

# Examples of Good Practice the Freight Forwarding Sector

## Examples of Good Practice in the Freight Forwarding sector

### Case Study 1 - Better vehicle utilisation

One area that sustainable logistics focusses on is maximising vehicle utilisation. This logistics provider reviewed its transport processes to create a domestic system based on greater utilisation of their own transport system. The company consolidated their domestic and European groupage activities improving links between their distribution centres

The twin aims of the distribution system changes were to:-

- Support customers in reducing their carbon footprint
- Differentiate their service from their competitors by creating a unique selling point

After reviewing their processes, the member decided the best way to achieve its targets would be to centralise the booking of UK haulage operations and introduce a robust document flow for airfreight and LCL cargo transported within the distribution system. Bar coding technology was introduced to protect the client from routing Air freight to Sea freight and vice versa.

In addition to improving the operational processes generic changes such as intensive driver training, the use of eco tyres and using environmentally friendly fuels and lubricants created additional environmental savings.

The above changes resulted in the following environmental outcomes:-

- Fleet carbon emissions were reduced by 9%
- By the end of the second quarter of the new system operating 133 truck days per month had been removed from the UKs road
- Significant increase in the use of internal haulage boosting profitability due to increased efficiencies were realised and spending on sub-contracted haulage reduced.

### Case Study 2 - Modal Shift

Much is talked about the modal shift; within the EU the main thrust is to reduce long

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haul trailer movements by increasing movements by rail or waterborne transport. A BIFA member went a stage further by developing a new intermodal service combining trailer and short sea movements. Services were developed to transport goods mainly from the Iberian Peninsula and Poland to the UK and Benelux countries.

After identifying their customer's interest in the development of a reliable, cost effective and environmentally friendly alternative to road transport a viable intermodal alternative was developed directly between Sweden, Poland, the UK and Spain. In order to ensure that this product was a success, the company realised that it had to provide over a long period of time a cost effective service to meet client expectations in terms of capacity and frequency on a regular fixed day basis.

The most interesting part of the project was the successful cost effective integration of trailer operations to deliver containers and short sea activities to ensure that the new service was a success. Competitive charter rates were negotiated and additional vessels were deployed to meet demand. The critical mass generated allowed customer expectations for frequency, capacity and cost effectiveness to be met.

The environmental outcomes of this service were as follows:-

- Improved energy efficiency, studies show that one ton of cargo per gallon of fuel will travel approximately 500 miles by sea as opposed to 60 miles by road
- Removes vehicles from the road, due to the vessels size approximately 400 vehicles are removed per sailing
- Safer, the number of accidents by sea is less than for road movements
- Reduces road congestion
- Produces little noise or pollution reducing social impacts

## **Case History 3 - Incorporating environmental considerations into business management**

This logistics provider has consciously incorporated environmentally focussed policies into their business activities in order to differentiate themselves from their competitors.

These policies have included incorporating carbon friendly solutions and reducing CFC emissions when redesigning their head office. The realisation grew within the company that the best way to improve their environmental performance was to measure and manage the impact of their operation. This led to them attaining ISO 14000:2004 in 2009, which led them to set the ambitious target of becoming "carbon neutral".

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This ambition was achieved and the business offset 100% of its unavoidable emissions in any one year by acquiring carbon credits supporting re-forestation and sustainable energy projects in developing countries.

By working with their clients, the logistics provider has assisted them to minimise the environmental impact of their supply chain. Realising that the key phrase was the “supply chain”, emphasis was placed on developing business relationships and working with suppliers who could demonstrate that they had market leading environmental policies in place.

Additionally clients were made aware of the potential environmental benefits of switching goods from road to rail when moving cargo from Felixstowe to Manchester and better vehicle utilisation.

The environmental benefits of this programme are:-

- Offsetting 100% of unavoidable emissions totalling 68 tonnes per annum
- The ripple effect by encouraging other organisations to adopt environmental policies
- Modal shift reduces road miles and thus emissions

## **Case History 4 - When Greener thinking becomes part of daily management activities**

This major Japanese forwarder and supply chain provider, has developed innovative, environment orientated policies using technological solutions to greenhouse gas emissions. These policies are designed to create efficiencies for the company and benefits for the customer.

A vigorous continuous improvement process was introduced with environmental progress at its very core, providing a clear focus and incentive for efficiencies and best practice. The main target was to reduce their CO2 emissions by at least 10% by 2013.

