Supporting Sustainability with Smart Cold Chain Logistics

For many years, companies have been looking to engage in the triple bottom line, also known as the three pillars or people, planet and profit. Dow Jones has even come up with a Sustainability Index to track "leading sustainability-driven companies worldwide." The index evaluates companies based on how well they are:

> *"Fostering loyalty by investing in customer relationship management and product and service innovation that focuses on technologies and systems, which use financial, natural and social resources in an efficient, effective and economic manner over the long-term."* (Dow Jones Sustainability Index)

Companies looking to further their green initiatives may also want to consider ways to maximize these efforts to improve their triple bottom line, which is likely to receive attention from stakeholders, including potential investors looking for green investments.

How Logistics Can Support Sustainability Initiatives

The supply chain is one area where biotech companies can look to improve their sustainability index using frozen shipping alternatives. Dry ice and Styrofoam® are still the most commonly used methods for shipping biomaterials. However, dry ice sublimates at -78.5º Celsius and releases carbon dioxide gas and is therefore regulated as a dangerous good by the International Air Transport Association (IATA). Styrofoam is recognized by the U.S. Environmental Protection Agency (EPA) as non-biodegradable and is considered the fifth largest source of hazardous waste. When thrown away, it ends up in landfills for hundreds of years, releasing harmful air pollutants.

The Cryoport Solution

Cryoport is helping biotech companies support sustainability initiatives by replacing some of today's outdated shipping technology with dry vapor liquid nitrogen shippers. Validated to maintain -150º Celsius for 10 days, Cryoport's innovative technology is based on liquid nitrogen, which is made up of nitrogen — an element that makes up 78.08 percent of the Earth's atmosphere and is not considered hazardous or a dangerous good.

Cryoport dewars, or aluminum shippers, are made with recycled materials and are cleaned and reused more than 100 times before they're recycled. While other companies may purchase re-usable containers along the entire supply chain, they may not realize their full environmental or budgetary benefits because the containers are often lost in the field. Cryoport offers a complete logistics solution that includes shipment tracking, pre-labeling and scheduled pickups, and is also able to retrieve shippers for full re-use.

For a breakdown of some of our other recycled materials, see below:

Part	Material	Recyclable	Biodegradable	Recycled to Virgin Ratio
Outer Box	Cardboard	Yes	Yes	35%
Inner Box	Cardboard	Yes	Yes	35%
Tray	Cardboard	Yes	Yes	35%
Cover, Tray	Cardboard	Yes	Yes	35%
Rollerboard	Cardboard	Yes	Yes	99%
Support Ring	Cardboard	Yes	Yes	80%
Absorbent Pad	Cellulose	Yes	Yes	80%

By examining their logistics options for frozen shipping, companies can discover new alternatives that not only improve their plans for becoming more environmentally responsible, but also demonstrate the potential to impact their triple bottom line.

Visit cryoport.com or call +1 949.232.1900 for a strategic evaluation or to learn how Cryoport can support your company's sustainability initiatives.