

# New thinking for deep green profit

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**Before the 16<sup>th</sup> century, astronomers** believed that the earth was the centre of the universe, and everything moved around it. Calculating planetary movements was extremely complicated. And the better their telescopes got, the more complicated their models got and the more difficult their calculations became.

Then a great step forward was taken – someone changed their thinking. Nicolaus Copernicus developed a revolutionary new proposition – that the Earth moved around the sun. The astronomers' calculations became much easier as they gave up their old thinking and made some different assumptions.

Our thinking about the environment is in a similar situation at the moment. As we become more and more aware of our impact on the planet, it seems harder and harder to deal with the problems.

It's time for a thinking change – and thanks to the big thinkers behind books like *Cradle to Cradle* and *Natural Capitalism* we have that thinking change.<sup>1</sup>

Fundamental to the thinking change is a shift in our underlying perspectives – particularly in the world of business. There are underlying assumptions we have been making that don't work any more. They're the assumptions that have led to today's world.

Once we take a new perspective, we can think differently. The key thinking changes to make are these:

1. To change our underlying assumptions about the environment and its potential impact on our business.
2. To look at the whole system we do business in, not just our own business.

## Why Green Matters to Your Business

'The environment' shows up more and more under many names. Whether it's Greenhouse, Peak Oil, **Low Carbon Economy**, **Carbon Trading**, Global Warming, Species Loss, Biodiversity or Deforestation – more and more problems are raising their heads.

They started being raised in the 1960s and 1970s and they haven't gone away since then.<sup>2</sup> All that's really changing is that their projected impact dates are getting closer and closer.

### **Our 'Environmental' Issues are Largely Supply Chain Problems**

Every business forms a link in the supply chain that takes resources from the earth, creates a product or service and delivers it on to a process that ends with an individual consumer.

For most people, the supply chain and how it works is a mystery. So it's actually hardly surprising that the supply chain we've inherited from the 20<sup>th</sup> century is less than 1% efficient in its use of natural resources.

If your accountant came to you and said your business was really inefficient, it would be both good news and bad news. It's bad news because it's inefficient. And it's good news – because if it's really inefficient then there are ways to get it running much more profitably.

### **Most Businesses Today Are Trapped in the Myth that 'Environment = Expense'**

A large number of business people think that environment is about scarcity, cost and compliance. If we think of green products at all, we think about more expensive 'green-brand' products for rich consumers.

And while we think that way, we miss out – on new technologies, new products, new services and new business models that have moved beyond the realms of being costly, dangerous, risky ‘bleeding edge’ innovations. They’ve been proven in a variety of business contexts and become sound, ‘leading edge’ business practice

When we buy into the idea of ‘environment = expense’, we leave it out of core business strategy. It gets dumped in with compliance and reporting, and we miss out on profitable opportunities for business growth and development.

### **An Emerging Reality is ‘Environment = Opportunity’**

If we step back from ‘business as usual’ and start questioning what ‘everybody knows’ then what we find is that there is an alternative: ‘environment = opportunity’. Not at some future ideal time, but here and now.

When we start to get strategic we find that there’s a whole range of new products, new services and new processes emerging. The new products and services open up new business processes and new markets with new customers and fresh profits.

### **Here, Now, Today, Deep Green Entrepreneurs Are Building Great Green Businesses**

This is current business reality. Hard-core entrepreneurs like Ray Anderson of Interface started exploring the world of great green profit in the 1990s. And as we move into the new century the movement is spreading.

More and more entrepreneurs are developing profitable business models for the 21<sup>st</sup> century. Smart green business is no longer dangerously bleeding edge – it’s now leading edge. Approaches being practiced by Dell Computers, Toyota, Caterpillar, Ford and Ikea aren’t ‘alternative’.

The people changing these businesses’ approaches are ‘deep green’ entrepreneurs because they’re not interested in ‘green-washing’ –

they aren't just interested in making their business look 'green' to those outside it.

