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How Green is your Supply Chain?

Five fundamental questions that every environmentally pro-active CEO needs to ask about their supply chains

*By Vivek Sood and Tony Fedorowicz**

Environmental

consciousness is now changing to environmental pro-activeness. Businesses are discovering that it makes good commercial sense. Boards are asking management to review their policies related to environmental norms not only to bolster their corporate social responsibility aims but also because consumers are asking for it. It is widely agreed that consumers will increasingly prefer to buy more and even pay more for products or services provided in environmentally sound manner.

However our research has revealed four key additional points:

- a) Companies are still primarily focused on environmentally conscious internal production. Any company can become totally carbon neutral by outsourcing all its production. Shifting the carbon producing activity up or down the supply chain does nothing more than hide the dirt under the carpet. A holistic approach to carbon management is required, and is provided by adoption of green supply chain methodology.
- b) Environmental pro-activism is generally assumed to come at an additional cost to corporations. It is widely thought that going green is expensive. On the contrary, our modelling indicates that adoption of Green Supply Chain methodology should result in overall cost reduction if it is done in a thorough and logical manner.
- c) Most business models are still focused on growing the volume of their current goods or services offering to increase profits. A change in this focus towards providing customer end outcomes can not only reduce the impact on the environment, but secure and/or increase market share whilst also improving profitability.
- d) Well beyond mainstream business thinking on environmental impact of technology, our discussions with Professor Ernst von Weizsacker (co-author of the book "Factor Four – Doubling Wealth, Halving Resource Use" with Amory & Hunter Lovins) highlight a radical concept aimed at doubling wealth whilst concurrently halving resource consumption through an innovative technological push. The implications for Green Supply Chains, and



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for business performance more generally, are staggering. However, in the rest of this article, our conclusions are based on current technological limitations; the “Factor 4” thinking and its associated technological push would multiply the benefits significantly, if brought into practice.

So it is clear that a move to Green Supply Chains is not only necessary for sound environmental management, but also profitable for sound financial management. How can companies start making the move? From our research and practical work in this area, we believe the following five fundamental questions would help focus the discussion and crystallise the action plans in the right direction:

1. What are the tangible and intangible benefits of moving towards a Green Supply Chain?

In our experience these benefits are frequently neither fully explored, nor adequately quantified. Even where a robust analysis can be carried out, analysts tend to either ignore some of the potential benefits, or find it hard to analyse their full impact on business. As a result, the overall benefits do not get adequate attention at board level to generate enough interest to release budgets that are necessary to create the transformation.

In one company we know (a large global industrial and building products company with revenues in excess of US\$5bn) the task of exploring opportunities in

Green Supply Chains was handed over to a senior executive as an additional job over and above his regular job, without any funding, clear direction or expectations. In a situation like this (which is very common), all the potential benefits cannot be fully understood and agreed by the key stakeholders, resulting in understaffed projects, and poor implementation.

Our research has found that without any new technologies being utilised, just a move to Green Supply Chain can reduce costs by 5-20%. The adoption of new technologies, however, can take cost reductions to a whole new level.

In addition, by raising their Green credentials amongst customers, employees, government authorities and other stakeholders, companies also move rapidly towards ensuring a sustainable and successful future.

2. What are the costs – both direct, and indirect?

This is the flip side of the question above. For the same reasons, while companies have vague ideas of the costs, these are rarely fully explored and analysed. In our experience, these are also frequently exaggerated because of uncertainty surrounding many of the costs. While all costs have a certain amount of uncertainty, and there is general tendency to allow a buffer; our research finds that costs of going green are generally more uncertain, but the buffers allowed are disproportionately higher.

The indirect costs are generally the source of most complications. It is really hard to estimate costs of process changes, disassembly lines planning and set-up, waste collection and recycling modeling, additional research and development, inventory reduction, green supply chain modeling etc. Once each one of these systems is fully functional, the costs will follow a predictable experience or learning curve pattern, but it is difficult to predict the transitional costs, and these make the analysis complicated and perhaps insurmountable for many project teams.

