

## Position paper on Sustainable Logistics

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CLECAT is the Brussels based organisation representing freight forwarders, transport and customs related services in Europe. CLECAT represents the interests of more than 19,000 companies employing in excess of 1,000,000 staff in logistics, freight forwarding and customs services.

Neutral towards transport modes, European freight forwarders and Customs service providers use all modes of transport including road, rail freight, maritime, inland waterways and intermodal transport. They make extensive use of IT systems, dedicated terminals and warehousing to respond to the needs of their customers.

### Summary

This paper seeks to set out the various goals and needs of freight forwarders in sustainable logistics, including the economic need to increase efficiency and cost-effectiveness, closely linked with the direct social responsibility to reduce emissions and waste. In summary, CLECAT believes that environmental initiatives for the transport sector should:

- Find the optimal and most efficient solutions, especially in terms of cost/benefit, without harming the freight transport industry;
- Combine instruments such as regulation, economic and fiscal incentives, and information campaigns in order to encourage the industry to opt for the most fuel efficient technologies;
- Be based on exchanges between legislators and the industry in order to define the best solutions in terms of sustainable development;
- Focus more on research in order to modernise the transport sector. For instance, the development of alternative fuels could reduce the dependency of the EU on oil and reduce the environmental footprint of vehicles;
- Be harmonised at the EU level and linked to international standards
- Follow an overarching objective involving all means of transport. The definition of an optimal transport system regarding the environment cannot be mode-exclusive. It should be based on the development of the co-modality as well as the modernisation of each mode of transport.



## Introduction

The Paris COP21 resulted in a historic agreement to reduce greenhouse gas emissions. Significant efforts will need to be made in the coming years to translate the ambitious commitments into concrete action, particularly in the transport sector.

In its White paper on the future of transport<sup>1</sup>, the European Commission announced that “a reduction of at least 60% of GHGs by 2050 with respect to 1990 is required from the transport sector, which is a significant and still growing source of GHGs”. In 2015, the European Environment Agency estimated<sup>2</sup> that, in spite of concrete progresses, the transport sector continues to be responsible for 25% of the global GHG emissions in Europe as well as an important vector of other air pollutants (especially Nitrogen/NO<sub>x</sub> and Particulate matter/PM).

Sustainable logistics can be defined as “doing more with less” and refers to increased efficiencies in a supply chain to avoid waste, use less energy, and possible re-using of materials and energy. The data obtained from carbon foot-printing will allow the identification of such efficiencies, which are a boost to sustainability and competitiveness.

CLECAT and its members believe that while they bring growth and prosperity to societies, they have a responsibility in mitigating the negative impacts of transport and logistics and do so by seeking to reduce their dependency on fossil fuels. The ambitions of policy makers to reduce emissions, and the goals of the logistics industry, are therefore clearly intertwined.

CLECAT is of the opinion that the ambition of regulators to reduce emissions, and the vision of industry of a competitive, sustainable economy, are closely intertwined. From a sustainable development perspective, the environment and economic development are not mutually exclusive.

Therefore, a holistic approach should be adopted when it comes to environmental policy: the balance must be made between costs and environmental benefits, offering the industry relevant alternatives without imposing a conflicting choice. In general, CLECAT believes that EU policy should focus on innovation (alternative fuels, IT, mobility management, aerodynamics, etc.), training and awareness-building.

Innovation will play a major role in driving sustainable logistics. The supply chains of the future will be influenced by technological developments in ICT and 3D-printing, as well as in vehicle and infrastructure technology. These will bring new opportunities for efficiencies, smart demand management and ultimately a greener logistics chain.

This paper seeks to address a number of policies and recommendations in this regard which we address to our members, industry stakeholders and policy makers.

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<sup>1</sup> [Roadmap to a Single European Transport Area](#) – Towards a competitive and resource efficient transport system

<sup>2</sup> The contribution of transport to air quality - TERM 2015



## **Carbon Footprinting Tools**

The pressure on shippers, logistics providers, and carriers to monitor, report, and reduce CO<sub>2</sub> emissions continues to increase. Freight forwarders are expected to be able to inform shippers on their commitment to sustainable logistics operations and to reducing their environmental impacts. However, they are confronted with the fact that the carbon footprints which are available are often neither accurate nor comparable.

