



13th Annual Cold Chain

**GDP & TEMPERATURE  
MANAGEMENT LOGISTICS**  
Summit - **CANADA**

# Going Green: A viable option for the Cold Chain?

The green revolution has begun. There are now a wide range of green or sustainable solutions available in the temperature controlled distribution of life science products due to increasing demand. Recent industry survey results revealed 11% of temperature control and quality professionals cited green/sustainable packaging systems as one of their top 3 investment priorities in the next 12-18 months, according to the *Global Controlled Room Temperature Logistics Survey 2015*. In this report, Andrea Charles of Cold Chain IQ looks at the green balancing act and **5 ways to lessen the environmental impact of your cold chain**.

## Balancing Act

The temperature controlled supply chain sector is under more scrutiny from the government and other public organizations to reduce the carbon footprint of the cold chain, lower environmental impact and create more sustainable networks. A paper by Peli BioThermal “Reusable Temperature-Controlled Packaging Solutions,” highlighted the sustainability imperative and the importance of getting it right: *“Sustainability is essential for corporations in the life sciences industry, as it has a direct impact on many practices. The focus on sustainability comes from many directions, including new regulations in the European Union that require recovery of post-consumer waste, investor organizations that measure public corporations on their environmental impact and various public-interest groups that monitor corporate activities.”*

As focus shifts towards using greener packaging solutions, reducing carbon emissions and energy costs, life science companies must strike a balance between balancing costs, compliance and their environmental impact. In the Cold Chain IQ article “Cutting Waste in the Cold Chain,” Geraint Thomas, Technical Director at Laminar Medica, wrote: *“The suppliers and users of temperature-controlled packaging systems are under increasing pressure to reduce the environmental impact of cold chain shipping. The widespread introduction of formal corporate social responsibility policies, together with new customer expectations and more strict regulations, mean that developing a suitable packaging system is more challenging than ever.”*

## The Business Benefits

However, these external pressures are not the only reason for increasing design and development of sustainable cold chain solutions. Some life science companies looking to save money in the long term by switching to these environmental solutions and improving energy efficiency in the cold chain. As a result, some life science companies now also consider sustainability performance as an essential part of the overall supplier performance equation in addition key requirements of quality, cost and delivery.

The potential business benefits of greener supply chains are numerous. Companies that succeed in making their operations more environmentally friendly can expect operational cost savings as a result of less waste, reduced fuel, energy and transport costs, and a lack of compliance penalties. In addition, studies have shown that supply chain improvements of this nature invariably enhance an organization's brand and reputation considerably.

In a recent interview with Cold Chain IQ Malik Zeniti, Business Development at DuPont de Nemours highlighted the need to reduce waste and unnecessary carbon emissions within the total distribution chain: *“At present a huge proportion of CRT pharmaceuticals are transported with a 'protection' comprising a simple covering of stretch- or bubble-wrap. This is a wasteful exercise in itself since these materials are rarely re-useable and, even more seriously, they have been shown to contribute to unnecessary temperature deviations by causing serious heat gains through 'greenhouse' solar gain effects. The elimination of the wastage that results will make a worthwhile contribution to minimizing unnecessary carbon emissions”.*

Building a robust green pharmaceutical cold chain is more than just developing biodegradable or reusable packaging. Temperature controlled distribution is very energy-intensive process and there is still a significant way to go in improving supply chain operations, with companies looking at the long-term benefits of renewable energy technology and utilizing alternative fuels and integrating cooling and heat pumps.

In many countries around the world the idea of an environmentally-friendly cold chain is just not viable. This does not represent a lack of commitment to green issues, but more the challenge of establishing even a basic cold chain in the first place. However, the growing awareness of sustainability issues among consumers, combined with stricter legislation and the increased prevalence of corporate social responsibility reporting, means there is plenty to motivate life science companies who have yet to make major inroads with their supply chain and create sustainable, environmentally friendly solutions that protect temperature sensitive goods.

# 5 key steps to lessen the environmental impact of your supply chains:

## 1. Adopt a lifecycle approach



Lifecycle may have become a buzzword among supply chain experts in recent years, but it does hold the key to making operations greener. By understanding the lifecycle of a product from raw materials to disposal, companies can identify areas where there is real scope for improvements and redesign aspects of the process to minimize their environmental footprint.

With carbon accounting methods requiring companies to include all costs from raw material extraction to the final disposal of materials, there has never been a stronger case for carrying out product lifecycle analysis.

## 2. Embrace cold chain technology



Research has shown that automating supply chain transactions can have a significant impact on a firm's carbon footprint, as well as the well-publicized cost benefits. Automation can be used to drive efficiencies throughout the supply chain, although reduced paper usage is likely to be one of the most immediate and visible benefits. To this end, technology can be a powerful tool for companies planning a green overhaul of their supply chains.

## 3. Target green efforts



The 'lifecycle' school of thought may promote a holistic approach to greening a supply chain, but it is also important to think strategically and target efforts in places that are likely to yield the best outcomes. Significantly decreasing the environmental impact of a company's entire supply chain should be the long-term objective; identifying priority areas and delivering tangible results should appear on the day-to-day business agenda.

## 4. Remember the bottom line



Organizations must be careful not to view their sustainability targets as existing in an entirely separate sphere to their overall business goals. Any supply chain project is likely to be more successful if it closely reflects the strategic direction of the organization. For this reason, identifying the financial benefits of any green supply initiatives and clearly demonstrating them to the relevant decision-makers of the company is essential.

## 5. Seek expert assistance



Businesses without the internal expertise to carry out a full review of their supply chain operations and establish a plan for change should seek support from outside the organization. Working in partnership with a consultancy or independent adviser can give firms access to a wealth of skills and experience that will help them to trim waste and embed efficiency into the supply chain.

## Learn More at the Summit

The expert speaker faculty at the [13th Cold Chain GDP & Temperature Management Logistics Summit - Canada](#) will go into much greater detail on this topic. At the event, **February 23-26 at the Hilton Montreal Bonaventure**, you can hear the Head of Distribution Packaging at Sanofi share an in-depth case study on sustainable packaging. [Download the Brochure](#) to learn more.



Over four days, the Canadian Summit will examine the modern cold chain – including all temperature range products and their regulatory requirements – with an expanded focus on Supply Chain Integrity.

As supply chain complexities continue to increase, the Canadian market faces costly challenges resulting from evolving regulations, changing requirements and challenging regional weather conditions. If you care about overcoming these challenges, then you need to attend the Summit.

Register today! [www.ColdChainPharm.com](http://www.ColdChainPharm.com)