RESULT REPORT

GREEN CARRIER AUDIT

Devega Logistics Srl

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410000 Oradea

FUMO SOLUTIONS

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1. Audit content

On behalf of the Devega Logistics Srl, FUMO Solutions GmbH carried out an Green Carrier Audit on 2022/10/12 at the Oradea location in order to compare and evaluate the processes and structures within the scope of an actual as-is recording with the valid (legal) regulations.

2. Subject areas

1. Organization and controlling
2. Vehicle fleet
3. Office and administration

3. Audit result

The evaluation of the test questions resulted in an overall degree of target achievement of:

62.86 %

The company at the Oradea location has thus provided evidence of a certified organization in accordance with the requirements of the expert panel on which the examination is based.

4. Annex

Annex 1: Summary of the test results
Annex 2: Result report
Annex 3: Conclusion

Dornstadt, 2022/10/12

Fabian Sattler
Auditor

Annex 1: Summary of audit results

Devega Logistics Srl was founded in 2009 and offers national and international part and full load logistics (also with mega trailers) in local and long-distance transport. In transport logistics, a variety of different goods are transported throughout Europe, preferably with refrigerated and curtainsider semi-trailers and by intermodal transports. Furthermore, Devega Logistics Srl offers various services in the field of warehouse logistics (e.g. warehousing, order picking, packing and packaging, including material procurement).At the time of the on-site audit, the company's fleet consisted of 4 EURO V and 68 EURO VI vehicles. All parties involved were always able to answer our questions in a very friendly and competent manner during the audit. The points objected to from the questionnaire are enclosed. FUMO Solutions GmbH will be happy to provide you with practical and competent support in the preparation and implementation of the audit.

Evaluation of the audit criteria

The evaluation of the test criteria showed that the Devega Logistics Srl scored 347 out of 552 maximum possible points. The following table shows the detailed evaluation of the test criteria.

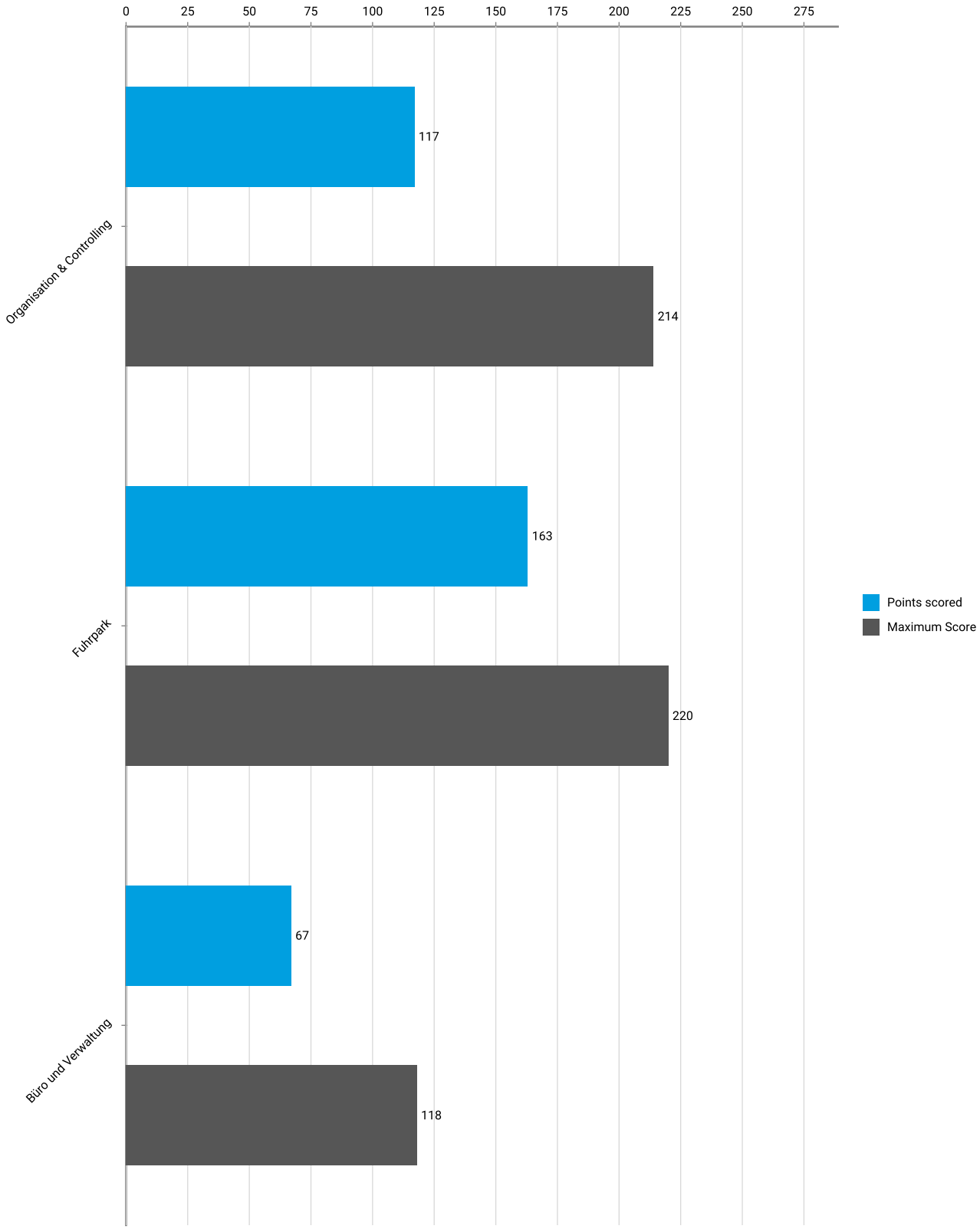
Result overview of the audit			
Subject area	Points scored	Maximum score	Degree of achievment
Organisation & Controlling	117	214	54.67 %
Fuhrpark	163	220	74.09 %
Büro und Verwaltung	67	118	56.78 %
Total	347	552	62.86 %

