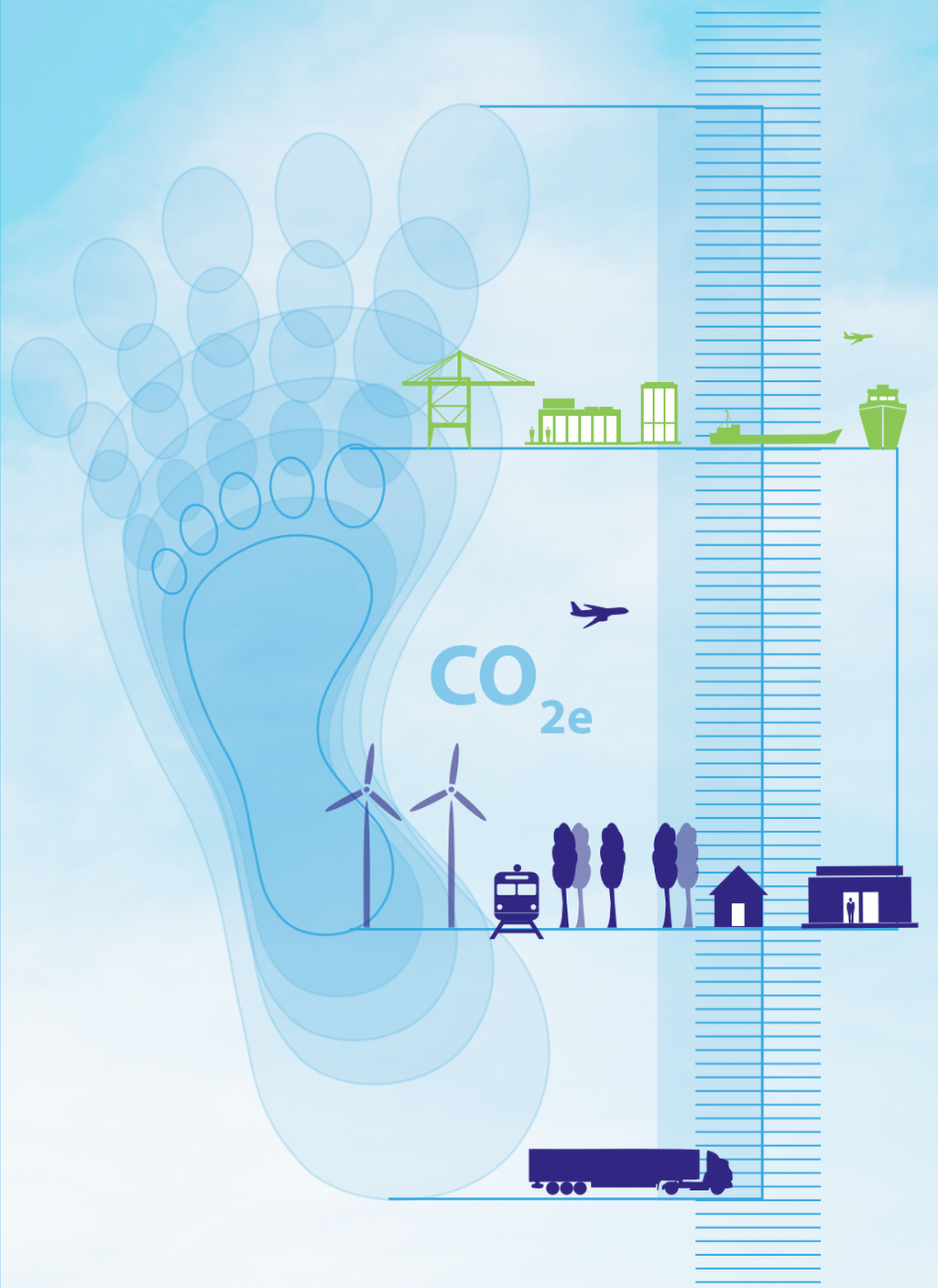
GUIDELINE 18 - CARBON FOOTPRINT IN LOGISTICS



Benchmarking

Comparing with the aim of improving

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Guideline 18 - Benchmarking
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Carbon Footprint in logistics

