Sutton</a></p> <p>A partnership between the Borough of Sutton, <a href="#">B&amp;Q</a> and <a href="#">BioRegional</a> to offer residents loans to invest in energy efficiency in their homes.</p>	<ul style="list-style-type: none"> <li>• work with communities</li> <li>• partnerships</li> <li>• new financial business model</li> <li>• energy saving</li> </ul>
<p><a href="#">Proctor and Gamble</a></p> <p>Launched a number of eco-innovative products including their ‘turn to 30’ campaign for washing powders.</p>	<ul style="list-style-type: none"> <li>• partnership with consumers</li> <li>• life cycle assessment</li> <li>• reduced energy</li> </ul>
<p>PV for Free</p> <p>A number of companies (eg <a href="#">Homesun</a>) offer free installation of solar pv panels. They benefit from the feed in tariff, the consumer benefits from free electricity.</p>	<ul style="list-style-type: none"> <li>• new financial business model</li> <li>• long-term partnership approach</li> <li>• 25 year maintenance agreement</li> <li>• energy saving</li> </ul>
<p><a href="#">Steelcase</a> and <a href="#">Vitsoe</a></p> <p>Both companies design products to minimise its lifetime impact on the environment.</p>	<ul style="list-style-type: none"> <li>• cradle to cradle approach</li> <li>• flexible and durable</li> <li>• simple design –can be disassembled after use for repair/ recycling (also saves assembly time/ cost).</li> </ul>