

Carbon Services. For a sustainable low-carbon society.

Global warming is a serious threat to mankind, primarily caused by the increasing emissions of greenhouse gases associated with human activities. As an internationally recognized greenhouse gas validator and verifier, the TÜV Rheinland Group plays a crucial role in ensuring that claimed emission reductions are real, quantifiable and directly contribute to the mitigation of climate change.

TÜV Rheinland, your global partner.

- Represented worldwide with more than 13,800 employees at 490 locations in 61 countries
- Accredited and active as GHG validator / verifier in various international emission trading schemes
- Positioned strategically to be close to key markets
- Extensive technical expertise within a wide range of sectoral scopes

TUVdotCOM. The noticeable difference.



The Internet platform TUVdotCOM illustrates the difference: Products, services, companies, systems and personnel tested by TÜV Rheinland are optimally documented and accessible from all over the world.



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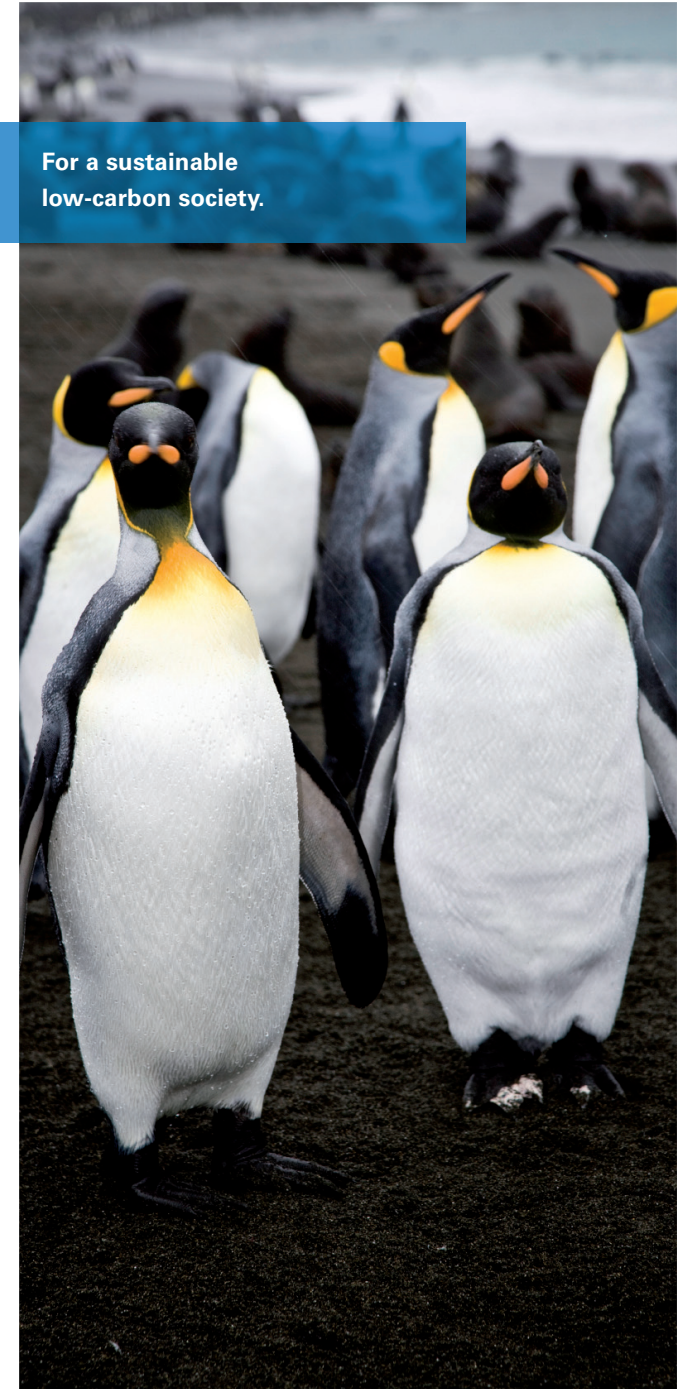
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Surefooted.

Our services for a sustainable low-carbon society.

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For a sustainable low-carbon society.

Validation and verification of greenhouse gas emission reductions based on the ISO 14064 series.