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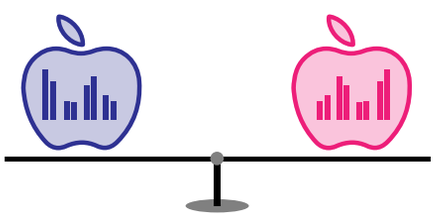
Benchmarking

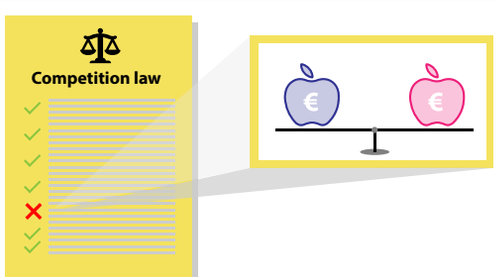
Comparing with the aim of improving

This guideline deals with the question of comparing the results of allocation calculations.

As soon as allocating emissions to cargo becomes a habit, the next question is obvious: can you say anything about performance by comparing figures? Are we doing well, can we do better, are the improvements we have made paying off and how well are we doing compared to others? These are logical questions.



When you are comparing figures it is important to keep the aim in mind and make sure you are comparing apples with apples.

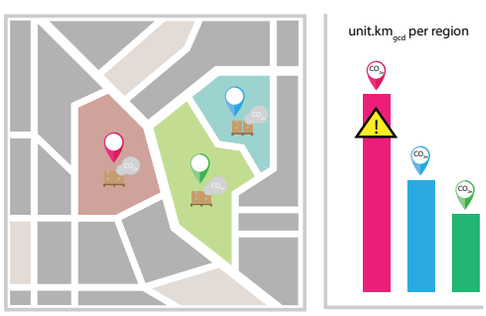


If companies that operate on the same market compare their performance, it is important to take competition law into account: many things are permitted, as long as this does not lead to the sharing of information on prices or market shares. To avoid problems, it can be extremely useful to get help from an independent third party, such as a trade association.

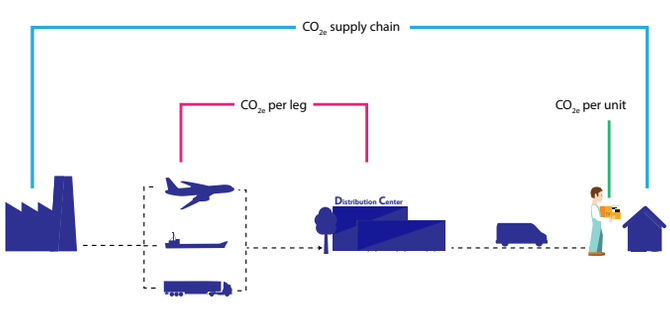
Internal benchmarking

The first application is, of course, internal benchmarking. You can find out a great deal just by performing simple analyses for each customer, region, route and vehicle. Imagine that a transporter analyzes the emissions of all its customers.

The first analysis relates to the emissions per unit for each customer/delivery location. Sometimes a significant difference may be visible in this figure. At first sight this may seem strange. After all, is the distance from the warehouse not roughly the same? Further analysis may reveal, for example, that one of the customers demands very disadvantageous delivery conditions or works with difficult order sizes, meaning that vehicles are less full. The signaling function of this difference is what matters here.



In other words, if there are significant differences in the emissions per unit.kmgcd per region, this immediately signals that you need to look at the details. Is the situation unavoidable or can something be done about it? Are these customers contributing to your operating result? These are all good questions.

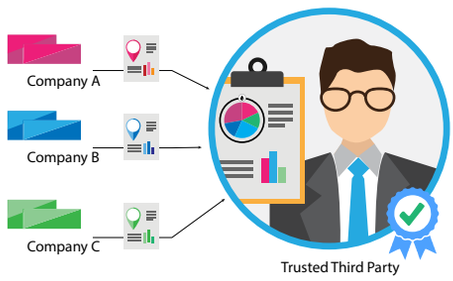


In the case of larger supply chains it is interesting to compare different lanes or the differences in the structure of the chain: does multimodal working actually reduce emissions? If the basic data are sufficiently detailed, it is possible to very quickly identify obvious discrepancies and what you can learn from them. Imagine that an investment has been made with the aim of reducing emissions (purchase of an LHV, cooperation with another party, IT investments, etc.). These analyses will immediately reveal whether the intended result is being achieved and whether adjustment is possible.

