

# Packaging and logistic: A plea for a **global view** on the supply chain



**LogPack project reveals great savings potential in logistics and packaging. The LogPack project of the Flemish Institute for Logistics (Vlaams Instituut voor de Logistiek, VIL) mapped the supply chain of ten Flemish companies and discovered that there is a considerable savings potential. "In order to realize this potential however, companies need to re-gain insight into their entire supply chain. Optimization projects can only be successful if their impact on the next steps in the process is taken into account", states Peter Lagey, Project Officer at VIL.**

prevent **pack**

## Lack of insight into the **supply chain**

"What struck us very strongly is that most optimization efforts are restricted to a sublevel of the supply chain", observes Peter Lagey. "Each department optimizes its own activities – the activities over which it has direct control or for which it has a profit and loss responsibility – but without taking into account the next step in the process. That is certainly the case when this next step takes place at another company, as often happens in today's industry. This leads to optimization projects that deliver fewer results than

expected or even work in a counterproductive manner. What is good for transportation is not necessarily good for the warehouse and vice versa. And what seems to be efficient for the supplier may result in additional costs to the client. This kind of thinking leads to an accumulation of inefficiencies and costs throughout the supply chain. Companies would do well to take a step back and re-gain insight into the entire supply chain".

## Impact on **customer satisfaction and brand image**

"Companies also think too little about the consequences of product damage due to poor packaging", notes Karel Gemmeke of VAL-I-PAC. "Protection of products – both during storage and during transport – is one of the primary functions of packaging. Companies that only look at this phenomenon from the product loss side, are bound to take the wrong decisions. There is much more at stake. There is not only the product cost, but also the environmental cost, the cost of the waste, return costs, and so on. These costs are seldom adequately taken into account. Moreover, there is a cost that simply cannot be quantified – that of dissatis-

fied customers and damage to the reputation of the company". "This again suggests that logistics should not be an isolated activity within companies", confirms Peter Lagey. "Well-organized logistics can create positive effects on every aspect of a company's performance – cost reduction, profitability, sustainability, customer satisfaction and brand image. The latter two are less easy to quantify and thus are generally not taken into account when evaluating logistics. In this sense, we believe that logistics should be looked at from a higher level within the organization".

good to remember

**Gain insight into the entire supply chain.** Take a step back and try to get a clear view of inefficiencies and unnecessary costs throughout the supply chain.

**Encourage cooperation and consultation.** Avoid optimizing sub-levels of the supply chain and work together closely with colleagues, suppliers and customers.

**Less is not always more.** Often it pays to add packaging at the beginning of the supply chain to avoid product damage at the end of the ride.

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## Packaging in the supply chain: Where are the opportunities for your company?

**The LogPack project revealed many optimization opportunities for logistics and packaging. Some of the most striking results and findings are presented below.**

### Reduce the volume of shipments

"Reducing the volume of packaging and shipments is nearly always a good thing", says Peter Lagey. "Transporting empty space makes little sense and only adds transport costs. Reducing the volume reduces the need for packaging and cushioning materials. Moreover, the products are actually better protected, and at the end of the day, there is less waste that needs to be treated. It also pays to analyze all levels of packaging – up until the product level.

Do not limit your approach to just the packaging around the product; there is also the secondary and tertiary packaging to be considered and optimized. Always ensure your efforts are not compromised further down the chain. You can get as much empty space out of the packaging as you want to, if the trucks are not loaded optimally in the next stage, your efforts will make little sense and will simply not pay off."

### Increase the load factor of transports

"This is undoubtedly a great potential for savings throughout Flemish companies", continues Peter Lagey. "Too many trucks are riding out insufficiently filled. Any optimization in the load factor of trucks leads to an almost linear cost reduction. Obviously, the potential depends in part on the type of product – fresh products cannot

always wait. But for many other products, arrangements can be made with customers regarding the frequency of shipments and deliveries, especially if you can offer financial incentives. Also consider the efficiency of the return transport: are there any items you can bring back? Here, too, we see much room for improvement."



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### Optimize your warehouse for transport efficiency

The way pallets are loaded is crucial for efficient transport. But this often requires the warehouse processes to be reassessed. "In one case, for example, we found that every order from a customer was immediately placed on the pallet as soon as it came in, resulting in much inefficiency. By postponing the loading of the pallet until

the final order is in and the complete shipment is ready to be sent, loading of the pallets can be fully optimized. The result was not only a spectacular decrease in volume, but also more stable and secure pallets".



### Assess the impact of packaging on production processes

It may also be worthwhile to think about the impact packaging can have on production processes. "For example, many electronic components are supplied in an individual packaging", explains Peter Lagey. "However, this also means they will need to be unpacked for use in the production process further down the chain – a time-consuming and labor-intensive activity. By eliminating individual packaging of components and delivering them in trays, for example, considerable labor costs and packaging waste can be avoided".



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## LogPack

### Smart and innovative packaging

The Flemish Institute for Logistics (Vlaams Instituut voor de Logistiek, VIL) initiated the LogPack project to determine how Flemish companies can save costs by using smart and innovative packaging. Among the areas investigated were the filling of trucks, the loading of pallets and the influence of packaging on the supply chain. The first phase of the project started in late 2012 and mapped the logistical processes at each of the participating companies, along with optimization opportunities. The findings will be compiled in a

white paper that will help other Flemish companies make the right choices.

Participating companies included Colruyt, Daikin Europe, DHL Supply Chain, DuPont, Eurobrokers, Hubo Belgium, Mopal, Renson and Scania. The project was carried out in cooperation with the Belgian Packaging Institute, Katholieke Hogeschool Sint-Lieven (Ghent) and VAL-I-PAC.

## Flemish Institute for Logistics (Vlaams Instituut voor de Logistiek, VIL)

### Innovation platform for the logistics sector

The Flemish Institute for Logistics (Vlaams Instituut voor de Logistiek, VIL) is the innovation platform for the logistics sector. The organization assists the sector in the implementation of sustainable and innovative concepts and technologies and offers financial support and advice. VIL also undertakes collective research projects such as LogPack and connects various players through

networking activities. The aim is to increase the competitiveness of the Flemish logistics sector and ultimately turn Flanders into a sustainable and innovative top region for logistics in Europe. In this sense, VIL contributes to the realization of one of the great ambitions of the Flanders in Action (Vlaanderen in Actie, ViA) program of the Flemish government.





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