

UNDERSTANDING YOUR SHIPMENT'S CARBON FOOTPRINT

1. What is CO₂ equivalent?

CO₂ equivalent, or CO₂e, is a metric used to compare the emissions from various greenhouse gases (GHGs) based on their global warming potential (GWP). It expresses the impact of each GHG in terms of the amount of CO₂ that would create the same amount of warming. This allows for a standardized way to measure and report on GHG emissions.

The CO₂ equivalent figure shared with you on our offer represents the total GHG emissions associated with transporting your goods, including emissions from the vessel's fuel consumption and emissions from other sources such as port operations and inland transportation. It provides a comprehensive view of the environmental impact of your shipment.

2. Calculating accurate CO₂e estimates

To provide precise CO₂e calculations, Remant collaborates with a partner who uses advanced algorithms and datasets to achieve accurate carbon emissions reporting. They are a leader in maritime sustainability. With accreditations of the Global Logistics Emissions Council (GLEC) and the Sustainable Freight Forum (SFF), they ensure adherence to the highest industry standards, making them a leader in maritime sustainability.

Our partner employs a rigorous methodology integrating scientific principles with empirical data to obtain estimates that closely reflect reality. Key aspects of their approach include:

- **Global standards:** aligning calculations with the guidelines established by the Global Logistics Emissions Council (GLEC), ensuring consistency and reliability.
- **Data-driven methodology:** estimates are based on average emission factors from the International Maritime Organization (IMO). Historical shipping data for specific trade lanes in 2020 will be analyzed to improve data output. Granular data for distances, assets, and speeds guarantees a differentiation between scheduled voyages and services
- **Dynamic route optimization:** the use of advanced algorithms to calculate the shortest and most efficient routes, considering factors such as weather conditions, piracy risks, and fuel consumption regulations within specific emission control areas.
- **Post-shipment verification:** Through post-shipment analyses, further enhanced accuracy is guaranteed. Based on the vessel's recorded journey, this process compares the planned CO₂e with actual (a posteriori) emissions.

The actual CO₂e calculation is based on multiple variables such as distance, which is determined using UN/LOCODES (or nearest code in case no UN/LOCODE is available for a location), cargo weight, fuel type, type of container, speed, engine power of the vessel, etc.

3. The importance of transparency

Remant believes transparency is key to making informed decisions. By providing detailed CO₂e information, we empower you to choose the shipping option that aligns with your sustainability goals. Understanding the factors influencing your shipment's carbon footprint enables you to take steps to reduce your environmental impact.

4. Our commitment to sustainability

Remant is committed to reducing the environmental impact of its operations. The cooperation with our partner is a significant step towards this goal. Working together can provide accurate and reliable CO₂e data, helping you make more sustainable choices. If you have any questions about the CO₂e calculations or our sustainability initiatives, please do not hesitate to contact us.

5. FAQ

Why can CO₂ equivalent differ between shipping lines?

It is important to note that CO₂e values can vary significantly between shipping lines, even for identical routes. Each shipping line may have its methodology for collecting and reporting their data, which can lead to variations in the CO₂e calculations. Additionally, shipping lines may have different approaches to allocating emissions between co-loaded cargo. Some base it on volume, while others use weight or value as the allocation factor. These differences can result in varying CO₂e figures for the same shipment, even though the actual emissions from the vessel remain the same.

For road transportation, are all EURO classes incorporated in the calculation?

Our partner uses the emission factors from the latest ISO and GLEC documents, which reflect the European truck fleet's current performance, that contains Euro 6 trucks and other classes. Since Euro classes are related to air pollutant levels and not greenhouse gases, the classes are not included yet as a parameter for the road freight calculations.

Why can an HVO option be noticeably lower than an LNG option?

Fossil LNG overall is not much better than diesel for CO₂ purposes, especially since the well-to-tank factor of LNG increased last year.

What is the difference between well-to-tank, tank-to-wake, and well-to-wake?

Well-to-tank includes all greenhouse gas emissions from the production, transportation, transformation, and distribution of the fuel used to power the vehicle. Well-to-tank emissions exclude emissions from the manufacture of the vehicle.

Tank-to-wake contains all greenhouse gas emissions from fuel use onboard a marine vessel. This includes propulsion, energy generation, and auxiliary systems.

Well-to-wake is the sum of well to tank and tank to wake.

Specifically for countries where UN/LOCODES are limited, is it possible to do an API call (data interchange request) via specific coordinates?

UN/LOCODES return particular coordinates used to calculate the distance between two or more locations, meaning specific coordinates can also be used.