Notes on Serious Violations

If serious violations are determined during the course of the audit, this automatically leads to a failure, since serious violations require immediate action in order to avert the currently very high sanction and liability risks for those responsible in this area.

No serious violation has been identified at the Devega Logistics Srl.

Graphic representation of the individual subject areas



Annex 2: Result report

The Green Carrier Audit consists of a total of 175 audit criteria. Of these, the Devega Logistics Srl has fully met86 audit criteria.

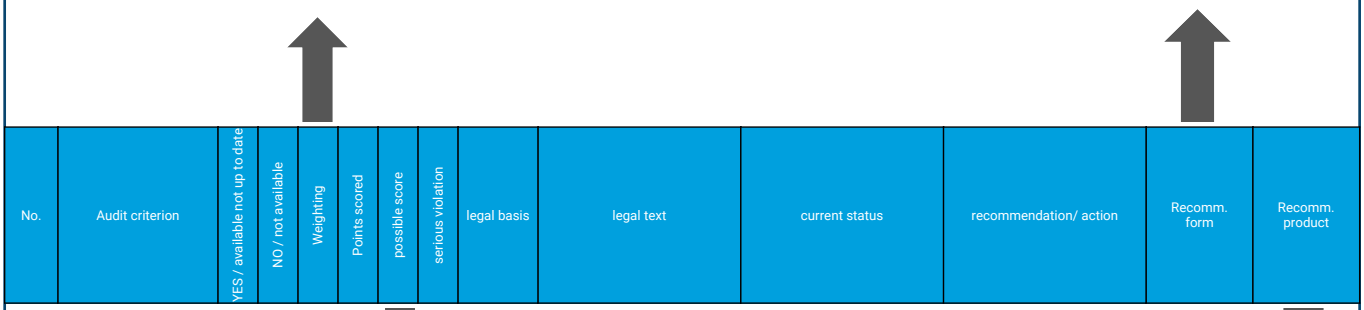
Of the overall audit criteria, 7 were not relevant to the Devega Logistics Srl.

The following figure explains the structure and the evaluation as well as the weighting of the individual test criteria. If you have any questions regarding the evaluation or test results, please feel free to contact one of our employees.

Note: You will receive the result report in the form of a table. Only the test criteria that did not pass or were not currently available at the time of the audit are displayed. Audit criteria that were passed or were not relevant for the company are not displayed for reasons of simplification.

The weighting indicates the number of points with which the test criterion is weighted. The independent panel of experts decided on the level of weighting based on the sanction and liability risks for those responsible.

In the "Recommended form" category you will receive a standardized sample form for the respective test criterion, which you can assign using the form numbers in the attached form overview. In order to fulfill the legal certainty in logistics, you should use the sample forms. You are welcome to adapt this to your corporate design



Calculation of possible points:

possible points = 2 x weighting
Exception: If a question is answered with not relevant, then the achieved and possible points are not evaluated

Calculation of the points achieved in dependence from the response:

YES/ present = 2 x weighting
YES/ available not up-to-date = 1 x weighting
No/ absent = 0 x weight
No/ not relevant = 0 x weighting

In the "Recommended product" category, you will receive a recommendation on the legally compliant monitoring of the test criterion in practice.