As noted in the study<sup>3</sup> prepared for the EC by CE Delft and others, many of the currently available footprinting tools for logistics are based on default values, such as the average fuel consumption of a particular vehicle type, rather than on the measured fuel consumption of a particular vehicle. Furthermore, the various tools employ different methodologies and assumptions. This lack of comparability is in itself a disincentive for the market to report, request or use carbon footprints. For example, if one carbon footprint is based only on Tank to Wheel (TTW) emissions, while another also includes the upstream, Well to Tank (WTT) emissions of the transport service, comparison becomes inherently difficult if not impossible for the average user.

To improve the harmonisation, accuracy and application of carbon footprinting, CLECAT therefore supports the following goals:

- calculations must be consistent and comparable;
- calculations must be reliable and accurate;
- for application in business practice, carbon footprinting must be simplified and facilitated;
- industry awareness must be increased

A universal way of carbon accounting – the [GLEC Framework for Logistics Emissions Accounting](#) - is in the making, which builds on existing methods and the GHG Protocol. CLECAT is a member of GLEC, an initiative that unites like-minded groups specialising in CO<sub>2</sub> calculations for various transportation modes, aiming to ensure comparable CO<sub>2</sub> calculations across the transportation supply chain. GLEC does not seek to replace existing tools but to ensure comparability.

CLECAT concurs with the policy recommendations made by CE Delft et al to the European Commission, which would include a combination of voluntary reporting and mandatory use of a Level 3 methodology. This option has the greatest potential for reducing GHG emissions, particularly in the long term, as it incentivises the full range of emission reduction measures and is the most accurate in estimating real-world emissions. This is also in line with the GLEC approach, which will provide the framework for such reporting without imposing a single means of doing so.

The CEN standard 16258 establishes a common methodology for the calculation and declaration of energy consumption and greenhouse gas emissions related to any transport service. CLECAT believes this standard should be implemented and used all over the EU in order to obtain comparable data<sup>4</sup>. Only with reliable ways to measure can the industry understand how and where the optimum emissions saving can be made in the supply chain.

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<sup>3</sup> 4.A61.1 - Fact-finding studies in support of the development of an EU strategy for freight transport logistics

<sup>4</sup> CLECAT has published a [Guide on Calculating GHG emissions for Freight Forwarding and Logistics Services](#). The guide is a practical tool for freight forwarders and logistics service providers that seek to make use of the CEN standard 16258

### **Sustainable Logistics initiatives**

In its White paper on the future of transport<sup>5</sup>, the European Commission announced that “a reduction of at least 60% of GHGs by 2050 with respect to 1990 is required from the transport sector, which is a significant and still growing source of GHGs”. In 2012, the European Environment Agency estimated<sup>6</sup> that, in spite of concrete progresses, the transport sector was still responsible for 25% of the global GHG emissions in Europe as well as an important vector of other air pollutants (especially Nitrogen/NO<sub>x</sub> and Particulate matter/PM).

Taking into account these initiatives and trends, it appears that the ambition of governments and regulators to reduce emissions, and the vision of industry of a competitive, sustainable economy, are closely intertwined. From a sustainable development perspective, the environment and economic development are not mutually exclusive.

Despite this, CLECAT is of the view that a number of policies have been counterproductive, from an environmental and economic point of view. These last years, several policies, mainly charging schemes, have been put in place in Member States leading to an increase of costs for the industry but also to disappointing results regarding the environment objectives. Moreover, the revenues generated by such a scheme are not often fully earmarked for transport modernisation, making it a burden for the industry without added-value.

Therefore, a holistic approach should be adopted when it comes to environmental policy: the balance must be made between costs and environmental benefits, offering the industry relevant alternatives without imposing a conflicting choice between costs and environment. In general, CLECAT believes that EU policy should focus on innovation (alternative fuels, IT, mobility management, aerodynamics, etc.), training and awareness-building.