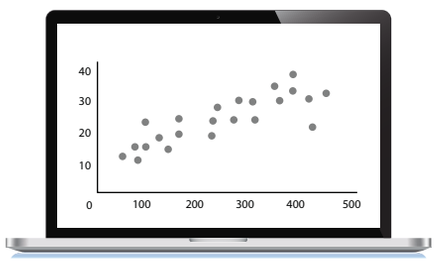
Community benchmark

For companies that operate on the same market are do roughly the same thing, (confidential) mutual comparisons can be very interesting. Here 'the same' refers either to shippers that operate on the same market or to transporters that offer the same type of transport. A great deal can be learned from such comparisons.

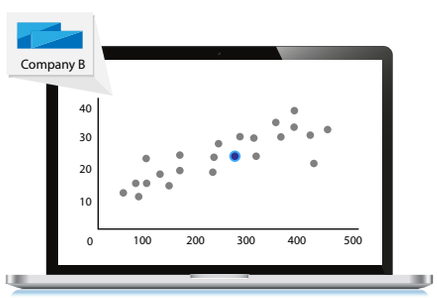
One tried-and-tested way of doing this originates from the oil industry:



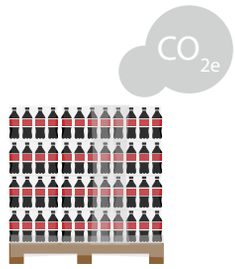
Each company performs measurements in the same way, with the same scope, and passes on the results to a trusted third party (TTP).



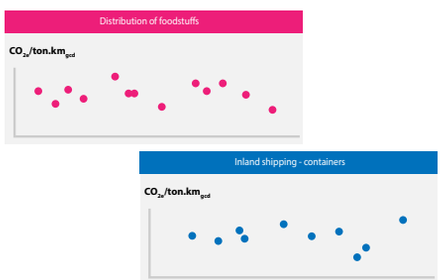
The TTP checks the data, ensures they are comparable and uses them to produce an anonymous 'scatter plot'.



Each participating company receives this scatter plot, on which only its own position is identifiable; other companies' positions cannot be deduced. This means that everyone receives their own specific version: a lot can be learned from this, but not the identity of each competitor whose performance can be seen.

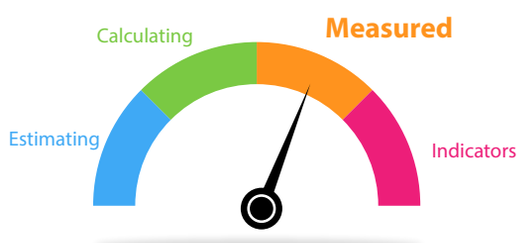


In the case of shippers this concerns the emissions per unit (grams or kilograms of CO_{2e} per unit) for a comparable scope: e.g. distribution transport of soft drinks and beer in the Netherlands.

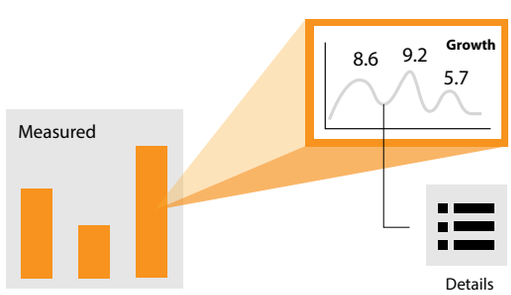


In the case of transporters it concerns the efficiency of a particular type of transport (grams or kilograms of CO_{2e} per unit. kmg_{cd}): e.g. distribution transport of foodstuffs by road in the Netherlands, or container transport by inland waterway.

A nice by-product of this method of community benchmarking is a representative indicator for a specific sub-market. These indicators can have a variety of uses:



As genuine, measured figures for monitoring the development of emissions in logistics (see guideline 22).