Organisation & Controlling													
No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
Organisation & Controlling: CO2 management													
11536	Do you create an annual carbon footprint for your company?		X	1	0	2				there is no carbon footprint for the company	In order to achieve the climate policy goals of the European Union, logistics must make a contribution, meaning that the calculation and disclosure of CO2 emissions caused by the company will become more relevant in the near future. By proactively recording and evaluating generated CO2 emissions in accordance with internationally-recognised standards (e.g. CEN EN 16258, ISO 14083, ISO 14064, GHG Protocol), future regulations can be counteracted at an early stage.		
11495	Do you create an annual carbon footprint for your warehouse and office buildings?		X	1	0	2				no carbon footprint for the warehouse and office	In order to achieve the climate policy goals of the European Union, logistics must make a contribution, meaning that the calculation and disclosure of CO2 emissions caused by the company (incl. warehouse and office buildings) will become more relevant in the near future. By proactively recording and evaluating generated CO2 emissions in accordance with internationally-recognised standards (e.g. CEN EN 16258, ISO 14083, ISO 14064, GHG Protocol), future regulations can be counteracted at an early stage.		
11570	Do you track the indirect CO2 emissions that your subcontractors generate?		X	1	0	2				not tracking co2 emissions from subcontractors	Climate protection should always be considered and implemented holistically. By determining the CO2e emissions of subcontractors, you also comply with the requirements of internationally-recognised standards (e.g. CEN EN 16258 (until October 2022) or ISO 14083 (from October 2022)) and can counteract forthcoming regulations both early and proactively.		
11568	Do you participate in an initiative to reduce greenhouse gas emissions in logistics (e.g. Lean & Green)?		X	1	0	2				not participating in an initiative to reduce greenhouse gas emissions	By participating in an initiative to reduce greenhouse gas emissions, you have the opportunity to systematically reduce energy and fuel consumption and associated costs within a given structure. In addition, a basis for external communication on efforts and successes in climate protection is created.		
Organisation & Controlling: Compressed air													
11496	Is the power consumption of the compressed air compressor calculated?		X	1	0	2				not calculated	Due to the high energy production costs for compressed air, the power consumption of the compressed air compressor should be reported separately. If the compressor does not have a separate electricity meter, the power consumption can be estimated by (1) the installed compressor capacity (in KW), (2) the station's compressed air index (Wh/Nm³) and (3) the operating hours.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11497	Are costs for compressed air production recorded and evaluated?		X	1	0	2				costs not evaluated	Due to the high energy production costs for compressed air, the power consumption of the compressed air compressor should be reported separately. If the compressor does not have a separate electricity meter, the power costs can be estimated by (1) the installed compressor capacity (in KW), (2) the station's compressed air index (Wh/Nm³), (3) the operating hours an (4) the energy costs (€/ kWh).		
Organisation & Controlling: Energy management													
11554	Do you have a uniform, operational energy concept?	X		1	1	2				partially, the environmental is part in the energy concept	A uniform corporate environmental concept supports the company in a targeted manner in identifying and eliminating the company's environmentally-relevant weak points and in using resources sparingly.		
11585	Has the company conducted an energy audit (16247-1)?		X	1	0	2				no audit has conducted	An energy audit in accordance with 16247-1 analyses the energy use and energy consumption (e.g. diesel, LNG, electricity, heating) of a company in order to identify energy flows and the potential for energy efficiency improvements, to define medium-term energy saving targets and to reduce energy costs sustainably. The Federal Office of Economics and Export Control (FOFA) states that after an energy audit has been carried out in companies in the transportation sector, energy consumption can be reduced by more than 1 percent per year.		
11558	Are the relevant energy consumers (fuel consumption of the vehicle fleet, electricity consumption for office and warehouse buildings and heating energy consumption) in your company identified and evaluated on the basis of the CO2 emissions caused?		X	1	0	2				not identified by co2 emissions	Only when the relevant energy consumers in the company have been identified can targeted internal measures be planned and implemented to reduce the associated CO2 emissions.		
11560	Does your company have specific goals for reducing the CO2 emissions caused?		X	1	0	2				no specific goals for reducing the co2 emissions caused	Only if specific targets for the reduction of CO2 emissions have been set can they be pursued and implemented in a targeted manner.		
11502	Are specific targets for reducing energy consumption communicated externally?		X	1	0	2				no extern communication	Only if specific energy and environmental goals are communicated externally can they be pursued and implemented in a targeted manner. External communication further increases the incentive to achieve goals.		
11562	Are specific environmental goals communicated externally?		X	1	0	2				no extern communication	Only if specific energy and environmental goals are communicated externally can they be pursued and implemented in a targeted manner. External communication further increases the incentive to achieve goals.		
11567	Are specific targets for reducing CO2 emissions communicated internally?		X	1	0	2				no intern/ extern communication	Only if specific climate protection goals are communicated externally can they be pursued and implemented in a targeted manner. Internal communication makes employees aware of this and can contribute to the achievement of the goals.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11563	Are specific targets for reducing CO2 emissions communicated externally?		X	1	0	2				no extern communication	Only if specific climate protection goals are communicated externally can they be pursued and implemented in a targeted manner. External communication further increases the incentive to achieve goals.		
Organisation & Controlling: Heating oil													
11761	Is the heating oil consumption of the office and administration buildings recorded on a monthly basis? Can this be fully disclosed using billing data?	X		3	3	6				Central heating system from city!	The structured recording and analysis of energy consumption and the resulting costs is the central task in reducing energy costs and greenhouse gas emissions.		
11762	Is the absolute heating oil consumption of the office and administration buildings assessed regularly (monthly) and are deviations documented?	X		2	2	4				central heating system from the city	By continuously monitoring heating oil consumption and the resulting costs, developments can be identified and weak points in the company's energy consumption can be identified.		
11763	Are specific key figures (e.g. kWh/m²) generated to evaluate the heating oil consumption of the office and administration buildings?	X		1	1	2				central	The creation of specific key figures (e.g. L/m²) is mandatory in order to analyse the reasons for deviations and fluctuations in energy consumption and to initiate countermeasures in a timely manner.		
Organisation & Controlling: Key figures													
11508	Are key figures generated for resource consumption (e.g. film, paper, etc.)?		X	1	0	2				no key figures generated	Saving packaging material saves resources and reduces waste disposal transportation processes. However, this can only be determined and proven by means of meaningful key figures.		
11686	Are key figures generated for annual water consumption?		X	1	0	2				no key figures generated	The structured recording and analysis of water consumption and the resulting costs is the central task in reducing costs and greenhouse gas emissions. Continuous monitoring allows developments to be recognised and weak points to be identified and countermeasures to be implemented.		
11687	Are key figures generated for annual waste generation by type of waste?		X	1	0	2				no key figures generated	The structured recording and analysis of waste by waste type and the resulting disposal costs is the central task in reducing costs and greenhouse gas emissions. Continuous monitoring allows developments to be recognised and weak points to be identified and countermeasures to be implemented.		