Adopting a holistic approach also means that initiatives on the environment should be taken at the European level and harmonised. Numerous initiatives have been taken at the national/regional level which are sometimes contradictory and are likely to generate distortion of competition. The most notable such initiative was implemented in 2013 in France, where national legislation was adopted requiring all transport operators to report their CO<sub>2</sub> emissions. Progress made in the transport sector regarding the environment should be comparable between EU countries and between the different means of transport, which is not the case for the time being, due to the prevalence of varying regulatory approaches.

The operations of freight forwarders do not only imply transport but also a wide range of activities related to the global supply chain. CLECAT supports various initiatives which can lead to a greener supply chain, including:

- **Alternative Fuels**: CLECAT supports research and innovation to develop alternative fuels as a means to decarbonise transport and improve the efficiency of the transport system. A holistic approach combining low-carbon energy use, increased energy and vehicle efficiency,

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<sup>5</sup> [Roadmap to a Single European Transport Area](#) – Towards a competitive and resource efficient transport system

<sup>6</sup> [The contribution of transport to air quality - TERM 2012](#)

and smart demand management would greatly serve to reduce the carbon footprint of transport and logistics.

- Installation of alternative energy sources (photovoltaic, solar hot water, wind, ground source heat pump, biomass systems) in office buildings and warehouses: CLECAT is aware of the potential of these energy sources to reduce energy consumption and energy bills. Best practices have shown that the investment will pay off in a relatively short amount of time after the installation.
- Use of IT systems to enhance exchange of information and reduce paperwork: connected IT systems have a great potential in ensuring a continuous flow of information along the supply chain. Moreover, it reduces the paper consumption in significant amounts. CLECAT has been involved in several initiatives aiming at developing these kind of IT shared platforms and support their rollout (iCargo project<sup>7</sup>). In addition to tracking and tracing technology and reporting schemes, CLECAT encourages the use of IT systems that are able to calculate the best solutions and the best routes in order to optimise companies' planning.
- R&D aims to advance the use of ICT in support of new logistics services that synchronise vehicle movements and logistics operations across various modes and actors. This serves to lower CO<sub>2</sub> emissions and combine services, resources and information from different stakeholders taking part in an open freight management ecosystem.
- Waste reduction: The vision of a Circular Economy can aid in reducing emissions through the more efficient allocation and use of resources. While waste itself is inevitable and unavoidable, it is important for the logistics sector to focus on better environmental performance as well as the economic benefits achieved through savings on waste disposal fees. Recycling is an option to enhance environmental performance, particularly with regard to items like computers, monitors, keyboards, and fluorescent bulbs. This can save money and can also be proposed as a service to third parties.
- Consolidation of cargo and collaboration: CLECAT considers this as one of the best methods to reduce GHG emissions and it one of the major 'raison d'être' of freight forwarders. The digitisation efforts referred to above can greatly aid in revolutionising the planning of logistics so as to make more efficient use of assets through consolidation and collaboration. This therefore enables a lower environmental footprint for logistics operations, as well as making business sense by reducing costs and creating new business opportunities for freight forwarders in logistics planning.

### **Mode-specific initiatives**

This section sets out a number of initiatives supported by CLECAT across the various modes of transport, with a view to decreasing their environmental footprint, as well as for the logistics system as a whole. As was outlined above, CLECAT considers that each mode of transport is necessary in the frame of freight forwarding activities, as logistics is inherently a multi- and inter-modal activity.

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<sup>7</sup>: For more information: <http://i-cargo.eu/>

## Road

Road transport is the main mode used for freight in the EU and it is expected that this will still be the case in the future, mainly because road infrastructures are of good quality and well-connected throughout the EU. In recent years, road transport has been singled out as the most damaging for the environment and policies have been set against it in order to promote the use of alternative modes.