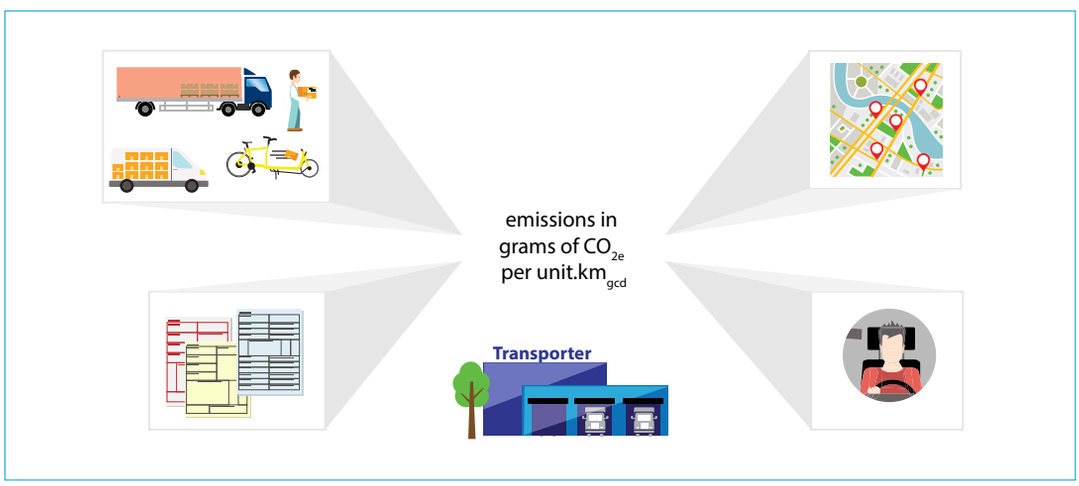
As an indicator for a particular part of the transport market, which smaller transporters can use to provide a guide figure to their customer if they are not yet performing measurements themselves (see guideline 22).

Assessing indicators

Indicators can therefore be extremely useful for companies that want to compare themselves with their peers, at least in cases where they perform roughly the same kind of work. They can give you a feel for trends, or for discrepancies that encourage you to examine a situation in more detail to identify the cause. A discrepancy is not necessarily a problem, as long as it can be explained and is the result of a conscious choice by the company.

An entirely different application for indicators is their use in commercial negotiations between the customer and contractor. The question is whether this is possible and whether it works: what does the indicator grams of CO_{2e} per unit.kmgcd tell you about the details of the transporter's operational management?

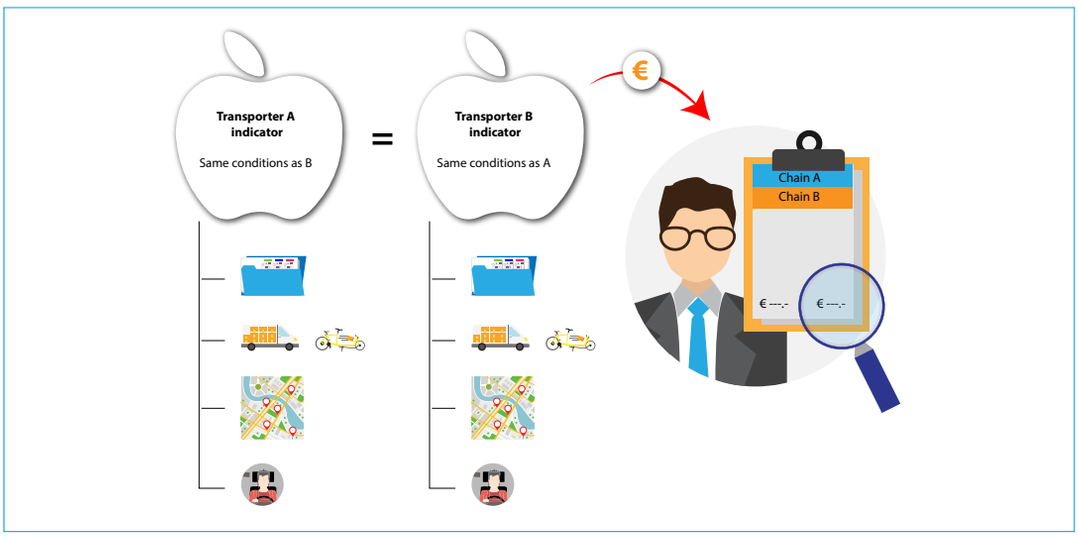
Does it provide purchasers with an additional argument in price negotiations? Can a customer compare transporters on the basis of this indicator?



The great thing about the indicator 'emissions in grams of CO_{2e} per unit.kmgcd' is that in itself it gives very little away about the operational management, other customers, or cost factors of the transporter. Numerous factors are brought together in a single figure:

- The combination of cargo,
  - The combination of consignment notes for 1 or more customers per vehicle;
- The customer's wishes and requirements;
- Time restrictions;
- Weight or volume restrictions;
- The use of people and resources;
- The route plan, road conditions, volume of traffic;
- Driving behavior.