The main threads of this process can be summarised as follows:-

Equipment: - Teardrop bodies (reducing fuel consumption by 8%) and also the adoption of biodiesel vehicles

Training and employee engagement: - An environmental training programme was delivered to all 25 sites, to:-

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- Emphasise the necessary cultural changes
- Create employee engagement
- Encourage energy efficiency
- Reduce CO2 emissions
- Appointment of site champions

Integrated Management System:- A management system was developed linking Quality, Security, H&S and Environmental Management into an integrated cohesive whole to maximise their impacts.

Internal Awards Scheme:- Sponsored by their MD, an externally judged Environmental Award for best improvement/initiative, was introduced.

Ambitious targets:- Objectives in excess of UK legislative targets are set, reviewed and adjusted, for instance to reduce CO2 emissions by 2020 compared to 1990 levels.

Campaigns:- In order to tackle specific issues and maintain staff awareness and engagement campaigns are run.

Utilities management:-

- Smart monitors were installed to provide real time electricity and gas consumption
- Sensor activated lighting installed where appropriate
- Timers utilised on heating, cooling, lighting and electrical equipment
- Auditing and the better management of water use

Cutting Fuel Consumption:-

- Improved vehicle planning
- Reduction of journey length and idling
- Driver training
- Utilisation of tracking/monitoring equipment to reduce vehicle driving and improve MPG
- Published driver league table

Driver Training:-

- Driver training and assessment structure established
- Intensive fuel efficient driving courses implemented

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## Waste Management:-

Working with suppliers to reduce transit-only packaging has reduced waste generated, landfill waste, and waste miles travelled.

The environmental benefits of this programme can be summarised as follows:-

- Electricity reduction of 35% per site=2116 Ct
- Water consumption reduced by 14%
- MPG increased by 6%
- CO2 emissions from fleet reduction of 11% per vehicle were achieved
- The reduction of general waste to landfill of 46% was achieved
- Waste miles reduced by 54%

## Case History 5 - Making the most of a Port centric location

The logistics arm of this organisation focusses on sea freight particularly in emerging and difficult companies. In 2009 they opened a new division to provide a Port Centric solution to moving temperature controlled cargo.

By establishing itself with the port environs it was possible to discharge cargo from reefer containers, store it and then reload it for distribution using domestic temperature controlled vehicles.

This has meant that the company has:-

- The ability to safely and legally facilitate “heavy payload” Reefer container shipments, typically achieving additional payloads of 14.2% over the permissible UK road weight limitations.
- Reduced road miles and CO2 emissions by eliminating the need for Reefer Containers to travel inland, and so generating a reduction in cost associated with longer dwell times
- Wasted road miles were further reduced by Quality Checking goods at the port and destroying sub-standard product there rather than moving them inland for testing and then destroying them.

Using the above model they remodelled a major client’s import handling process saving them considerable money by:-

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- Eliminating container related penalties for the Reefer container detention and plug in costs
- Reduced transportation costs and emissions by making a single journey as part of a domestic distribution activity as opposed to a “round” trip container delivery.

Initially it was estimated that 157.35 Metric Tonnes of CO2 were saved per annum, however, the importer doubled the volume of their business pushing up the amount of CO2 saved by in excess of 300.00 MT annually.

This solution drove waste reducing costs, improved efficiencies and lowered CO2 emissions from the supply chain. In particular it allows for heavy weight containers to be loaded at origin reducing sea freight and port handling costs per unit moved. However, it should be remembered that this project's success was dependant on the development of Port centric business solutions.

## **Case History 6 - Co-ordinating the supply chain**

When looking at environmental issues one issue that is frequently referred to is that frequently the freight forwarder may be one of several suppliers to the trader. In this case it is often argued that their input and control will be limited.

In this interesting case history, the Freight Forwarder & Supply Chain Management provider developed a tool to measure and manage their customers supply chain carbon footprint both nationally and internationally.

Of crucial importance to the success of this project was that;-

- The UK importer actively supported them by insisting that their other transport providers provided data to them
- They had a well thought out and usable carbon management tool referred to as Global Carbon Dashboard
- Met the clients business expectations

The detailed information brought together by analysing all supply chain related data elements and allowed identification of business unit level footprint and the evaluation of each freight manager's sustainability performance.

The project was unique because it resolved two key business issues by:-

- Ensuring transparency across the supply chain of key logistics milestones from initial order to final delivery point

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- Securing collaboration between service providers to provide a single all-encompassing view of the supply chain.

The project identified the following steps to reduce carbon footprint:-

- Increasing the use of origin consolidation
- Utilisation of new/amended routing to reduce the number of miles travelled to market
- Increasing the volumes distributed to the international market by using four international hubs.

These efforts were seen as being essential to helping their customer meet their ambitious carbon reduction goals.

