

Sustainable supply chains

1. Challenges for the transport sector

Zelco has read the book *Sustainable Supply Chain Management*. In various episodes, Zelco will present you the mechanism of sustainable supply chains and how to render your organization sustainable. This first article serves as short introduction and takes the world of transport as example.

Sustainability in logistics

Sustainability has become a vogue word for every improvement project that reduces the environmental impact. Also in logistics we notice trends towards greener techniques and systems. However, supply chains are only sustainable if they are valued and funded in a realistic way.

The notion 'sustainable' is relative in space and time. What can be an excellent practice for a certain enterprise, is not at all excellent on another moment in time or for another organization.

Beneath we succinctly have a look on how the transport sector is challenged and affected by sustainability.

The growth of transport in Europe

If we compare the growth of transport and of the gross domestic product in the European Union, we see that if the latter grows with 1 % transport grows with 1.05 %. The demand for goods transport increases mainly due to reactive logistic systems such as just in time and lean, global sourcing, outsourcing of marginal activities, concentration of production to one location, return logistics and messenger services. An important factor which helps decreasing transport is groupage. Chiefly road transport is growing: 75 % of all goods are transported over the road. While fuel supplies are finite, transport permits economic growth and employs people. Transport thus creates costs, but also societal and economic advantages.

The negative impact of transport

Transport also has negative economical, societal and environmental impacts. Accidents or noise pollution caused by trucks or airplanes are examples of a negative impact on society. Congestion is negative for the economy, since it has consequences for on-time deliveries and delivery reliability, and thus involves costs. Large projects are erected in order to tackle this problem. Examples are the construction of tunnels in the Alps or Pyrenees, or more close to us the closing of the Antwerp ring. A negative environmental impact is CO₂ emission. Although better technology reduces the amount of CO₂ emitted per individual car, the total amount keeps on increasing because of the growing number of cars. One quarter of all greenhouse gas emissions stems from transport, of which 75 % originates from road transport. For this very reason Europe promotes all kinds of initiatives, such as the expansion of other transport means (e.g. inland navigation or railroad transport), eco-driving or groupage.

Europe's goal

Europe aims to reduce the negative environmental and societal impact of transport without endangering economic growth. This requires measures which differ in investment, technology and complexity. Transport generates external costs by producing noise, pollution, greenhouse gases and accidents. These costs are not reflected in the transport rate, but on the contrary carried by the whole society. An interiorization of those costs is the objective; a system in which the transport sector bears all the costs it creates. In the future, measures such as the road vignette, toll or road-pricing will be employed on a larger and more controllable scale. They all have the same in common: making the people aware of the need to change. This begins with small steps, in your supply chain and in your company. Zelco can provide you tips and techniques to transport your goods in a greener, safer and more profitable way.