Our research indicates that direct and indirect costs associated with Green Supply Chains are substantial but can be fully funded and more than offset by the benefits they generate.

3. What influence do we have over our suppliers, their suppliers and our customers (especially the party with the most power in the supply chain) that would allow us to jointly work together and move the supply chain towards a green supply chain?

This question is easy to answer because most pragmatic managers have a good idea of the relative power balance in their customer-supplier relationships. While occasionally the influence is underestimated or overestimated, in general we found that just asking this question helps focus the action in the right direction.

Many corporations have now started to break intra-organisational silos to start thinking in terms of end-to-end supply chains within their companies. However, thinking holistically outside the boundaries of corporations, when applied to Green Supply Chain methodology can yield some outstanding results. Under this primary question, a few additional secondary questions will help sharpen the focus even further to create the clarity, impetus and momentum towards positive plan and action.

Clearly, the entity which has the most influence over an end-to-end supply chain is best positioned to create the clarity and impetus towards the Green Supply Chains.

For example in the retail supply chains, most retailers such as Tesco or Walmart



are best positioned to exercise this type of influence. On the other hand, in the automobile supply chains, retailers have far less influence than the manufacturers. In each supply chain, the entity which has the most influence needs to be encouraged to think holistically, in the interest of all parties that form part of that supply chain.

It is perhaps also clear why this crucial question can only be answered after we answer the two questions that come before it. Once the benefits, costs and influences are clearly enunciated, defined and analysed, it is much easier to have an informed discussion with the party that 'controls' the supply chain. A corollary to this discussion is how to distribute the costs and benefits of movements towards Green Supply Chains. Unless all the incentives are properly aligned, some parts of the supply chain will end up sabotaging the overall Green Supply Chain project.

4. How will we communicate and measure our progress towards the green supply chain to the key stakeholders? How will we engage them?

A new road needs new milestones. Traditional supply chain or financial measurements would not suffice in this case. We found several companies have started to make some progress towards vague environmental goals defined in terms of carbon impact reduction without clear definition of four or five key measurements that relate to supply chains at all levels.

Not only were the measurements not clearly defined, even the traditional KPIs that were adapted for the purpose could not be uniformly and easily accessed by the key personnel who needed the information.

A typical Green Supply Chain project has far more stakeholders than any other transformational projects inside a corporation. Besides internal staff, key suppliers, customers, and even public, media, regulators and government are all stakeholders in a transformation of this nature. A well thought out stakeholder engagement strategy, diligently executed, that includes clear and regular communication is essential to success.



5. What barriers to Green Supply Chains can be expected and how can these be overcome?

There are several categories of barriers to Green Supply Chains and these include legislation conflicts, inadequate or misaligned stakeholder incentives, lack of environmental norms and tools, lack of resources, and high costs of implementation and technology. Within each of these categories there are several specific components, making the total number of potential barriers quite formidable and daunting.

Like in any other change initiative, barriers can be overcome through a properly structured, comprehensive and phased

migration strategy. A "Big-Bang" approach is not recommended. Rather, each major project stream is dealt with in series of phases that cover detailed analysis, design and implementation, and organisation change management. Time and care should be taken on the first phase to ensure its success and the ability to leverage subsequent phases.

In summary, the leading organisations have started Green Supply Chain projects by asking some fundamental questions. The answers are illuminating their way towards innovation, profitability and sustainability. As is the case in all path-breaking endeavours, the first mover advantage is enormous, as are the challenges. ■

About the Authors

The authors co-wrote with Dr. Wolfgang Partsch a recent strategic report titled "Green Supply Chains – A CEOs handbook" which is a seminal and comprehensive text on the subject of Green Supply Chains.

For further information, please contact the Editor at turloch.mooney@supplychainasia.com

VIVEK SOOD

Vivek is a supply chain strategist with more than 24 years experience in supply chains – 11 years in operational management, and 13 years as a strategy consultant. Before founding global supply chain group in 2000 with a group of partners, he was a supply chain strategist with Booz Allen & Hamilton, a top-tier global management consultancy.