The ISO 14064 series provides specific requirements and guidelines for designing, maintaining and reporting on GHG inventories on organizational level and for quantifying and reporting on GHG emission reductions on project level. It aims to

- offer uniform criteria and procedures for GHG accounting and verification
- achieve consistency among GHG emissions reporters
- promote clarity, transparency and credibility in quantifying GHG emissions towards various stakeholders
- allow organizations to manage their liabilities and risks associated with GHG emissions

Our extensive expertise allows us to perform validation and verification of GHG emissions in international GHG programmes, national schemes and voluntary emission reduction programmes.

TÜV Rheinland is your assurance provider complying with the requirements of ISO 14064 Part 3 which contains specifications for validation and verification of greenhouse gas assertions.

As an independent third party we guarantee that your emission reduction efforts are real, transparent and comprehensible and add significant value to your venture to showcase your commitment to environmental responsibility.

Product Carbon Footprint – PCF

The Product Carbon Footprint (PCF) refers to the overall amount of GHG emissions throughout the life-cycle of products. It provides an inventory of all GHGs being generated at each stage of the product's life-cycle and identifies GHG emission sources and potential reduction opportunities.

In addition to identifying the Carbon Footprint of your goods and services, we offer the appropriate certification that will help you to:

- make your product recognizable in a highly competitive market
- eventually make a “carbon neutral” statement.

Verified Emission Reductions

Verified Emission Reductions are project-based carbon credits, which are traded with purposes other than complying with international treaties or environmental legislation. Companies, organizations and individuals can offset their own GHG emissions resulting from activities such as manufacturing, transportation, product use or even personal travel by purchasing emission reduction units. This enables the buyer to:

- contribute to achieving a low-carbon society
- complement existing product/service marketing strategies
- boost corporate image and communication with potential clients
- help achieving Corporate Social Responsibility (CSR) commitments

Corporate Carbon Footprint – CCF

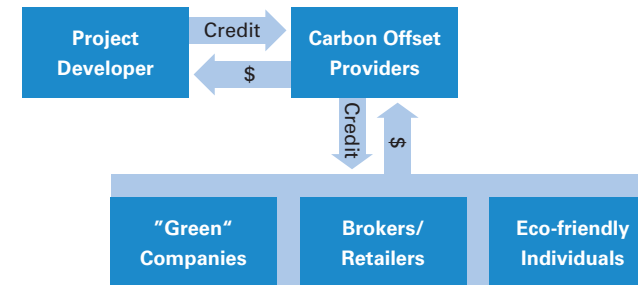
The Corporate Carbon Footprint accounts for GHG emissions from all business streams. It can be utilized as an indicator of your operational efficiency and directly identifies your hot spots and areas of greatest reduction potential.

Knowing your Corporate Carbon Footprint will help you to:

- implement quality assurance
- strengthen your position in the supply chain or within the Holding Group
- prepare for potential upcoming mandatory GHG programmes
- become certified carbon neutral by offsetting your GHG emissions using CO₂ certificates

We offer to perform validation and verification of Voluntary Emission Reductions in the emerging voluntary carbon market schemes, including

- The Gold Standard (GS)
- The Voluntary Carbon Standard (VCS)
- The Chicago Climate Exchange (CCX)
- CSA CleanProjects
- Social Carbon
- The Climate Registry (TCR)
- Climate Action Reserve (CAR)



European Union – Emissions Trading Scheme – EU-ETS.

In January 2005, the EU Greenhouse Gas Emissions Trading Scheme (EU-ETS) commenced operation as the largest multi-country, multi-sector greenhouse gas emissions trading scheme.

In the first and second commitment periods, more than 10,000 installations have been covered from industrial sectors such as:

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|-------------------|----------------|
| ▪ Energy | ▪ Ceramics |
| ▪ Refinery | ▪ Glass |
| ▪ Coke Oven | ▪ Cement |
| ▪ Sintering Plant | ▪ Lime |
| ▪ Iron & Steel | ▪ Pulp & Paper |

As an accredited EU-ETS verifier, we offer verification of GHG emissions in EU Member States and have been active in developing monitoring and reporting guidelines, implementing the scheme in new EU Member States, and reviewing permits, monitoring plans and verification reports.

