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Significance and calculation of carbon footprint

I. Carbon footprint significance

A carbon footprint is an index that shows the greenhouse gas (mainly CO2) emissions of a product, service or organization throughout its life cycle. It is a measure of the impact on global warming and climate change. Knowing the carbon footprint helps make informed purchase decisions, promote sustainable growth and reduce greenhouse gas emissions. Conscious management of these emissions enables companies to not only limit the negative impact on climate, but also raise their market value and better their reputation. Investing in sustainable practices is a step in the direction of ecological responsibility and long-term business success.

II. Benefits to clients

Information about the carbon footprint provides transparent data on the impact of a product or service on the environment. It makes it possible to compare products in terms of CO2 emissions and choose the one with a lower carbon footprint. A low carbon footprint strengthens the image of a responsible and sustainable company, but also usually leads to a reduction in costs and improvement in energy efficiency. It also helps meet regulatory requirements on environmental reporting, which may apply to our company, or the company of a client required to report the carbon footprint resulting from the entire supply chain that includes our company.

While doing business companies increasingly encounter requests from their counterparties to provide information on the so-called carbon footprint, which is a measure of the total amount of greenhouse gas emissions. In view of this, a growing number of companies will in the coming years be forced to determine the value of such emissions and present it to the outside world, even if not covered by so-called non-financial reporting requirements under sustainability regulations.

III. Carbon footprint calculation methods

There are many ways to calculate the carbon footprint, depending on the type of product, service and organization. The most popular method is the life cycle analysis (LCA), which includes CO2 emissions at all stages of a product's or service's life cycle, from obtaining raw materials to production, use and disposal. Energy consumption and other activities are converted into the amount of greenhouse gas emissions using emission factors. Each source's emissions are calculated by multiplying consumption (of fuel, energy) by the relevant emission factor. The factors, published by governments and international organizations (such as IPCC) may vary depending on the location and type of emission source. It should be noted that there are online carbon footprint calculators to help businesses calculate the carbon footprint of their products or services. It is, however, the best solution to entrust these determinations to specialists.

IV. Data and information needed for calculations

To calculate its carbon footprint a company needs detailed data on energy consumption, transport, materials and other factors that generate CO2 emissions. These data can come from the company's internal systems, invoices, reports and other sources. They can include the amount of fuels burned (in liters, cubic meters, kilograms), the amount of energy purchased (in kWh, MWh), as well as other more complex data, such as the number of kilometers travelled by vehicles not owned by the company or the weight of waste sent to landfills. Credible and current data should be used to arrive at an accurate view of the carbon footprint.

V. Presentation of carbon footprint information

Information about the carbon footprint may be presented to counterparties in many ways, for example on product websites, in brochures or sustainable growth reports. The information should be transparent, comprehensible, and easy to compare. Using visualizations may make it easier for our counterparties to understand the data.

VI. Importance of verification

Carbon footprint verification by an independent third party can increase credibility of information and build client confidence. There are various carbon footprint certification programs that can help companies verify their data and obtain a certificate. It should be stressed that a vital role is also played by certified auditors, who are tasked with not only checking the accuracy of greenhouse gas emission calculations, but also with evaluating compliance with relevant standards and identifying areas that need improvement.

VII. Working with counterparties

It needs to be stressed that in the process of determining their carbon footprint companies may, and even should work with their counterparties to reduce the carbon footprint of their supply chain. This is why when contracting the supply of products or services companies increasingly encounter requests for data on the carbon footprint left by their business. It should be noted that it is not only possible to exchange information on the carbon footprint of goods and services, but also to jointly implement solutions aimed at reducing CO_2 emissions and promoting sustainable business practices. By sharing carbon footprint information with their counterparties companies can build an image of responsible and sustainable business partners, contributing to the fight against climate change.

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VIII. Commitment and communication

Effective carbon footprint management requires commitment at all levels of the organization, as well as effective internal and external communication. It is key to educate and build ecological awareness amongst employees, clients and business partners. Companies often publish their results in annual reports, which not only increases ecological awareness, but also builds confidence and support for sustainable practices.

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