11690	Are key figures generated for the annual generation of hazardous waste?		X	1	0	2				no key figures generated	Hazardous waste has an increased potential for negative environmental effects. The structured recording and analysis of hazardous waste and the resulting disposal costs is the central task in reducing costs and greenhouse gas emissions. Continuous monitoring allows developments to be recognised and weak points to be identified and countermeasures to be implemented.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11823	Are key figures generated for the annual refrigerant loss of air conditioning systems in the office and administration locations?		X	1	0	2				no key figures generated	Refrigerants and, in particular, losses of refrigerant have a significantly high contribution to the greenhouse effect. Depending on the refrigerant, more than 4000 kg of CO2e per kg of refrigerant is released here. This corresponds to a quantity of more than 1000 litres of diesel. By means of the structured recording and analysis of refrigerant losses and the resulting greenhouse gas emissions, developments can be identified, weak points can be identified and countermeasures implemented.		
11824	Are key figures for the annual loss of refrigerant in the cooling systems of the thermal trailers formed?		X	1	0	2				no key figures generated	Refrigerants and, in particular, losses of refrigerant have a significantly high contribution to the greenhouse effect. Depending on the refrigerant, more than 4000 kg of CO2e per kg of refrigerant is released here. This corresponds to a quantity of more than 1000 litres of diesel. By means of the structured recording and analysis of refrigerant losses and the resulting greenhouse gas emissions, developments can be identified, weak points can be identified and countermeasures implemented.		
Organisation & Controlling: Empty kilometres													
11523	Is the percentage of empty kilometres demonstrably below 10 percent?		X	2	0	4				15 %	A percentage of empty kilometres below 10 percent means a significant fall below the EU statistical value (17 percent). By reducing the percentage of empty kilometres from 20 percent to 10 percent, savings of up to 4,000 litres of diesel or 3,500 kg of LNG per vehicle could be achieved based on a mileage of 150,000 km per year.		
Organisation & Controlling: Employee motivation													
11696	Are employees regularly (at least annually) involved in environmentally-relevant training and/or further education?	X		2	2	4				Partially, trainings also with a part of environmental relevant training	Environmental and climate protection in the company is based on the broad commitment of our employees. In order to fully exploit this potential, employees must be informed, trained and motivated.		
11525	Is there a corporate suggestion system in place that allows employees to share ideas on how to reduce power consumption?		X	1	0	2				no corporate suggestion system	By actively involving employees in reducing energy consumption, they become sensitised to the issue over the long term.		
11658	Is there a corporate suggestion system in place that allows employees to share ideas on how to reduce heating energy consumption?		X	1	0	2				no corporate suggestion system	By actively involving employees in reducing energy consumption, they become sensitised to the issue over the long term.		
11659	Is there a corporate suggestion system in place that allows employees to share ideas on how to reduce fuel consumption?	X		1	1	2				Partially on the website	By actively involving employees in reducing fuel consumption, they become sensitised to the issue over the long term.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11535	If there is a corporate suggestion system, are employees financially involved in the proposed savings?		X	1	0	2				no corporate suggestion system - and no benefit	If employee proposals to reduce energy costs have been implemented and they have been proven to reduce energy costs, it is appropriate to provide financial support to the employee in question to encourage further proposals. In addition to direct monetary allowances, fuel vouchers, for example, are suitable as a financial incentive.		
Organisation & Controlling: Electricity													
11760	Are specific key figures (e.g. kWh/m²) generated to evaluate the electrical consumption of the office and administration buildings?		X	1	0	2				no key figures generated (e.g. kWh/m²)	The creation of specific key figures (e.g. kWh/m²) is mandatory in order to analyse the reasons for deviations and fluctuations in energy consumption and to initiate countermeasures in a timely manner.		
11647	Green electricity: Is green electricity used for the operation of the administration and storage locations (at least 90 percent of the absolute electrical consumption)?		X	2	0	4				no green electricity	By using green electricity, electricity-related CO2 emissions can be reduced by more than 90 percent. In addition, green electricity is produced from renewable and renewable raw materials, i.e. the energy sources are infinitely available (e.g. sun or wind) and the raw materials grow again within a very short time (e.g. biomass from wood, grain or organic waste).		
11648	Green electricity: Is there a guarantee of origin or is it certified green electricity?		X	2	0	4				no green electricity	If green electricity is used, it should be ensured that it has been certified or that a proof of origin is in place Only in this way can it be ensured that the purchased green electricity was actually produced from renewable forms of energy.		
Organisation & Controlling: Subcontractors													
11584	Are the pollutant classes of the transportation companies used queried when awarding contracts via freight exchanges?	X		1	1	2				partially	As part of a holistic approach to environmental and climate protection, the pollutant classes of the transportation companies used should be queried when awarding contracts via freight exchanges.		
Organisation & Controlling: Transportation quantities													
11530	Can transportation quantities for individual vehicles be recorded and documented electronically?		X	1	0	2				can not recorded and documented	Only through the transparent, monthly recording of the transportation volumes of the vehicles can statements be made about the developments in specific fuel consumption and deviations identified.		
Organisation & Controlling: Measures implemented													
11738	Can measures to reduce the amount of fuel consumption be demonstrated using billing and key figures?	X		2	2	4				partially	Measures to reduce fuel consumption should always be supported by meaningful key figures. The simplest way is to refer to fuel bills. In the case of business developments, it is also useful to create additional ratio indicators that take the development processes into account.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11748	Can measures to reduce electrical consumption in office and administrative buildings be proven on the basis of accounts and key figures?		X	2	0	4				no evidence provided	Measures to reduce electrical water consumption should always be supported by meaningful key figures. The simplest way is to refer to electricity bills. In the case of business developments, it is also useful to create additional ratio indicators that take the development processes into account.		
11749	Can measures to reduce heating energy consumption (heating oil or natural gas) in office and administrative buildings be proven on the basis of accounts and key figures?		X	2	0	4				no evidence provided	Measures to reduce heating energy consumption should always be supported by meaningful key figures. The simplest way is to refer to heating energy calculations. In the case of business developments, it is also useful to create additional ratio indicators that take the development processes into account.		
11751	Have measures been implemented in the last three years to reduce water consumption in office and administrative buildings?		X	3	0	6				no evidence provided	Measures to reduce water consumption lead directly to a protection of natural resources and protect the environment, since drinking water often becomes waste water, via which pollutants are flushed into the environment.		
11752	Can measures to reduce water consumption in office and administrative buildings be proven on the basis of accounts and key figures?		X	2	0	4				no proof	Measures to reduce water consumption should always be supported by meaningful key figures. The simplest way is to refer to water bills. In the case of business developments, it is also useful to create additional ratio indicators that take the development processes into account.		
11755	Can measures to reduce the generation of waste in office and administrative buildings be proven on the basis of accounts and key figures?		X	2	0	4				no evidence provided	Measures to reduce waste generation should always be supported by meaningful key figures. In the case of business developments, it is also useful to create additional ratio indicators that take the development processes into account.		
Organisation & Controlling: Certifications													
11767	Is there a certified energy management system in accordance with DIN ISO 50001 in its current version?		X	1	0	2				no Iso 50001 certificate	By introducing an energy management system, the energy use and energy consumption (e.g. diesel, LNG, electricity, heating) of a company is analysed with a view to identifying energy flows and the potential for energy efficiency improvements, defining medium-term energy saving targets and sustainably reducing energy costs.		

