

Sustainability series: what are the challenges around wastes in the Supply Chain?

Introduction

As Supply Chain professional, you might wonder what you can do about sustainability and how you can contribute. This series of four white papers is for you.

Starting with the environment, the first article reflected upon the energy challenges focusing on providing a global understanding of the situation and suggesting levers to act. This article explores the question of wastes, scarcity of natural resources and highlights the opportunity of circularity. A third whitepaper will be dedicated to People and the role a company can play in Society. To finish the series, a summary of the challenges facing Supply Chain professionals and paths to act will be published.

A short recap on Sustainability

To make it simple, sustainability considers long-term value creation. This means that a company not only focuses on profitability but also on the impacts it has and the perennity of its operations. Usually, the environmental and the societal/social impacts are considered as the key drivers in Sustainability while maintaining economic profitability.

With increasing sensibility from the public on those challenges, investors are bringing their focus on the so-called Environment Social Governance (ESG) indicators.

Starting a transformation journey of your Value Chain is thus beneficial for your company, generating long-term profitability, securing capital allocation while preserving the Planet for the current and future generations.

The waste challenges

Wastes are an important part of the environmental challenge that we are all facing. Everyday a story appears on the news: plastics in the oceans, nuclear wastes storage or food spoilage are amongst the “trendiest”. The first section of this article focuses on the

wastes generated with commercial goods from production to end of life. The second part provides an outlook on food spoilage and some ideas to act as a responsible company even though your core sector of activity is different.

Product waste

Since more than 100 years, our economic and societal model is focused on optimization. Millions of engineers, production managers, shopfloors workers have spent brainpower and their life optimizing processes. This exercise led to a vast hyper-specialization of the work force focusing on individual components of a given product often forgetting the big picture.



At large scales, this means that we are ready to produce item A in China, manufacture component B in South

America, assemble both in India before commercializing it around the globe. Those movements of goods generate an important logistics needs and thus consumes natural resources (fossil based). In addition, when becoming hyper-focused industries tend to consider components individually and not as whole. Producing a specific item without considering the waste its production generates. Interestingly, new ways come around to valorize those by-products with for instance the production of textile from food by-product.



Figure 1 - <https://www.ananas-anam.com/>

Compelling movements can be seen on product packaging mainly fueled by an extreme sensitiveness on plastics. Efforts across industries have been initiated to move away from plastics components. Those efforts are valuable and can be enhanced with deeper questioning.

As a company, you may generate even more value (in cash and for the planet) considering eco-design approaches. Put simply, it refers to gathering all stakeholders that will touch the product throughout its life. Debating together allows to understand the requirements

and potentially adaptations that all the actors of the Value Chain are ready to take to reduce the product's impacts. It pushes the teams to think on the true purpose of the product (and of course its packaging).

Circularity

When considering a product's life, valuable challenges can be identified when extending the analysis up to the end of life. Very stimulating journeys have been made possible thanks to Circular thinking. Approaches where companies have identified ways to make their product reusable, unwastable. Very good examples, tools, frameworks and advises around the Circularity are available on the [Ellen MacArthur foundation's website](https://www.ellenmacarthurfoundation.org/).¹

Food waste

We all have an important role to play in food spoilage. Today, it is estimated that we generate about 931 million tons of food waste every year, this represents 17% of our global food production². This issue is particularly critical considering the challenges that climate change will bring to global food production. This coupled with population growth may lead to severe tensions around the globe.

As companies we have a role to play. A role within our facilities to limit waste, to identify solutions to valorize any potential leftovers. By showing the way at work, employee may then follow the same path at home. As company, we can embrace our societal role and educate, train or even motivate the teams on those challenges.

¹ <https://ellenmacarthurfoundation.org/>

² <https://www.weforum.org/agenda/2021/03/global-food-waste-solutions/>

Related to food waste, it is important to reflect upon the future of alimentation and particularly the proteins change. As companies, we have the opportunity to educate our employees to eat differently. In western countries, meat is often consumed on a daily basis and should be replaced by plant-based proteins. Leading by example is easy, implement a vegetarian option at the cafeteria 1, 2, 3 and why not 4 times a week. Push the cooking team to be creative and make the employees love lentils, chickpeas and others vegetal proteins. All of this while promoting local sourcing and fresh ingredients.

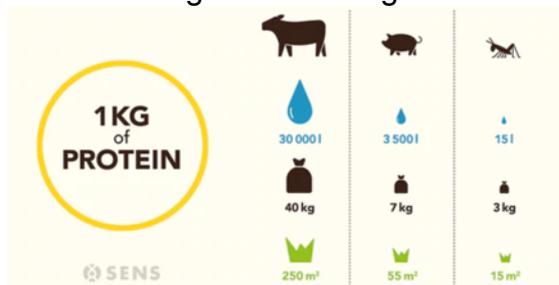


Figure 2 - <https://eatsens.com/de/blogs/news/can-other-protein-sources-match-insects>

Other ideas towards better resources usage

A company is a group of Humans working together towards a same goal, sharing similar values. This creates great opportunities to train those individuals to think and act. Creating an organization where innovation is promoted. Innovating can be related to products, processes, but it could also be sponsored for sustainability at large. Why not offering the teams the possibility to raise and share ideas to improve and contribute to the challenges we are all facing?

Let's take an example. Many businesses operate large facilities where hundreds even thousands of workers come every day. This creates an amazing group of people that could act together. You may consider that

those individuals could regroup their assets in a common "object library". Why should every employee have a drill in their home? Why not offering those objects that everyone uses from time to time directly at the work place? By doing so, unnecessary individual purchases would be avoided creating a "financial" benefit for the employees while preserving the planet and its resources.

Conclusion and key takeaways

As Supply Chain leaders, we can contribute to the future of our planet by understanding our impacts and taking actions. Identifying priorities is key to allocate resources where it generates the most long-term value for the company but also for the society at large. Thankfully, the Healthcare and Luxury industries generate high margins allowing strong ambitions and leading the way. At Supply Chain Operations, we have the experience, the methodology and the expertise to support you in this transformation journey. From understanding the impacts of your Value Chain to action plan definition and execution, we have experts with fresh eyes to help you avoid/reduce wastes while generating value, maybe a different type of value than ROI for once...

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