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Gareth Kane

Building a Sustainable Supply Chain

DōShorts

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Abstract

THE MASSIVE OIL SPILL in the Gulf of Mexico in 2010 was not caused by BP, but by a contractor, yet BP got the blame. The toxic waste from the production of Apple products dumped in China in 2011 was not dumped by Apple, but by a supplier, yet Apple got the blame. The horsemeat found in beef burgers in 2013 was not added by Tesco, but by a supplier, yet Tesco got the blame. In all three cases, blame for the damage caused by suppliers floated up through the supply chain until it lodged with the big brand at the top. No longer can companies constrain their corporate responsibility within the factory fence, as that boundary is not recognised by outside observers. This situation is exacerbated by the fact that the majority of most organisations' environmental footprint lies in their supply chain. This means that, to address the sustainability agenda in a meaningful way, they *must* tackle the impacts of their suppliers. Unfortunately, this is a huge challenge as visibility and influence diminishes quickly as you start to work your way down through the layers of suppliers. This book gives a quick but comprehensive guide to the most effective techniques to help you proactively address environmental risks in the supply chain. It covers the following:

- The business case for a sustainable supply chain;
- Supply chains and sustainability: the big picture;
- Making supply chains sustainable: the fundamentals;
- Basic techniques: the 'hard yards' of green procurement;

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Abstract

- Intermediate techniques: those requiring changes to operations and products/services;
- Advanced techniques: changes to the business model and corporate philosophy.

The book draws upon exclusive interviews with top sustainability practitioners along with the practical experiences of the author to provide real world examples at the cutting edge.

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About the Author



GARETH KANE is one of the UK's leading sustainability practitioners, specialising in embedding sustainability into organisations. His consultancy, Terra Infirma Ltd, has attracted a long list of blue-chip clients such as the BBC, BAE Systems plc, Johnson Matthey plc, Viridor, News International (now News UK) and the NHS. He runs the Corporate Sustainability Mastermind Group – a small gathering of top sustainability executives which meets quarterly to discuss sustainability issues and share best practice.

Gareth authored the books *The Three Secrets of Green Business* and *The Green Executive: Corporate Leadership for a Low Carbon Economy*, and he created the 'Green Jujitsu' approach to embedding sustainability into organisations – the subject of another Dō Short of that name.

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CHAPTER 3

Building a Sustainable Supply Chain

Overview

IN THIS CHAPTER we will look at the fundamentals underpinning the practical actions to build a sustainable supply chain, before we move on to practical measures in the following chapters. We will look at setting the scope of the process, basic principles, management systems and metrics, employee engagement and training.

Different organisations have different procurement processes. Some may have pre-qualification stages followed by a formal request for tender and tender evaluation; others will be much more informal. In this book we make no assumptions about the procurement process itself; however, a general rule of thumb is the earlier in the cycle environmental issues are considered, the better.

Scope – What’s in and what’s out

One of the key issues in greening the supply chain is deciding what should be included in the programme and what can be left out. Tracing the provenance of every last paperclip in every far-flung regional office operated by every third-tier supplier is both pointless and impractical.

If you want to make a real difference to your supply chain you need to apply

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some 80:20 thinking, in other words focus on the relatively small number of issues that have the biggest impact as it is here that you will make the biggest improvements. For example, a tissue paper manufacturer should include the provenance of the pulp it uses (forestry or recycled paper), but it shouldn't waste much time on, say, whether a minor supplier uses paper or plastic coffee cups in its cafeteria. The importance of an issue is often referred to as 'significance' or 'materiality'.

While the narrowing of focus is a necessity, it is also a risk. If you do it in completely subjective way, you risk missing a crucial issue and it either blowing up in your face or being accused of greenwash – or both. There are a number of ways of determining this scope in a more objective manner:

- Carry out a lifecycle assessment/carbon footprint of your product or service to determine where the most significant issues arise in the chain that runs from materials extraction through manufacturing, use and to eventual disposal.
- Use a screening indicator, for example, procurement spend, to filter out 'the small stuff'.
- Carry out a risk assessment to determine where the greatest potential commercial damage lies against the drivers assessed in Chapter 1.
- Survey your stakeholders to ensure all issues they have concerns about are covered.
- If you follow a sustainability reporting standard such as the Global Reporting Initiative G4 protocol,²³ it will have guidance on how to choose which issues are 'material'.

- Use a supply chain management service such as Sedex. These allow members to carry out a risk assessment on suppliers' data to identify 'hot spots' for a 'deep dive' analysis (see **box in Chapter 4**).

Basic supply chain principles

Our discussion of a sustainable economy in the last chapter concluded that you have two basic options to green your supply chain: eco-efficiency and emulating eco-systems.