- There was a 38% reduction in carbon per cubic meter shipped since 2007
- Better management of resources including drivers and equipment
- Promoted the concept of sustainability to all staff
- Disproved the view that sustainable logistics was expensive.

## **Case History 7 - Utilising better information in order to make decisions**

This large freight forwarder handling in excess of 60,000 Teu's per annum became increasingly aware of the importance of environmental issues to their customers cost management and logistics activities.

An initiative was launched to assist the customer gain visibility of their supply chain carbon footprint. In conjunction with leading academic and research bodies' tools were created to provide this information alongside recommendations to enabling customers to manage and attain their logistics and environmental goals. The information generated allows customers to review the impact of their logistics activities alongside other indicators such as cost, lead times and service levels. This service ensures that traders are given the relevant information including alternatives to create a more flexible and sustainable supply chain.

One area that was carefully scrutinised was container utilisation, which can directly impact on emissions. The focus was very much improving both the forwarders and their customer's utilisation levels at point of loading. Unsurprisingly perhaps, it was noted that when freight costs were high that carbon reduction and cost were closely

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aligned. When rates drop the correlation between utilisation and emissions is not so close.

Utilising the close links developed with academia, the freight forwarder took the opportunity to further understand market trends. It took a holistic approach looking at ships design, the future demand for shipping capacity, technical developments and the measurement of Green House Gases. Using this projected data, models could be devised demonstrating potential ways to reduce emissions.

The key part of this programme is providing this information to the forwarders customer. Where appropriate these customers, including high street names have attended seminars hosted by the forwarder to discuss the programme and its goals and operation. These events looked at the changing supply chain which due to slow steaming etc. is considerably than it was in 2007, the year before recession started. Shippers stated that their main concern was no longer the speed of the service received but is regularity and predictability.

These discussions inevitably led to reviews of client's mode utilisation and the possibility moving goods from road to sea and also from air to alternative modes. Within road empty backloads were identified as being the largest single issue and some initiatives were introduced to reduce them. Air being the most costly and least environmentally friendly mode of transport was carefully scrutinised. Analysis indicated that a relatively modest reduction led to a proportionately much larger fall in emissions.

In this case history, in many ways the freight forwarder has become in part at least their customer's carbon manager, a trend which BIFA anticipates will develop further. The forwarder believes that their strategy is paying off for them because their customers are benefitting from cost savings and also fulfilling their environmental obligations.

## **Case Study 8 - Modal Shift**

A recurring theme of carbon reduction is the reduction of CO<sub>2</sub> by changing the mode of transport to a more environmentally friendly one. The following study involving one of the country's major supermarkets shows how moving goods by rail instead of road can reduce emissions.

The freight forwarder utilised their expert local knowledge to co-ordinate the activities of the supermarket, their supplier and the rail operator. One of the key factors which contributed to the success of the project was the simple fact that many trains

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operating from where the supplier was based returned empty. By placing “swap body” containers at the point of origin, after loading they were transported the short distance to the nearest railhead, loaded onto the train and moved to the supermarkets Daventry and Glasgow distribution centres.

In 2009, 830 containers were moved in this manner, this had increased to 7060 by 2012. What it does indicate is the potential to use rail in many cases where, it may have not been considered as viable, particularly where the customer regards cutting emissions as being an important element of their business plan.

It is estimated that HGV's on average produces 63g CO<sub>2</sub> for every tonne of freight per kilometre transported. By moving the goods by rail it is estimated that this reduces to 26.4 Co<sub>2</sub> per kilometre a saving of 60% for every train journey.

## **Case Study 9 - Modal Shift**

Three European shippers sought guidance on how sustainable barge transport could be integrated into shortsea UK operations in a way that made business sense. After identifying their customer's interests, this global logistics company launched an inland container barge service connecting inland terminals by barge to the Rotterdam Shortsea Terminal.

The overall target was to convert 15,000 truck transport journeys to a multimodal solution, whilst ensuring the switch was cost neutral. The service provision was developed after consultation with the shippers who had aspirations to cut both congestion and fuel emissions.

The service was based on managing the combined production output of three different plants and connecting with five times weekly shortsea services into the UK. Deliveries to any destination in the UK being possible within 2 days of departing Rotterdam. All parties collaborated openly with the logistics provider who explored challenges and identified solutions.

The above changes resulted in the following environmental outcomes:-

- Figures released by one of the customers indicated that in 2013 the modal switch saved 17,500kg in CO<sub>2</sub> emissions
- Another customer reported that 4,500 containers had been transported using the new service during 2013
- The collaborative approach provided the basis for further service developments

The new service takes full advantage of the strengths of the multimodal transport offering.