Fleet													
No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
Fleet: Aerodynamics													
11429	Is the adjustment angle of the roof spoiler/wind deflector checked regularly (at least every six months) and adjusted if necessary?		X	1	0	2				no proof	It must be ensured that the roof spoiler is set at the correct angle - neither too flat nor too steep - and that it in no case protrudes beyond the trailer, as this will increase the flow losses. Incorrectly adjusted roof spoilers can significantly increase the air resistance of the semi-trailer and increase fuel consumption by up to 3.4 percent. The height and angle of the roof spoilers/windshields should be checked regularly (at least every six months) as in some cases the drivers make manual changes for visual reasons.		
11432	Is the angle of the end flaps changed when the vehicle is moved over a longer distance without a trailer?		X	1	0	2				no proof	When moving semi-trailers over long distances without trailers, it should be ensured that the end flaps are adjusted at a negative angle (-15°) to reduce the drag by up to 5 percent.		
11657	Are semi-trailers fitted with special aerodynamics packages (e.g. Betterflow's aerodynamic package) used?		X	1	0	2				no special aerodynamic packages	Trailers with aerodynamics packages can reduce the specific fuel consumption of the semi-trailer by approx. 0.8 to 2 litres (according to the manufacturer) if the semi-trailer has a high motorway share.		
Fleet: Assistance systems													
11454	Are at least 90 percent of the vehicles that are mainly used in long-distance traffic equipped with distance control speed?	X		2	2	4				nearly 90	The use of automatic distance control speeds ensures a uniform speed and driving style, thus preventing increased fuel consumption/wear due to manual acceleration and braking.		
11456	Are at least 90 percent of the vehicles equipped with the fuel economy packages offered by the manufacturer?		X	3	0	6				no evidence provided	When making new purchases, care should be taken to ensure that the vehicles are equipped with the fuel-saving packages offered by the manufacturer in order to actively support the driver in improving his/her driving behaviour and to reduce fuel consumption in the long term		
Fleet: Driving behaviour													
11439	Are the cruise controls limited to 85 km/h, while maintaining the electronic speed limit (90km/h)?		X	1	0	2				not limited by 85	By limiting the maximum speed to 85 km/h, savings of up to 3 percent can be achieved with minimal time losses. In practice, however, it is known that a general deceleration of the vehicles to 85 km/h can lead to an increase in consumption due to the lack of momentum on uphill gradients. The combination of reducing the speed of the cruise control (85 km/h) while maintaining the maximum electronic speed limit (90 km/h) has proven to be effective in practice.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11545	Do drivers receive written information on efficient driving at regular intervals?	X		1	1	2				partially they do	Drivers can only improve their driving behaviour if they know the strengths and weaknesses of their own driving style. It is therefore mandatory to give the driver, at regular intervals, written instructions on how to drive efficiently.		
Fleet: Vehicle technology													
11442	Are special low-viscosity oils (e.g. 5W-40/ 5W-30) used in at least 90 percent of the vehicles?	X		1	1	2				5w-40 and 10w-40	When performing maintenance or service work, care should be taken to use low viscosity oils (0W or 5W) if approved by the manufacturer. The use of special low viscosity oils reduces friction in the engine and thus reduces fuel consumption by up to 2 percent. Furthermore, the use of low viscosity oils increases the service life of the engine.		
11444	Are at least 95 percent of the distribution vehicles, which are mainly used in local and regional traffic, equipped with an automatic start/stop function?	X		1	1	2				nearly 95	In local and regional transport in particular, fuel consumption can be reduced by up to 5 percent by using an automatic start/stop function, depending on the number of delivery and pick-up stops.		
11684	Have concepts for alternative fuels (e.g. biodiesel) already been implemented in the company?		X	1	0	2				no proof	Alternative fuels (e.g. Shell R33 Blue Diesel) contain a higher proportion of biodiesel and paraffin fuels. According to manufacturers, at least 22% of CO2 emissions can be saved compared to fossil fuels due to the more environmentally-friendly composition of the fuel. Please check that the HGV manufacturer has issued a corresponding approval before using alternative fuels.		
11662	Have concepts for alternative drives (e.g. LNG) already been implemented in the company?		X	1	0	2				no concepts have been implemented	In order to achieve the climate goals in transportation and to secure Europe as a business location, the political focus will be on alternative propulsion systems (e.g. electromobility, hydrogen technologies and alternative fuels) in the near future. Please develop appropriate concepts and implement them in order to counteract future regulations at an early stage.		
Fleet: Tyres													
11446	Is there an overview of the current tyre inflation pressure of the vehicles?	X		1	1	2				partially	Regular checking of tyre pressure (at least once a month) minimises diffusion losses (approx. 0.1 bar per month) and prevents additional consumption. In order to be able to take appropriate action in a timely manner, an up-to-date overview of the current tyre pressures of the vehicles should be available.		