Vivek has served dozens of world-wide companies in nearly 70 projects, most of them as a project manager in diagnostic, conceptualisation and implementation of

supply chains, including Green Supply Chains. He has written a number of path breaking articles and commentaries published in respected journals and magazines. He has also spoken at several conferences, forums and workshops on leading supply chain issues, including Green Supply Chains.

TONY FEDOROWICZ

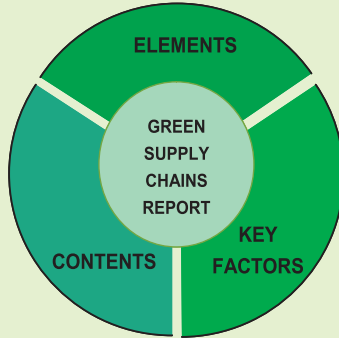
Tony has over 20 years experience as a supply chain practitioner and thought leader in several world leading Australian and International firms. He has worked in a variety of industries that include mining services, chemicals, consumer products, lifts, animal health, gaming machines, pharmaceuticals and lubricants.

His previous roles have embraced strategic, tactical and operational management as well as substantial end-to-end supply chain process and business improvement initiatives including lean six sigma master black belt and general management in supply chain. ■



- Green Procurement & Supply
- Green Production
- Green Packaging
- Green Marketing
- Green Logistics
- Supply Loops & Reverse Supply Chains

- Overview
- Benefits
- Introduction
- Evolution
- Conceptual Foundation
- Elements
- Barriers
- Key steps
- Ensuring progress



- Objectives
- Drivers
- Parameters
- Best-Practice
- Moving Forward
- Performance Evaluation

“Literally, the hottest issue today is Global Warming, and businesses need to play a role in finding a solution – along with the public and governments. Our extensive modeling reveals that businesses stand to gain overall if they decide to move systematically and collaboratively to Green Supply Chains,” - Dr. Wolfgang Partsch –Co-creator of “Supply Chain Management” and Co-author of the report “Green Supply Chains – A CEO’s Handbook”.

Green Supply Chains – A CEO’s Handbook is a comprehensive and leading-edge guide to effectively transform your entire Supply Chain.

This report helps you answer the 5 key questions raised in the attached article.

How will you benefit?

- Save Time – why recreate the wheel ?
- Save Money – no trial and error approach to what works
- Be more effective – concentrate on the important few, rather than the less important details
- Achieve a lot more in less time – work smarter, not harder
- Benefit from our research, experience and knowledge of industry leaders
- Be a good corporate citizen – it makes common sense
- Take charge – be on the leading edge of the Green Supply Chain movement
- Reduce your company’s costs – Green is lean
- Ensure alignment with other initiatives

Large corporations routinely spend hundreds of thousands, sometimes millions, of dollars on consulting fees in their quest for appropriate positioning in the Supply Chain arena. This report contains top level strategy consulting information without the exorbitant price tag. This report incorporates nearly 12 man-months of top-tier strategy consulting research and analytical effort. The Green Supply Chains – A CEO’s Handbook is available for AUD 5,000 per copy by calling 02 8920 0694, faxing 02 8920 0689 or emailing info@globalscgroup.com

Buy Green Supply Chains – A CEO’s Handbook in the month of April 2008, and quote GREEN-ANZAC as a reference in the fax or email to win one of the five trips to the Green Island for two people. As an added bonus you can buy our second report “Global Supply Chain Information Technology Report” at a 25% discount.

Green Supply Chains- A CEO's Handbook is a comprehensive and leading-edge guide to effectively transform your entire Supply Chain

"[Chairman] Rob Walton doesn't sit in on many meetings, but he was there to tell us we needed to get serious about sustainability. When the guy who represents 51% of the equity in your company shows up to say something is important, you listen." - Lawrence Jackson, recently retired president and CEO of global procurement at Wal-Mart Stores



I am interested in knowing more about Green Supply Chains

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