This will not give the results expected as demand for road transport is nonetheless increasing every year. Therefore, rather than punishing road transport, policies should move towards the modernisation and the improvement of the road sector. Taking into account the fact that road use will continue to increase, technological innovations and other measures to remove barriers and increase the efficiency of road transport must be implemented. Several measures which are under discussion or implementation have the potential to do so:

- Weights and dimensions: CLECAT has been fully supportive of the aim of the Commission to developing the use of aerodynamic devices, aerodynamic and secure cabs, as well as trucks powered by alternative sources (such as electricity), which would be beneficial for the environment. CLECAT also supports the larger use of European Modular System (EMS) in the EU, as they provide additional loading capacity and fewer trips for the same amount of goods transported. Longer and heavier vehicles have a huge potential in reducing fuel consumption and GHG emissions.
- Platooning: Platooning has been shown to be an efficient and innovative way to reduce emissions and increase the efficiency of road transport. When trucks can drive closely behind one another, fuel economy is improved as a result of the reduction in drag. Drag accounts for up to 25% of a truck's total fuel consumption, and the closer the trucks drive to each other, the greater the fuel-saving potential.
- Cabotage: CLECAT supports a phased withdrawal of cabotage restrictions, so as to significantly reduce the number of empty trips, which represents additional costs and GHG emissions without any added-value. In order to optimise utilisation, vehicles should be allowed to carry out cabotage operations within the host country as soon as the vehicle has entered into the host country with its international cargo, and utilise any empty space within the load carrier.
- Intelligent Transport Systems: CLECAT supports the implementation of the ITS directive as these devices would lead to better traffic management as well as smarter driving. ITS offers the possibility for dynamic traffic management, which increases efficiency through reduction of traffic jams and smoothing traffic flow, therefore reducing the overall environmental impact of traffic (less time sitting stationary and less sudden braking/acceleration which unnecessarily increases fuel consumption).
- Drivers' education and training: CLECAT supports drivers' education which focuses on making drivers aware of fuel-efficient driving, and contributes to enhancing the safety of both driver and goods. This can generate savings in the form of lower insurance premiums, less energy consumption and better use of resources.

- VECTO: The VECTO simulation tool, which allows the calculation of emissions for the whole vehicle, for a range of payloads and drive cycles, has the potential to greatly aid in the decision-making process by providing accurate, trustworthy information on emissions performance. At present, only original equipment manufacturers are intended to receive access to this data. CLECAT members believe that this access should be opened up to transport buyers and operators in order to facilitate the measurement of road transport emissions and decision-making on that basis. Transparency of emissions performance information can be a motivating factor for innovation in logistics, and in ensuring trust between supply chain parties.

## Maritime

- Benchmarking tools: CLECAT is a member of the Clean Shipping Index<sup>8</sup>, a benchmarking tool to evaluate the environmental performance of ships and carriers. The Clean Shipping Index is a business to business tool for freight forwarders and cargo owners to select clean ships and quality ship operators and can be used by regulators to provide incentives to cleaner ships.
- Alternative fuel infrastructure: CLECAT welcomes the fact that the Alternative Fuels Infrastructure Directive includes maritime LNG and shore-side electricity.
- Energy efficiency: In recent years, discussions at the International Maritime Organization (IMO) have resulted in the development of an Energy Efficiency Design Index (EEDI). The standards apply to ships built in 2013 and later and require all future ships to meet increasingly stringent fuel economy standards over time. CLECAT would be supportive of concerted action to build on this initiative, such as a mandatory data collection system for GHG emissions in shipping and further global action.
- Emissions: The EU's Monitoring, Reporting and Verification Regulation is an important first step here, and should form the basis of a push for a global measure. As shipping is a global industry, the IMO is the appropriate forum for progress on maritime emissions but in case of lack of progress regional initiatives should be taken.
- Inland Waterways: Inland waterway transport offers an efficient and low-carbon means of transport as part of an intermodal network. However, there is a need for more consolidation and cooperation between players as too often containers travel back and forth empty between ports and inland terminals. Collaboration between the different operators and consolidating their volumes is increasingly seen as the best solution for making better use of the limited capacity and infrastructure.