If two indicators are compared, the first question is therefore whether all these factors were the same. Take the influence of delivery times, for example: if the customer schedules deliveries at unfortunate times for the same combination of cargo, the indicator will quickly increase, as the equipment can be used less efficiently. The choices made by the customer are also reflected in the indicator: the indicator tells you something about the overall combination.

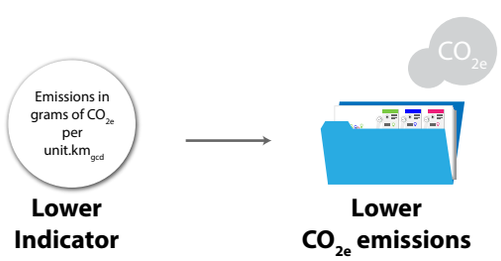


Only if the combinations of cargo, the routes and the conditions are identical do two indicators provide a direct insight into the differences between transporters. These situations are exceptions, however: in such a case it is more likely that price will be relied on for comparisons than these calculated indicators.

In all other cases two different figures do not tell you whether the transporter with the lower indicator is doing 'better' than the one with the higher indicator. The indicator depends on all the different factors referred to above, a significant proportion of which are determined by the customer.

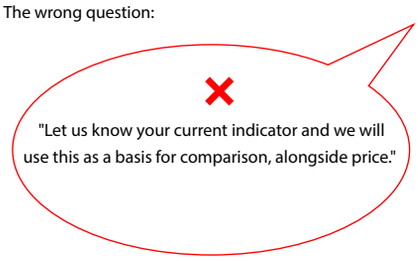
Quotations and tenders

If CO_{2e} emissions are important for customers, this will be taken into account when quotations are compared. If transporters regularly perform their own carbon footprinting measurements for their own company, this calculation will result in their own indicator.



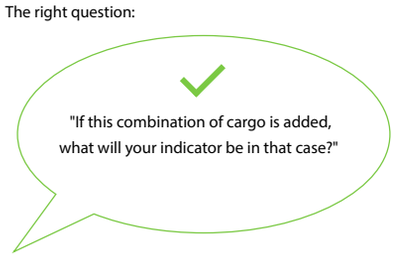
This indicator says something about the efficiency and emissions of the combination of the transporter and its customers together: the lower the figure, the more efficient the combination.

The wrong question:



A new customer now asks for a quotation to transport a certain combination of cargo to multiple parties. Past results are no guarantee for the future. In practice, taking on a new customer can unfortunately sometimes lead to an imbalance in the transporter's network. An imbalance means traveling more kilometers with less cargo or no cargo, which pushes up the average emissions. The transporter's indicator therefore increases, as do the costs. The reverse can also happen: additional cargo eliminates an imbalance and saves costs.

The right question:



For a transporter who wants to perform such a calculation, carbon footprinting works just as well, but in this case in a predictive way. If planning software is used to simulate what the trips and consumption will be when the new customer is added to the existing combination of cargo, the carbon footprint can be immediately calculated. In practice, the calculation will be performed for a number of variants.

The message of this guideline is that historical indicators can be extremely useful for companies, both transporters and customers, to help them improve their own organization. They cannot be used to make commercial decisions relating to specific orders. If they are employed in such cases, it is important to consider the future situation: what will happen to the indicator if the combination of cargo in question is added.

Carbon Footprint guidelines

0. Measuring, calculating, allocating and reducing

1. Allocating

2. Cargo

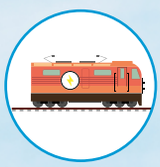
3. Origin and destination

4. Fuel

5. Inland shipping - containers

6. Inland shipping - bulk

7. Freight transport by rail



8. Air freight

9. Maritime and short sea shipping

10. Transshipment

11. Storage

12. Parcel transport and post

13. General road transport

14. Perishable and temperature controlled

15. Outsourced transport

16. Repositioning and empty kilometers

17. (Inter)national supply chains

18. Benchmarking

19. Intermediaries and platforms

20. Auditors and accountants

21. Data quality

22. The relationship between social goals and corporate goals

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