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## **Case Study 10 - Cardboard Exchange Programme (CEP)**

One area that sustainable logistics has traditionally focused on is the recycling of packaging materials.

This logistics and supply chain management specialist company have been involved in shipping waste cardboard to Europe and the Far East for many years. However, they felt that there were too many parties involved in what should be a simple process. Also, they recognised that there was a direct link between the value of waste at destination and the cost of cartons at origin. To address these points they agreed a new process with a large Chinese Recycling Mill based on a true exchange system with a pre-agreed conversion rate, old for new.

These changes generated the following general benefits:-

- 40ft containers of waste cardboard delivered directly to the Recycling Mill
- New recycled cartons delivered directly to the customer's factory
- No money changing hands between the parties

The above changes resulted in the following environmental outcomes for customers:-

- A significant reduction in the carbon footprint of moving empty containers back to China
- A fully auditable life cycle of waste cardboard and new cartons
- Reduction in administration and accounting for new packaging and waste cardboard
- Delivery of waste back to where the cartons are needed

The CEP was developed to reduce the client's carbon footprint and save money by taking wasted time and effort as well as emissions out of the supply chain.

## **Case Study 11 - Incorporating environmental considerations into daily business**

This environmentally aware logistics provider has taken a holistic approach to general environment awareness over a 7 year period commencing in 2007. Environmental impacts became a cornerstone of the decision making process when replacing plant and equipment and also generic commercial decisions.

After just 2 years they achieved accreditation for their management processes being compliant with ISO14001:2004 in Environmental Management. They have continued to develop their Environmental Policy with a number of new objectives including

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working towards becoming a carbon neutral company, which they have now achieved. For this company environmental issues are very much embedded in their commercial decision making process. This has resulted in a systematic approach to environmental management leading to a high degree of consistency and cohesion.

They are also working closely with suppliers and customers to raise awareness and encourage them to put environmental management processes in place.

Working with one of their key customers they have minimised the environmental impact by;

- Replacing traditional paper documentation with e-documents
- Utilising Rail/Road services they have reduced the number of road miles their product has to travel, reducing emissions within their supply chain
- Using a young and fuel efficient Euro 5 & 6 fleet for road freight
- Introducing low energy heating and lighting technology in buildings

This logistics provider has also seen benefits for themselves which include gaining a competitive advantage by having a market leading environmental policy that has created new business opportunities.

## **Case Study 12 - Modal Shift**

The client, a major food retailing chain has a longstanding goal of becoming carbon neutral by 2030.

Working in partnership with a select group of freight forwarders and transport companies in an initiative to shift from road to rail, they had a requirement to work with a forwarding company that could take the lead the help them achieve their aims quickly.

This particular forwarder was selected because of their excellent record for intermodal transport and links in South Wales. They were also able to introduce another customer to the initiative that could take advantage of the empty freight trains going in the other direction (back-haul), which helped to make it a viable scheme.

By utilising rail transport it was possible to reduce congestion on the already crowded Welsh roads.

The key to the success of the initiative was the use of “swap body” containers that could be lifted between trucks and trains. By using the swap body containers they realised tangible benefits including:-

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- The removal of 40 loads a day from the roads.
- A reduction of nearly 60% in Co2 emissions with every train journey.

The growth and success of this initiative is demonstrated by the number of containers moved by this forwarder during the past 5 years. Figures show a substantial year on year increase from 830 containers during 2009 to 9,000 in 2013.

This intermodal solution has proven to be successful and three new customers have recently agreed to use the back-haul service which will enable the original customer to increase their volumes whilst also reducing their CO2 emissions.

## **Case History 13 – Thinking “Inside” the Box**

The future of sustainability within our industry relies heavily on modernisation of shipping methods and contributions from all parties within the supply chain. This logistics provider is one of the larger independent multi modal operators in the UK and are striving to develop sustainable logistics solutions to meet their customer’s evolving supply chains. In response to their Corporate Environmental goals, they reviewed shipping processes to identify areas where client needs could be met with green and sustainable solutions.

During the review, their Export department identified an innovative method for the stowage of multiple motor vehicles in standard ISO containers, using reusable metal racking.

The re-usable car racks are collapsible and removable loading aids which are used on a rotation basis, making them more effective and efficient than wood. This reduces the number of containers used by 50% or more and can eliminate the use of timber within the containers.

The flexibility of the racking system allows for many load combinations including 6 small cars or 3 4x4’s and can be used to combine vehicles and other LCL cargo within the same container. This helps to optimise the space on a vessel.