They're not doing a compliance program in order to be labelled 'green' – they're changing their whole business model. The game they're playing is 'environment for fun and profit', and the whole business is involved, not just technical compliance specialists.

### **The Essence of Deep Green Profit Is Simple**

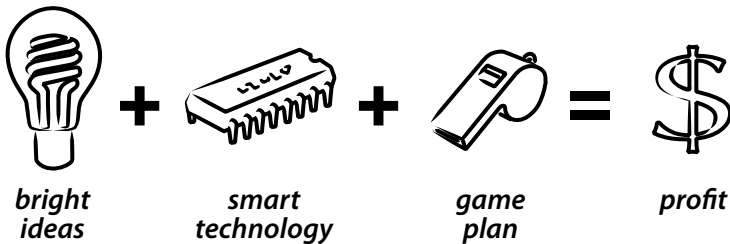
The good news is that great green business is based on simple core principles. These principles were identified in the 1990s and have been clarified and tested since then.

You can learn the core principles in a day and start practising them tomorrow. They're not complex technical ideas, they're mainly just new ways of thinking.

So business owners and managers don't have to spend years learning lots of complex new stuff – they can learn the basic principles in a day and start re-aligning their businesses to thrive in the 21<sup>st</sup> century. If they need experts, they can hire them or train them up.

There will always be compliance issues. Their reporting may be complicated and implementation may be expensive. But that's the nature of compliance programs that are enforced by bureaucracies. It could be better to be so clean you don't need to do compliance.

And at the level where productivity, innovation and business development meet business strategy, there are real opportunities that grow businesses, and more than offset compliance costs.



# What Is the Supply Chain and Why Does It Matter?

**A critical change to our thinking** is to fully understand the supply chain we inherited from the 20<sup>th</sup> century. Our supply chain is the complex system that takes materials and resources from the planet and turns it into the products and services we use.

When we understand the whole system, then we can re-design it to support an abundant future. Since it's the supply chain that produces all our products and services, we can't afford not to understand its impact. When we do understand it, we get access to a range of new opportunities.

## **How Much Do We Use To Make Our Stuff?**

From the hole in the ground where the first mineral is mined, to the finished consumer product in someone's hand, the supply chain that delivers our products is barely 1% resource efficient.

Let's look at a ream of office paper. There's the tree felled to make the fibre content, and the fuel used to truck the logs to the paper mill. Then there's the water used in the pulping process.

And there's the coal or oil burned to make the power to run the paper mill – not just the power for the machinery, but the lights in the factory, the computers in the office and the kettle in the tea-room.

Then there's the minerals used to create a smooth surface on the paper, the trucks used to mine the minerals, the pre-processing of the minerals and the fuel used to transport them to the paper mill. There's also the fuel used by the mill workers to drive to work.

The same sorts of resource chains also exist for the printed paper that binds your ream of paper, the cardboard carton used to package multiple reams into a box, and the plastic strap that closes the carton.

And that's a simple ream of paper, not a complex high-tech item like a computer or a mobile phone.

The end result of our current systems is that up to 99% of the natural resources used to create consumer goods and services are currently used up before the product reaches the consumer.<sup>3</sup>

### **Resource Efficiency – The Arithmetic of Waste**

In a way, a 1% resource-efficient supply chain is great news – because it means that we’ve got a problem that’s fixable. And the entrepreneurs who develop ways to fix it will make good money.

Understanding the impact of waste in the supply chain is critically important. The big problem with waste is that it multiplies. Waste at any one step in the process wastes part of every preceding process – it’s like compound interest. And when you understand it, it can work for you instead of against you.<sup>4</sup>

To keep it simple, let’s say that there are seven businesses in the supply chain between the forest and the ream of paper on your desk, starting with the loggers who cut down the trees and ending with the office supply store that sold you that single ream.

