

# **Intensive course of Sustainable Logistics, Helsinki**

**07th – 11th of September, 2009**

## **Sustainable Logistics in the Baltic countries and in the Scandinavian countries. Similarities and differences.**

Before this course, I did not know much about sustainable logistics. I didn't know much about logistics itself, as I did not have any course about it. When I chose to attend this course, I thought it would be very interesting to meet other people from the other countries, who are interested in the same things, and also thought it would be interesting to learn logistics sustainability in these countries. I was very excited, I wanted to learn as much as possible. And, talking about my experience, I have to say that I was right even more – I have got more what I expected!

We arrived in Helsinki on Sunday, and started working on Monday by each country presenting a Power Point presentation of sustainability issues related to logistics. After each presentation we had some time for the discussion. All presentations were very interesting. And personally I learned so many new things just from presentations.

Later we had two more presentations. The first one was „Packaging and the environment – Recovery and recycling in Finland and in EU“, presented by Annukka Leppanen – Turkula, Managing director from The Environmental Register of Packaging PYR Ltd. I have learned that Finland recycles about 80% of packaging waste, and uses more than half to make new products. The main recycled packaging materials are fibre, glass and metal. Wood and plastics are improving in their positions also. Plastic packaging returned is problematic as recycling material because often they are difficult to clean. Finland is in leading position in Europe when talking about reuse. They reuse two thirds of packaging. So they use packaging in more environmentally sustainable manner. ‘Packaging is not designed to waste’ – Annukka Leppanen – Turkula.

The second presentation was presented by Dr. Anita Makinen, Head of Marine Programme – „Future for the Baltic Sustainable Maritime Traffic“. Presentation was all about Baltic sea environmental issues. The Baltic Sea is a unique marine ecosystem. And now the Sea is one of the most threatened marine ecosystems on the planet. In WWF fuel is one of the biggest issues. Baltic Sea is approved as a particularly sensitive sea area (PSSA). It means that an area needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities. The health of the Baltic Sea is seriously damaged due to excessive pollution. The Baltic Sea's pollution is causing severe damage to the sea, which is an important source of economic, transport and recreational value for the countries along the coast. A PSSA can be protected by ships routing measures.

On Tuesday all groups were preparing the interview questions for the company visit. We collected all possible information about the company. And we got the impression that Synebrohoff is very ‘green’ company. So we prepared questions focused on the company's logistics, how the sustainable logistics relate to their actions and what kind of challenges the term “being green” have for them. I have got really big impression after the company visit. The manager was very nice; he prepared presentation for us, answered all our questions, and showed us around, so we could actually see how the things are happening. The next day after the interview we have clearly seen that company has been focusing on the affects of their actions very well and the priority of being ecological is very high in the company. In the company they are aiming to be waste-free and everything is recycled that can be used again.

On Wednesday we all had a visit to Vousaari Harbour. It is a modern harbour centre. It includes a cargo harbour, a logistics area, traffic channels (harbour road, harbour railway line and fairway) and the Business Park. It was amazing to see those cranes and piles of containers. There is also a sound barrier wall stretched a kilometer long between the harbour and the nature reserve area. I was amazed to see how everything is made to save the environment and to ease the traffic in harbour. There is also kind of leisure centre for the drivers at harbour area, to keep them in comfort.

Talking about sustainable logistics, countries are thinking of better use of existing transport infrastructure (better logistics) better connecting transnational and regional networks, paying more

attention to specific elements such as rail, air and ferry transport and ports. Improving the control function of transports and developing an early warning system against accidents is needed.

It is very important that countries are initiative and they support projects aiming at improved cooperation between all modes of transportation in competitive and sustainable logistic chains. They support projects strengthening maritime safety in general as well as education within maritime transport and safety and security. And they monitor ships movement in the Baltic Sea.

The Scandinavian countries Denmark and Finland are already working on environment-friendly logistics solutions. Baltic countries participate in many international projects. And in my opinion there is never to much when we talk about the environmental issues.

## **Group presentations on Friday 11th of September**

My expectations for this intensive week was quite different from the actual experience. Our group worked quite good together in an efficient way. The other teams had more time to prepare their work, we had one day less, as our company visit was a day later than other groups. We became a little bit stressed because of this, but the result proved that we had been working quite well. All companies are considering beeing as green as possible.

The main points from each presentation:

### ❖ **KUUSAKOSKI Ltd.**

➤ The main problems in the supply chain management of Kuusakoski are: inventory and managing of the different material quantities located at the particular time in different units of Kuusakoski premises as well as the material transportation.

➤ Company guarantees environmental responsibility and cost efficiency in everything they do, but the company does not entirely live up to those standards they promise. Even though they manage to deliver cost efficiency in every contract, still in the same time they have to compromise with their environmental responsibility.

### ❖ **DHL FINLAND.**

➤ Ocean shipping is the most environmentally friendly means of transport. Its share in the global CO<sub>2</sub> emission comprises only 2.7%, but vessel traffic grows from year to year and by 2050 experts forecast an increase of this share up to 5%.

➤ In 2008 DHL launched „Go Green Program”. The program focuses on the main issues of how to minimize the carbon footprint on vehicles and aircrafts, subcontractors, customers, innovative technologies and at least changing employees’ behavior towards the environmental impact. They are the first global logistics company to set a clear CO<sub>2</sub> efficiency improvement target of 30% by 2020 and an interim target of a 10% improvement in their own operations by 2012. They are using modern technologies to reduce emissions in daily operations; e.g. new air fleet. DHL is improving energy efficiency in buildings (lighting, green energy). The company is involved in research projects aimed at developing efficient transport (e.g. alternative technology, use cleaner fuels).