The benefits for customers include less reliance on Ro-Ro options and the freedom to choose any carrier and efficient routes which can result in less fuel being used and less emissions.

Customers of the service can reap the benefits of a green reputation and use their chosen shipping method as a unique selling point to benefit their own customer base, whilst demonstrating their commitment to corporate social responsibility.

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## Case Study 14 – When Greener thinking becomes part of daily management activities

This logistics provider is a leading supplier of time-critical logistics solutions, often in emergency and crisis scenarios. In recent years they have focused efforts on environmental management by introducing a company-wide Environmental policy.

Through several initiatives the company has seen real results including reductions in carbon footprint, waste, water and energy consumption. In 2013 they were awarded the ISO 14001:2004 certification for Environmental Management.

The Environmental Management team hold regular meetings to identify, set, deliver and monitor environmental objectives. Green Champions have also been appointed to represent their departments and encourage the adoption of initiatives.

Through the development of an in-house platform they have reduced empty mileage and developed the ability to optimise return loads. They also monitor and report CO2 emissions and have introduced a vehicle replacement process with carriers to ensure that modern vehicles are used, which are more fuel efficient and produce less emissions.

A review of the company's combined efforts revealed the following savings during 2014:

- 65% reduction in postage
- 40% reduction in printing
- 37% reduction in gas usage
- 20% reduction in landfill waste
- 20% reduction in electricity usage
- 19% reduction in total waste
- 7% reduction in water usage

Their cloud-based transportation management system has greatly assisted shipment optimisation and supported client objectives to minimise inventory holdings. The system has been rolled out across all sites and is compatible with client ERP's. This digital link reduces the requirement for letters and telephone calls and maximises optimisation efficiencies.

Utilising road transport whenever possible, rather than air and favouring the Eurotunnel rather than ferry services across the Channel, it is estimated that the company has reduced carbon emissions. In 2014 Eurotunnel confirmed that the logistics provider had saved at least 749 tonnes of CO2 by using their service.

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## **Case Study 15 – Export of waste for environmental recycling**

The management team of this logistics company investigated whether they could re-use the containers that they sent back to suppliers in the Far East for other purposes. A decision was made to utilise the empty containers to export waste materials to environmental recycling facilities in Southeast Asia and a subsidiary company was set up for this purpose.

The goal of this initiative was to reduce the amount of waste going to landfill and increase the amount being recycled. The company also wanted to remain responsible for the waste once it left UK shores by ensuring that the waste materials went to the best recycling facilities overseas.

The process involves the receipt of import containers, which are then collected by selected hauliers who go on to collect recyclable materials in the same area and on the same day as the import.

Since launching the subsidiary company more than 5,000 containers of waste materials have been shipped and that represents more than 75 per cent of the company's export movements. This drastically reduces the carbon footprint as containers are not being utilised one way only. The services are also valued by clients who would otherwise have to pay costly fees for the disposal of waste materials in the UK.

## **Case History 16 - Incorporating environmental considerations into business management**

This Logistics provider was featured in Case History 3, and has since continued to focus on a strategy that addresses environmental risks, impacts and opportunities.

Their journey started more than a decade ago when they refurbished their head office and ensured that environmentally friendly solutions were considered at every stage.

CFC free air conditioning, low energy lighting and sensors to switch off lights in offices when no one is present, were some of the changes made at that time.

In 2009 they issued their first complete environmental policy and went on to gain ISO 14001:2004 accreditation in Environmental Management the same year.

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In 2011 a new objective was set, to become a carbon neutral company and they have been assessed and certified as being “Carbon Neutral” for each of the past 4 years. This was achieved by ensuring that 100% of unavoidable emissions were offset by acquiring carbon credits supporting thermal energy projects.

A number of key suppliers adopted environmental management policies as a result of their proactive approach and by working closely with their sister company (also ISO 14001:200 accredited) who provide the majority of their container haulage, they have been able to offer an intermodal solution for UK full container movements.

They estimate that their initiative to reduce the road miles driven has produced a 10% reduction overall in road movements annually for the past 3 years, which is equivalent to approximately 3,000 container movements per annum.

A partnership with a major customer provides an example of their approach to working with an environmentally aware partner, who has environmental management systems in place and wishes to work with a logistics partner with an approach to sustainable logistics that is aligned to their own.

Together they have reduced the use of paper by using e-documents which has also led to a revision of working practices and improved workflows. With the same customer the utilisation of the Rail/Road services has reduced the number of road miles their product has to travel in the UK by 60,000 miles, reducing emissions within their supply chain.