And let’s assume for the moment that because the supply chain has never been designed for resource efficiency, each business is 50% efficient in its use of environmental resources – fuel, water, energy and materials. (We’re talking about natural resource efficiency here, not business process.)

$$\text{Overall natural resource efficiency} = .5 \times .5 \times .5 \times .5 \times .5 \times .5 \times .5 = .0078 = 0.8\%$$

Yes, the overall resource efficiency of our simplified supply chain is less than 1%. And studies on real products in real supply chains bear this out. It’s hardly surprising that as we’ve increased the range of products that make our life easier we’ve hugely increased our impact on the eco-system.

Let’s say that each business in our supply chain increases its resource efficiency by 30% – from 50% to 80%. The overall resource efficiency of the supply chain increases enormously.

$$\text{Overall resource efficiency} = .8 \times .8 \times .8 \times .8 \times .8 \times .8 \times .8 \times .8 = .21 = 21\%$$

An increase of over 20% resource efficiency! It's a significant improvement, and lifting efficiency from 50% to 80% is achievable. But it's not the whole answer.

The specific numbers aren't as important as the basic concept – any process with lots of steps and a bit of waste at each step ends up with a whole lot more waste than most people expect.

## Changing Perspectives On Your Business

New working assumptions are emerging for developing more effective business models. These assumptions require us to step back from the ways we have traditionally done business, and the way we treat (or ignore) 'the environment' in our business strategy.

The great thing about these assumptions is that they're not about scarcity – they're about innovation and opportunity.

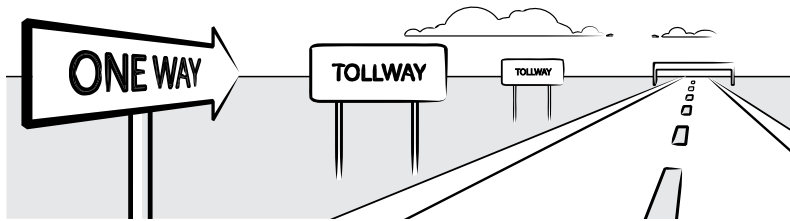
### **Our Planet is Finite**

To the entrepreneurs of earlier centuries, the world was vast and resources were endless. There would always be more resources and endless space for dumping leftovers. So the production and distribution system we have inherited is essentially 'one-way'. Our supply chain concept evolved based on 'no limits' thinking.

### **We Can't Afford One-Way Systems**

We dig stuff up, we make it into things, we ship it around to where we use it, and when we finish with it, we throw it away. From the mine to the rubbish dump – one way.

Even a lot of our so-called '*recycling*' only extends this process, it doesn't change it. So it's '*downcycling*', not real recycling.



From tree to office paper to cardboard to toilet paper is just a longer route from the forest to the sewer. Pulverising structural timber into mulch doesn't retain the initial value of the timber.

And on the occasions where we're starting to do 'real' recycling that retains the full value of the original materials (the new term is '*upcycling*'), we're doing it in systems that aren't designed for it with products that aren't always designed for it. If we don't design it well, it's expensive, difficult and frustrating.

### **Closed Loop Systems – Bypassing the Arithmetic of Waste**

The big change we can make to our supply chain is to change it from being a one-way system to a closed loop. To get truly serious about recycling, a number of steps need to be taken:

- Design products to be totally safe with no nasty by-products.
- Design processes that have no wastes, only valuable by-products that go into other processes.
- Design products for efficient collection, disassembly and complete remanufacture.

No waste – ever!

A closed loop system makes the arithmetic of waste almost irrelevant. Everything that can't be safely composted gets used and re-used.

Once we recognise that we live in a finite environment, we can start designing closed-loop supply systems. We can design our products so they can be endlessly re-manufactured into more valuable products, and create value based on the services supplied, not the materials used.



We can design our transport systems and even our ownership systems so that when our stuff wears out it goes back to be made into more valuable stuff.

And the good news is that doing it this way can be more profitable than the old one-way business model. Especially when we get lots of people doing it – then we get big economies of scale working for us.

This isn't an oddity on the edge of modern business. It's core strategy in some big, well known companies. Dell is doing it with computers, Google is doing it with design tools, Interface is making closed-loop commercial carpet, and Ikea is building healthy furniture.