➤ In the future DHL wants to design areas around a country’s coastline where ships must not exceed limits on NO<sub>x</sub>, SO<sub>x</sub> and PM emissions.

### ❖ **DB Schenker Finland**

➤ DB Schenker is focusing on environmental issues. Their plans are to stay green and keep saving the environment. DB Schenker has collaborated with Deutsche Bahn in launching an environmental initiative “The Climate Protection Program 2020 (CPP)” to bundle its activities in the field of global warming management. The lighthouse projects are a part of the “CPP”. Their goal is to help reduce the CO<sub>2</sub> emissions by 20% with their customers on land, sea and the air (2006-2020).

➤ DB Schenker Rail is constantly improving its advantage by utilizing trains more effectively, modernizing equipment and using train engines with low emissions.

- For environmental and economic reasons, DB Schenker continuously renews its own vehicle fleet and ensures the quality of subcontractors by strict monitoring measures with a focus on the Euronorm classification.

- DB Schenker Logistics has set up a program to monitor eco-efficient driver training for both their own and subcontracted employees until 2014.

❖ **Heinon Tukku Ltd.**

- Company often has to repack some of the products. That is why for Heinon Tukku the recycling of the packaging has become a way to become even more environmentally friendly. This is done by separating the packaging waste into different categories and sending it to the incinerator in Riihimäki where it is burned for energy.

- They are trying to make the packaging process more environmentally friendly by replacing the old packaging gas with CO<sub>4</sub> gas, which is less harmful for the nature.

- Their customers can bring their used frying oil back to Heinon Tukku where the oil is taken to a facility where it is used to make bio-diesel. They also accept dead batteries, light bulbs and other hazardous waste from their clients. These services are free for their customers and all the costs are covered by Heinon Tukku to protect the environment.

- The company should start replacing regular fuel with bio-fuel for their trucks. Another thing – changing their European transports from roads to railways. This change would not only cut the emissions but also help to reduce the amount of traffic on European roads.

❖ **Association of Packaging Technology and Research - PTR**

- The most important role for PTR now and in the future is the development and the newest research. To find sustainable solutions to the packaging material problem, PTR and the European Union has made cooperation on several projects. Recently they worked together on a project where the aim was to find out what the most common product in Europe - “European-basket”. PTR takes part in the European standardization of packaging.

- They also work together with The Environmental Register of Packaging (PYR) and the Regional Environment Centre, to collect the databases required by the EU directives on packaging and packaging waste. Packaging provides comprehensive global solutions for many industries. It is important to find out the advantages of packaging as this reduces the cost of the product. The main thing is to protect the product. Using the right combination of package sizes, the re-usable packaging system brings the satisfaction to the customers.

- Most of the companies have certifications like ISO9001 and ISO 14001. The PTR doesn't have any certifications; association uses its own experience for all of its work.

- PTR is currently participating in a project called Futupack. The Project is actually a network designed to help people from different parts of the delivery chain to get together and design together a package that benefits all sides. PTR's role in this is coordination and to offer know how and information.

- Different firms contact PTR if they need certain information about packaging and that often leads to co-operation.

❖ **Sinebrychoff**

- Company's concern for the environment is seen in the selection and use of raw materials and in the reuse and recycling of by-products and waste.

- Sinebrychoff have concentrated distribution and storage at Kerava, and in 2006 an automated high bay warehouse was taken into use. Unnecessary transports have been eliminated and trip distances have been shortened. Computer-assisted planning enables them to optimize transport routes, conserve fuel and reduce environmental impacts, including carbon dioxide emissions.

- Company is trying to be as ecological as possible. They have made the budget for next year, where they are going to take 4% of the distribution costs and put them into green activities.

- There is just a little amount of waste that comes from the process (scrapped bottles, cans and packaging materials that cannot be used). And some waste which is coming from the office.

- Hot thermal energy used by the brewery is slightly cooled, then transferred for the city's use.
- They have boosted the efficiency of waste sorting. The percentage and volume of waste carted to tips are decreasing year by year. Plastic and label waste is recycled.
- Sinebrychoff promotes the recycling of plastic and glass bottles, aluminum cans, drink crates and honeycomb boards with other breweries. Recycled plastic bottle replaced the refillable plastic bottles. In one year they have also managed, to cut down the plastic they use in the bottles. In addition, more than 50% of the plastic used, is recycled. They extrude, or “blow up” the new bottles from recycled performs.
- The priority of being ecological is very high in the company. Their production is aiming to be waste-free and everything is recycled that can be used again.

As concern for the environment rises, companies must take more account of the external costs of logistics associated mainly with climate change, air pollution, noise, vibration and accidents. Companies should find ways of reducing these externalities and achieving a more sustainable balance between economic, environmental and social objectives. They should choose transportation smart (their mode, route, vehicle design), plan sustainable routes – shorter routes make for lower fuel consumption and fewer emissions. Employee practices make transportation more sustainable too. Hopefully more companies around the world will do their best to become greener, as the companies we have visited during the intensive week does.

### **What was new and meaningful to you? What would you like to know more related to sustainable logistics?**

Personally, I am very grateful for having this opportunity. During the week, I learned a lot about sustainable logistics as well as being a member of the group, and taking part of the discussions. All were active on discussions, and every one's opinion was paid attention to. I think we all received something new from each other during the week. We were told about many different things happening in the area, and I know that we can make a difference. If you really want to do something, you have to work hard of course, but there is nothing better than the feeling that you succeeded!

The week was full of experiences. Thank You very much!