

# Sustainability business insights

Sustainability driven innovation



### Background

The current economic system has placed enormous pressure on our planet's resources while catering only to the needs of around 25% of the global population. Over the next 10 to 15 years twice that number will become consumers and producers. In addition, social and environmental issues are more prevalent and critical than ever. A transformation of the global economy is expected. These are challenging times to run a business and generate and sustain profitable growth. If businesses are to survive and thrive they will have to adapt and change by developing innovative solutions. **Sustainability driven innovation** provides the impetus that can help businesses optimise their growth potential while addressing challenges such as climate change, resource scarcity, and depleting biodiversity.

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*“Looking at the world through a sustainability lens not only helps us ‘future proof’ our supply chain, it also fuels innovation and drives brand growth.”*

**Paul Polman**

Vice-Chair of the U.N. Global Compact

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### What do we mean by sustainability driven innovation?

Sustainability driven innovation means any new or significantly improved product, goods or services, process, organisational change or marketing solution, that reduces the use of natural resources (including materials, energy, water and land) and decreases the release of harmful substances across the whole lifecycle<sup>1</sup>. It is the creation of changes that can help businesses create or improve their competitiveness, while respecting the environment through the reduction of resource intensity of products and services. As this genre of innovation takes a full **lifecycle**<sup>2</sup> perspective it means it is not just about inventing new products and delivering new services. It encompasses the reduction of environmental impacts in the way products are designed, produced, used, reused and recycled. Innovation can either be incremental, focusing on improving existing goods and services, or disruptive which is about thinking creatively and bringing completely novel approaches to the marketplace.

The table below highlights how sustainability-driven innovation can be applied across different levels of business. This includes products, services and operational processes, to the way its markets operate at a strategic and tactical level, including revolutionary and evolutionary changes.

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1. EIO 2010: Eco-innovation Observatory Annual Report 2010. Pathways to a resource-efficient Europe, [www.eco-innovation.eu/index.php?option=com\\_content&view=article&id=200&Itemid=258](http://www.eco-innovation.eu/index.php?option=com_content&view=article&id=200&Itemid=258)

2. Life Cycle Assessment (LCA) is a tool to determine the environmental impact of a product or system across its whole life from production through use and to recycling, reuse or disposal (from cradle to the grave).

### Sustainability innovation at every level

**Product innovation** New products/services that embrace new technical and sustainable dimensions as sources of differentiation

**Process innovation** Improving efficiency, reducing waste – or more holistically – through the redesign of value chains and the whole system of cradle to cradle

**Market innovation** Addressing new needs and wants/finding new markets/new places for existing sectors/new sectors for existing places or both

**Brand innovation** Developing a brand and culture that reflects the purpose and sustainable practices of the business

**Business innovation** Re-thinking the purpose of business, the business model by which it works, its stakeholders and measures of success

**Strategic innovation** Fundamentally changing the rules by which the business and its competitors work and compete

Consider opportunities such as:

**Streamlining** – reducing/eliminating – cheaper, faster, lesser ways of achieving necessary evils. For example, maybe of lower priority for customer, be time consuming for employees or have a negative impact on the environment.

**Elaborating** – enhancing or adding aspects of business that are the most important – identifying more engaging, more distinctive and more profitable ways of achieving positive moments. For example, high priority for consumers, be enjoyable/rewarding aspect of work for employees, or be something that has a positive impact on society or the environment.

Peter Fisk (2010) *People, Planet, Profit: How to Embrace Sustainability for Innovation and Business Growth*. London: Kogan Page

### Why should businesses get involved?

In order to adapt as the traditional global economic system changes, companies need to think about how economic, social and environmental considerations are impacting on their business. By focusing on sustainability as a one of the key drivers for innovation, they will be able to identify the challenges as well as the opportunities that exist at every level of their business and, when exploited, have the potential to reap bottom line benefits.

It's evident that businesses are becoming increasingly aware of the competitive advantages of taking proactive action. Growing numbers of businesses, here and internationally, are placing sustainability at the core of their strategies. They find that this is helping them manage risks, reduce costs, build resilience, as well as cut their carbon emissions. In some cases, this leads to an aspiration to go further and achieve **net zero emissions in their operations**.

#### Four key benefits of sustainability driven innovation

<b>Cost savings</b>	Cost saving innovations result in improved resource productivity and can help save money, time, natural capital and materials by reducing waste and energy use. These types of savings opportunities are especially associated with process innovation and are based on initiatives including energy efficiency, resource management, and "cleaner and leaner" production. The business case for taking action on material efficiency is ever increasing especially with volatile and rising commodity prices.
<b>Entry to new markets and finding new customers</b>	Businesses that develop and sell new innovative <b>products, services and technologies</b> are far more motivated by opportunities to access new markets and customer segments to achieve higher margins and profits.
<b>Build resilience</b>	Business can reduce resource intensity and bring about new market opportunities by reviewing existing <b>business models and value propositions</b> and reconsidering novel ways of delivering value to its customers. For example, switching from selling products to providing services such as functional sales. It can help make the business more risk aware and resilient to market trends such as fluctuating commodity prices and threats of extreme weather events.
<b>Complying with legislation and standards</b>	Many businesses innovate their processes and products to comply with new and existing <b>regulatory requirements or standards</b> . This means they can meet increasing environmental and social demands applied by a range of stakeholders and external bodies (For example SEPA, suppliers, retailers, consumers).

### How to get started?

A good place for businesses to start is to evaluate products according to the following ten key environmental principles.

#### 10 Key environmental principles

1. Use materials that will have less environmental impact
2. Use fewer materials overall in the manufacture of products
3. Use fewer resources during the manufacturing process
4. Produce less pollution and waste
5. Reduce the environmental impacts of distributing products
6. Ensure that products use fewer resources when they are used by end users (customers/consumers)
7. Ensure that products cause less waste and pollution when in use
8. Optimise the function of products and ensure the most suitable service life
9. Make reuse and recycling easier
10. Reduce the environmental impact of disposal

For more in-depth analysis businesses can opt to work using eco checklists or analytical tools, a range of which can be found online. These tools help businesses understand where they currently are in terms of leveraging sustainability through their particular innovation management process and how they compare to other businesses. These can help provide clarity on where strengths and weaknesses lie in the use of sustainability to drive innovation and can help businesses set ambitious aspirations. They can help them develop a bespoke action plan with clear tasks, responsibilities and relevant key performance indicators to monitor and measure their success going forward.



If you are interested in finding out more about the topic of this guide or any other aspect of making your business more sustainable please contact the Scottish Enterprise Sustainability team by emailing [sustainability.specialists@scotent.co.uk](mailto:sustainability.specialists@scotent.co.uk).