11448	Is there an overview of the current tyre inflation pressure of the trailers?		X	1	0	2				no evidence provided	Regular checking of tyre pressure (at least once a month) minimises diffusion losses (approx. 0.1 bar per month) and prevents additional consumption. In order to be able to take appropriate action in a timely manner, an up-to-date overview of the current tyre pressures of the trailers should be available.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11449	Are rolling resistance-optimised tyres (at least Class B) used on at least 90 percent of the vehicles on the steering axle?	X		2	2	4				partially - Goodyear KMAX S 315/60 R22.5 Class C and class B	Changing from Efficiency Class D tyres to Efficiency Class B tyres reduces rolling resistance on the steering axle. This means that savings of up to 0.6 percent can be achieved.		
11450	Are rolling resistance-optimised tyres (at least Class B) used on at least 90 percent of the vehicles on the drive axle?		X	2	0	4				Goodyear KMAX D 295/60 R22.5 class c	Changing from Efficiency Class D tyres to Efficiency Class B tyres reduces rolling resistance on the drive axle. This means that savings of up to 1.2 percent can be achieved.		
11452	Are at least 90 percent of the vehicles equipped with tyre inflation pressure monitoring systems (steering and drive axles)?	X		1	1	2				nearly 90	If the tyre pressure falls below the prescribed pressure, the rolling resistance will increase and the tyre will become very hot. In addition to increasing fuel consumption, the service life of the tyres used is greatly reduced. Underinflation of the tyres by 1.5 bar, for example, can result in an increase in consumption of over 3 percent and a 25 percent shorter service life.		
11543	Are at least 90 percent of the trailers equipped with tyre pressure monitoring systems?		X	1	0	2				no proof	If the tyre pressure falls below the prescribed pressure, the rolling resistance will increase and the tyre will become very hot. In addition to increasing fuel consumption, the service life of the tyres used is greatly reduced. Underinflation of the tyres by 1.5 bar, for example, can result in an increase in consumption of over 3 percent and a 25 percent shorter service life.		
Fleet: Telematics													
11461	Are indicators specified by the telematics system (e.g. deceleration, idling speed, shifting behaviour) evaluated on a monthly basis to assess driver behaviour?	X		2	2	4				Partially.	A meaningful assessment of the specific (L/100km) and absolute (L total) fuel consumption of the vehicles and drivers can only be carried out in conjunction with driver behaviour. The indicators specified in the telematics system are suitable for this purpose.		
Fleet: Thermal trailer													
11730	Are refrigerants with a global warming potential of less than 2,000 used (e.g. R134A, R407C)?		X	3	0	6				no evidence provided	Refrigerants and, in particular, losses of refrigerant have a significantly high contribution to the greenhouse effect. Depending on the refrigerant, more than 4000 kg of CO2e per kg of refrigerant is released here. This corresponds to a quantity of more than 1000 litres of diesel. By using refrigerants with a "low" greenhouse potential, CO2 emissions released by refrigerant losses can be reduced by up to 50 percent.		
11825	Are the refrigerant losses less than 1 percent (compared to the amount of refrigerant in operation)?		X	3	0	6				no proof	Refrigerants and, in particular, losses of refrigerant have a significantly high contribution to the greenhouse effect. Depending on the refrigerant, more than 4000 kg of CO2e per kg of refrigerant is released here. This corresponds to a quantity of more than 1000 litres of diesel. By reducing/avoiding refrigerant losses, CO2 emissions can be significantly reduced.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
Fleet: Transportation organisation													
11701	Has a collaboration project already been implemented with the customers to improve the transportation structure (e.g. avoiding empty runs, increasing the transportation utilisation, optimising the delivery structure)?		X	1	0	2				no collaboration implemented	A collaboration with customers can, in particular, avoid empty runs and increase transportation utilisation. Proposals should be addressed and presented during regular discussions with the contracting authorities. By reducing the percentage of empty kilometres from 20 percent to 10 percent, savings of up to 4,000 litres of diesel or 3,500 kg of LNG per vehicle might be achieved based on a mileage of 150,000 km per year.		
Fleet: Maintenance and service													
11458	Are the tracking settings of the vehicles checked as part of the maintenance and repair work?		X	3	0	6				no evidence provided	The track settings of the semi-trailer and trailer should be checked regularly (at least every six months) in order to detect tracking errors in a timely manner and to correct any misalignment. Regular checking of the tyre pressure and the condition of the tyres can give initial indications of possible tracking errors. In particular, asymmetrical wear on the front wheels (usually on the shoulder of the tyres) is a clear sign of misalignment. On the one hand, the tyre profile is roughened and shows clear signs of friction and on the other hand it shows longitudinal lines (or burrs) at the profile edges.		