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<sup>8</sup> <http://www.cleanshippingindex.com/>

## Rail

- Removing bottlenecks: CLECAT supports the ambition of the European Commission to increase the share of rail freight. However, there are remaining burdens to overcome, particularly the lack of interoperability between national infrastructures and the lack of competition due to privileges granted to national incumbent operators. The use of rail will increase if these bottlenecks are removed but equally when it becomes more customer-friendly through booking platforms, quicker response times and performance indicators. Such bottlenecks both discourage greater use of rail transport and prevent rail in Europe from fully maximising its potential as an efficient, green transport mode.
- Railway technology: The Shift2Rail Joint Undertaking will provide a technological impetus for these developments through increased railway capacity and modernisation of infrastructure and rolling stock, with important environmental benefits including reduced noise, greater energy efficiency and lower emissions.
- Market reform: CLECAT welcomes the Commission's intention to open rail markets and to enhance the competition in the sector. This will lead to an increase of operators which will be able to respond to more market demands. A shift from road to rail can only be effective if the performance of the rail freight is of a comparable standard and the door-to-door price is competitive. CLECAT encourages continued effort in combating and overcoming the barriers to making intra-European wagon-load services viable and sustainable. In this regard, we stress the importance of co-modal and intermodal terminals which are crucial for the running of Single Wagon Load (SWL) services. A further reduction of SWL services would be out of step with the aims of industry and of European transport policy to encourage the optimal use of rail transport in order to reduce emissions.

## Air

- Carbon footprinting: CLECAT supports the development of a carbon footprinting mechanism for air transport, for the reasons outlined above. Such a tool should follow the EN 16258 standard, in order to allow accurate calculation and proper comparison of emissions between carriers and ultimately with other modes. The IATA Recommended Practice 1678 deviates from the CEN standard, and therefore from all current statistics, ruling out the possibility of proper comparison of data. CLECAT therefore supports the work of the Airfreight Carbon Initiative to develop a footprinting tool for air cargo customers.
- Single European Sky: The reorganisation of European airspace, on a more efficient basis and away from national lines, will make air traffic management greatly more efficient. By allowing shorter, more direct routings, the Single European Sky will reduce unnecessary fuel consumption and related carbon emissions and other forms of pollution. We urge national governments to act rapidly to put the Single European Sky into place, in order to realise the great savings for all in environmental and financial costs which it will enable.
- Clean Sky Initiative: CLECAT supports this joint initiative between the European Commission and the aerospace industry. The initiative set high objectives for greening aviation: 50%



reduction of CO<sub>2</sub> emissions through drastic reduction of fuel consumption, 80% reduction of NO<sub>x</sub> (nitrogen oxide) emissions, 50% reduction of external noise by 2020. Technological innovation is an essential part of reducing aviation's environmental impact and one of the air transport industry's pillars for action. European funding should therefore remain available for driving aerospace innovation in Europe and globally.

- ETS: the suspension of international aviation's inclusion in the ETS, announced in 2013, was a welcome step which gives the necessary space to ICAO to devise a global measure for aviation emissions. CLECAT believes that unilateral regional solutions are counterproductive and a barrier to a global industry, which will only serve to divert air traffic and the related economic benefits away from Europe, with no impact little overall global emissions. We therefore urge the EU to respect the ICAO process and allow a global mechanism to be developed and put in place, without resorting to policies which will put Europe at a competitive disadvantage with minimal net environmental benefit.

## **Conclusion**

The logistics industry is committed to innovation to develop the technological, organisational and financial solutions which are needed to reduce greenhouse gas emissions through greater efficiency. Reducing carbon, in most cases, is good for business, thus it makes total sense to integrate these actions into normal operations plans and budgets.

CLECAT encourages its members to demonstrate that they are serious about decarbonisation by setting ambitious emission-reduction targets for a company's global logistics supply chain. This will encourage them to include the carbon footprint in their logistics decisions.

Industry cannot work alone on this, and nor can governments and policy makers who have a mission to reduce the impacts of climate change. Therefore CLECAT supports enhanced collaboration between the public and private sectors in order to ensure that solutions benefit from industry expertise and are workable for all, thereby guaranteeing maximum efficacy.