The following tactics will make your supply chain more eco-efficient:

- Purchase less stuff (per unit output).
- Purchase stuff that causes less damage to produce.
- Purchase stuff that will require less energy in use (either in your processes or as part of your product).

The eco-system model approach requires that you aim to do *all* of the below:

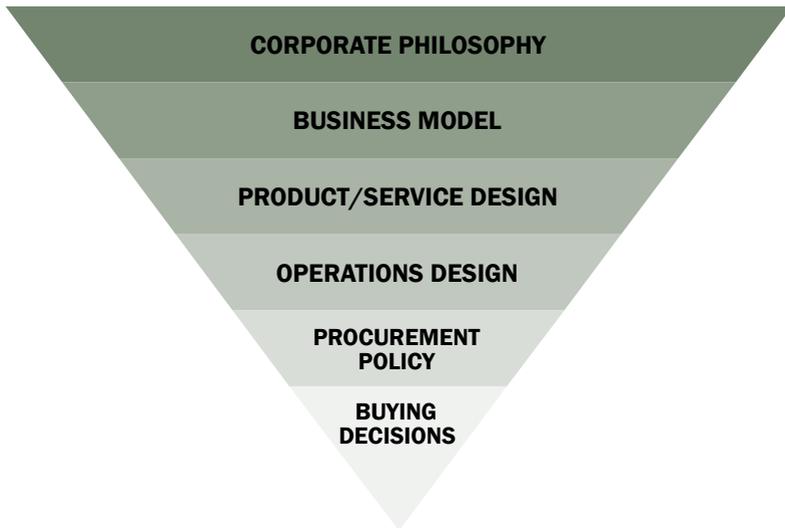
- Purchase natural, biodegradable stuff from sustainable sources and/or purchase recycled/secondary materials.
- Purchase zero carbon energy, and/or devices which use zero carbon energy.
- Phase out all toxic materials.

These simple principles are complicated by a number of internal and external barriers which we will describe below.

Constraints on building a sustainable supply chain

Internal constraints

FIGURE 4. Internal constraints on a buying decision.



Why does your organisation buy products and services from others? Fundamentally, it is to enable you to deliver your product and/or service to your customers. Therefore the procurement process is constrained by what the rest of the organisation demands. **Figure 4** shows the hierarchy of constraints – the more radical you wish to be, the higher you need to effect change in the hierarchy. From bottom to top, the levels are:

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- Showing preference for more sustainable products and services during purchasing decisions is the easiest place to start, but it will only ever lead to incremental improvements.
- By setting a procurement policy which, say excludes certain substances or certain suppliers, you will have more influence, but you are still constrained by the way the rest of the organisation operates.
- Your operations – whether manufacturing, logistics or even office processes – will determine which materials you need and in what quantities.
- Above that, the actual design of your product and/or service will drive operations and the levels below. Will this product be designed to be made out of recycled materials? Does it require rare earth metals?
- The business model is the next influential factor – are you going to produce a physical product at all or a digital product or a product service system where you lease rather than sell?
- And overarching everything else is your corporate philosophy – are you prepared to invest in the supply chain you need? Do you want to be a pioneer of the circular economy? Or collaborative consumption? Are you going to use your buying power to effect change on a transformational level?

Of course in practice, the boundaries blur and they may not all apply to all organisations. But the overall principle is that the higher in the hierarchy you effect change, the bigger the impact on your supply chain footprint. In the following chapters we will be considering change at these different levels, taking them in pairs.

External constraints

The following external risks apply to attempts to green the supply chain:

- **Traceability:** in long and complex supply chains, it can be very difficult to trace exactly where materials originate. 'Our dirty secret is that we often don't know who our suppliers are' is the honest admission of Gavin Neath, vice president of sustainability at Unilever.²⁴
- **Cultural differences:** attitudes to different environmental pressures and environmental legislation vary from country to country. 'Some countries are very strict on compliance', says Sean Axon of Johnson Matthey. 'Others are more interpretive of rules and guidelines.'
- **Translating information between languages** can also introduce uncertainty. 'Numbers are numbers in any language', says KyoceraDUK's Tracy Rawling Church, 'but when it comes to qualitative measures, it gets more difficult.'
- **Immaturity:** the supply chains for many 'greener' materials are immature leading to lack of competition/choice, high prices, low quality and scarcity of supply.
- **Dominance of existing suppliers:** many suppliers have huge economic strength which reduces the power of their (often smaller) customers to force or persuade them to change.
- **Legislation can hinder greener opportunities.** For example in the UK, once a material is designated 'waste' it requires a waste licence to handle it until either it becomes a new product or when it meets one of a growing number of quality standards.

Notes and References

23. Global Reporting Initiative. Available at: <https://www.globalreporting.org/>
24. Pearce, F. 2013. Cleaning up. *Sunday Telegraph magazine*, 21 July.