Office and Administration													
No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
Office and Administration: Building substance													
11669	Have thermographic images been taken of your office or administrative buildings to identify any thermal bridges?		X	1	0	2				no thermographic images been taken	Thermal bridges conduct heat to the outside more quickly than the rest of the surrounding surface. Thermographic images of the office and administrative buildings can identify these weak points and prevent heat loss. However, due to the high susceptibility to interference of thermographic images, they should only be made by a specialist.		
11672	Are office and administration buildings that do not meet the requirements of EnEV-09 insulated with additional thermal insulation (at least 90 percent of office and administration buildings)?		X	1	0	2				no evidence provided	The installation of thermal insulation will reduce the heat loss over the exterior walls. In practice, heat losses can often be reduced by more than two thirds.		
Office and Administration: Lighting													
11674	Are motion-dependent lighting zones (presence detection technology) defined in the office and administration buildings?		X	1	0	2				no motion dependent lightning zones (no sensor)	Motion-dependent lighting control is particularly useful if certain storage areas are rarely entered or if certain areas are poorly frequented.		
Office and Administration: Renewable energy													
11768	Are renewable energy systems operated in the office and administrative buildings (e.g. photovoltaic systems)?		X	2	0	4				no renewable energy systems operated in the office and administrative buildings (e.g. photovoltaic systems)	By operating energy generation systems, the electricity generated can be used to supply power to the office and administration buildings. This does not cause any direct CO2 emissions. However, for a meaningful assessment of the environmental benefits, indirect CO2 emissions (for the production and recycling of PV modules) must be taken into account. The CO2e conversion factor for self-generated electricity (from photovoltaic systems) currently stands, for example, at approx. 0.057kg per kWh.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11770	Do you use the self-generated electricity (e.g. from PV or CHP) to operate your own plants (own consumption)?		X	1	0	2				not using PV or CHP	Self-generated electricity from photovoltaic systems - in the case of systems currently in operation - pays off due to the low feed-in tariff, often only due to the self-used electricity (own consumption), as the feed-in tariff is often lower than the electricity costs incurred. Furthermore, self-used electricity is more sensible from an ecological point of view, since it does not generate direct CO2 emissions and only the indirect CO2 emissions (for the production and recycling of PV modules) have to be taken into account. If the electricity is fed into the grid, the losses from transmission and distribution of the electricity and the specific CO2e emissions of the energy mix used by the electricity provider (when purchasing electricity) must also be added to the electricity generation.		
Office and Administration: Heating													
11663	Is there a heat demand calculation for your office and administration buildings?	X		1	1	2				central heating system of the city	A heat demand calculation can be used to determine how high the heat demand of the office and administrative is and how the heating systems are optimally switched.		
11664	Is the boiler adjusted to the heat demand?	X		1	1	2				central heating system of the city	Older boilers are often oversized. Due to the energy improvements of the building envelopes and the reduction of standby losses of modern boilers, FUMO Solutions GmbH recommends checking whether the currently installed boiler is matched to the heat demand.		
11665	Are the maintenance intervals of the boilers observed and is compliance traceable by means of thorough documentation?	X		1	1	2				central heating system of the city	Lack of maintenance intervals has a direct impact on energy consumption. If the boiler is not maintained for a long time, the "energy consumption" for heat generation can increase by up to 10%.		
11668	Are heating pumps purchased according to the energy efficiency class (energy label)?	X		2	2	4				central heating system of the city	Since 2005, Europe's leading manufacturers of heating pumps have committed themselves to a uniform labelling of the energy consumption of heating pumps. A Class A pump requires on average only about one third of the electrical energy of a Class D pump		
11707	Do the boilers have an efficiency (boiler efficiency) of more than 95 percent?	X		3	3	6				central heating system of the city	The efficiency of the boiler is determined by the ratio of the heat energy generated to the fuel energy supplied. For the determination of the efficiency, mainly the heat losses caused by exhaust gases are taken into account (exhaust losses). The exhaust gas losses are determined, for example, during the inspection according to §1 KÜO (Ordinance on the Sweeping and Inspection of Installations) by the chimney sweep operation. The higher the efficiency of the boiler, the lower the energy losses and the more efficient the conversion of fuel energy into heat energy. Accordingly, the flue gas losses determined by the chimney sweep operation are subtracted from 100 percent to determine the efficiency.		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11704	Do work instructions exist for "proper heating and ventilation" or have employees been trained accordingly (demonstrably)?		X	1	0	2				no work instructions	During the heating period, the windows should be permanently closed to prevent heat loss. The air exchange should only be carried out by means of so-called shock ventilation (duration approx. 3 - 5 minutes) - i.e. with wide-open windows as far as possible opposite each other - in order to exchange the air without major heat losses.		
11706	Is the optimum heat demand (in °C) continuously maintained (e.g. by means of central heating control)?	X		1	1	2				partially - central heating system of the city	A reduction of the average temperature by 1°C means a heating cost saving of 6%. A central heating control system can significantly reduce heating costs. In conjunction with a heat demand calculation, for example, the optimum heat demand can be determined and the heating control adapted accordingly.		
Office and Administration: Cooling													
11679	Are refrigerants with a global warming potential of less than 2,000 used (e.g. R134A, R407C)?		X	3	0	6				no evidence provided	Refrigerants have a significant greenhouse potential, i.e. refrigerants make a major contribution to the greenhouse effect. While the combustion of one litre of diesel produces approximately 3.24 kg of CO2, this is 3922 kg for one kg of R404A. This means that the climatic effect of refrigerants is more than 1000 times higher than that of diesel engines. By using refrigerants with a "low" greenhouse potential, CO2 emissions released by refrigerant losses can be reduced by up to 50 percent.		
11826	Are the refrigerant losses less than 1 percent (compared to the amount of refrigerant in operation)?		X	3	0	6				no proof	Refrigerants and, in particular, losses of refrigerant have a significantly high contribution to the greenhouse effect. Depending on the refrigerant, more than 4000 kg of CO2e per kg of refrigerant is released here. This corresponds to a quantity of more than 1000 litres of diesel. By reducing/avoiding refrigerant losses, CO2 emissions can be significantly reduced.		
Office and Administration: Technical equipment													
11682	Do work instructions exist on the "correct handling" of computers and peripheral devices during periods of absence or have employees been (demonstrably) trained accordingly?		X	1	0	2				no work instruction for correct handling	To ensure that employees have knowledge of the energy-efficient operation of computers and peripheral devices, they should be regularly trained on this issue and be explicitly required to use energy-saving options (e.g. stand-by mode, energy-saving mode) by means of a work instruction.		
Office and Administration: Water													
11714	Are at least 90 percent of the fittings equipped with a flow regulator (constant flow regulator)?		X	2	0	4				not equipped with flow regulators	A flow regulator (constant holder) ensures that the water quantity - independent of the water pressure - can be limited and adapted to the demand. In practice, water consumption can be reduced by up to 60 percent with the aid of a flow regulator (constant holder).		

No.	Check criterion	YES / available not up to date	NO / not available	Weighting	Points scored	Maximum Score	Serious violation	Legal basis	Legal text	Status quo	Recommendation / Measure	Recomm. form	Recomm. product
11715	Are at least 90 percent of the WC systems equipped with a maximum of 6 litres of toilet flushing (as a two-volume flush box (e.g. 3 or 6 litres))?		X	2	0	4				only one volume flush box	With two-volume cisterns, the amount of water can be set and adjusted. The maximum amount of water for flushing the toilet should be 6 litres. Compared to conventional toilet flushing with a water volume of 9 litres, the use of two-volume cisterns can reduce water consumption by 30 to 60 percent per flush.		
11716	Is rainwater or grey water (e.g. water from wash basins) used for flushing the toilet systems?		X	1	0	2				not using rainwater	The use of rain or grey water (low-polluted water, which can be reused through treatment) in the toilet facilities saves drinking water.		
11718	Are at least 90 percent of the fittings in the sanitary area designed as self-closing valves?		X	2	0	4				no self closing valves	The use of self-closing valves allows better control of water consumption, as the water flow is automatically stopped after 10 - 15 seconds. In practice, the use of self-closing valves can reduce water consumption by up to 75 percent compared to conventional drain valves.		

Annex 3: Conclusion

For continuous improvement of environmental and climate relevant performance, the following points should be implemented until the next audit:

1. Please check to what extent rolling resistance optimised tyres (at least class B) on the steering and drive axle as well as on the trailer axle can further reduce fuel consumption.

2. Create an annual greenhouse gas inventory for your company. The unit for the CO2 balance is CO2e. To convert the units, please use the following conversion factors: 1 litre diesel = 3.24 kg CO2e, 1 kWh electricity = 0.323 kg CO2e and/or value on the bill (electricity labelling), 1 litre heating oil = 3.09 kg COe2, 1 kWh natural gas = 0.230 kg CO2e, 1 kg refrigerant depends on the gwp of the refrigerant used, 1 kWh district heating = 0.200 kg COe2.

3. In order to sensibilise, inform and motivate staff on the topic of environmental and climate protection, annual staff training should be carried out for administrative staff (e.g. energy-efficient office) and driving staff (e.g. energy-efficient driving).

4. Please check to what extent you can further reduce water and electricity consumption by using flow regulators, self-closing taps and motion-dependent lighting zones (presence detection technology) in sanitary facilities with a high staff frequency.

5.Develop an operational energy and environmental concept in which specific targets for the reduction of energy consumption and CO2 emissions as well as for the reduction of environmentally harmful impacts are set and plan appropriate measures to achieve them.