

TÜV®





Sustainability

SUSTAINABILITY IS GOOD FOR YOUR BUSINESS.

The importance of integrating sustainability into business strategies is well recognized. It is clear, that making sustainability part of your business, offers a variety of benefits, such as increased growth, improved brand value and reputation, both internally and externally.

Improving the sustainability performance of your business requires a holistic risk assessment of the environmental and social impacts, which it is exposed to. Identifying and minimizing these risks, such as those posed by Climate Change and Compliance Regulations, will enable you to differentiate your business in an increasingly competitive market place.

TÜV NORD CERT offers a range of services to support your business in assessing and improving of your sustainability performance, enabling you to fulfil your sustainability business goals.

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What is a Carbon Footprint?

A Carbon Footprint defines the total amount of greenhouse gases generated within the lifecycle of a product, the activities of an organization, during an event or by a single person.

Why calculate your emissions?

More and more companies want to, or are obligated to communicate their greenhouse gas emissions – for example in the course of Environmental or Energy Management Systems and for sustainability reporting. Additionally, CO₂ emissions are becoming an increasingly important criterion in the investor decision-making process.

CARBON FOOTPRINT

Apart from this, commitments in climate protection measures may be useful for marketing activities.

Why verify your Carbon Footprint?

Companies enhance their credibility and transparency towards clients, investors and the public by having their calculations and assertions checked by an independent, competent and well-recognized party.

Our services: Verification of a Corporate Carbon Footprint according to ISO 14064-3 ■ Verification of a Product Carbon Footprint according to TÜV NORD Standard TN-CC 020 Verification of other Carbon Footprints like for events, buildings or services according to TÜV NORD Standard TN-CC 020 More information →

Our services:

- Carbon-neutral organization/ company
- Carbon-neutral product
- Carbon-neutral gas
- Carbon-neutral event
- Carbon-neutral building
- Carbon-neutral service
- Carbon-neutral micro-enterprise
- + More information →

CARBON NEUTRALITY

What is Carbon Neutrality?

Carbon neutrality describes the offsetting of emissions generated by a company, a product, by deleting an appropriate amount of carbon credits equivalent to the amount of emissions generated

Why offset your carbon emissions?

Offsetting generates demand for additional climate protection projects and is therefore of real benefit to the atmosphere. On the other hand, commitment to carbon neutrality may be used for marketing purposes and is one further step to a zero carbon community.

Verified offsetting

It is not always easy for companies to communicate efforts with respect to carbon neutrality and carbon emissions reductions to clients, investors or the public and to provide evidence to what has been achieved. Verification provides credibility and transparency with respect to the whole process of being carbon neutral.

EMISSIONS TRADING SCHEMES (ETS)

What is an ETS?

An emissions trading scheme is a tool to combat climate change and reduce greenhouse gas emissions within a sector and/or region. For example, the EU-ETS is the world's first major carbon market, and remains the biggest one to date. It covers 31 countries, covering more than 11,000 heavy energy-using installations, accounting for around 45% of the EU's total greenhouse gas emissions.

How does an ETS work?

An ETS generally works on the cap and trade principle. A cap is introduced on the total amount of GHG emissions within the sector and/or region. The cap is reduced over time and therefore the total emissions reduce. Within the cap, organisations receive or buy emission allowances, which also can be traded.

Reasons for verification

Verification from an independent body offers organisations compliance with local or regional legislation, minimising risk of any penalties being imposed as a result of non-compliance.



What is CORSIA?

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), similar to the EU-ETS, presents a mechanism to systematically reduce carbon emissions within the aviation sector.

How does it work?

CORSIA requires airlines to both monitor and report their emissions resulting from international flights as well as to offset emissions above a baseline value from 2021 onwards.

Obligatory reporting of airline emissions in all ICAO member states will start with the reporting year 2019. During the pilot and first phase of CORSIA until 2026, participation in offsetting is voluntary on ICAO member state level. From 2027 onwards, binding offsetting requirements will apply.

Reporting requirements

- The operator prepares an emissions monitoring plan including one of five methods to determine the fuel use
- The Competent Authority in the designated member state approves the emissions monitoring plan
- The operator monitors its emissions according to the emissions monitoring plan during the respective year
- After the reporting year, the operator calculates its emissions according to the emissions monitoring plan and prepares an emissions report
- The operator presents the verified emissions report to the member state
- The verifier presents the verification report to the member state

From 2021 onwards, additional offsetting requirements will apply.

CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION (CORSIA)



What are GHG emission reduction projects?

GHG emission reduction projects include a variety of technologies, which lead to GHG emission reductions. Those include e.g. agriculture, energy or transport. Credible GHG emission reduction projects adhere to the requirements of recognized programs such as the CDM, Gold Standard or VCS. Certified projects will be issued tradeable GHG credits.

Our services:

Validation and Verification according to the following GHG emission reduction programs

- Clean Development Mechanism (CDM)
- Gold Standard
- Verified Carbon Standard (VCS)
- + More information →

GHG EMISSION REDUCTION PROJECTS

Need for GHG emission reduction projects

Organisations around the world are recognizing the importance of climate change, and are thus trying to reduce GHG emissions. Those emissions, that cannot be avoided may be neutralized or offset by using carbon credits, generated by certified emission reduction projects.

Verification Process

Each project follows a two-step process of validation and verification. During the validation phase, the project design is assessed against the chosen project development requirements, which is a prerequisite for registration of a project. Verification is a periodic review to determine the actual GHG emission reduction related to the project activity.

Energy Services

What is an Energy Management System?

An Energy Management System supports and guides companies and institutions in the systematic setting up and operation of energy management systems (EnMS) and the related processes for the continuous improvement of energy efficiency. The requirements are laid out in the International standard ISO 50001.

ENERGY MANAGEMENT SYSTEM

Benefits of Certification

Implementing an Energy Management System offers various benefits to organisations, such as

- Identification of possible savings potentials
- Lower energy costs
- Reduced CO₂ emissions
- Improved sustainability (resource efficiency)
- Image enhancement and greater market opportunities
- Compliance with various energy legislation, such as the European Energy Efficiency Directive (EED)
- Tax relief opportunities (in certain countries



Energy Services

Our services:

Energy Audits according to EN 16247-1

+ More information →

ENERGY AUDITS

What is an Energy Audit?

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

Benefits of an Energy Audit

Our energy audit services can provide a range of benefits. The findings of an energy audit can be a good reference for your management in supporting commercial decisions ranging from capital investment projects through to implementation of an Energy Management System (EnMS) in accordance with ISO 50001.

Sustainability Services

What are Green, Social & Sustainability Bonds?

- Green Bond: bond instrument, where the proceeds are used to finance or refinance new or existing Green Projects aligned with the Green Bond Principles (GBP)
- Social Bond: bond instrument, where the proceeds are used to finance or refinance new or existing Social Projects aligned with the Social Bond Principles (SBP)
- Sustainability Bond: bond instrument, where the proceeds are used for a combination of Green and Social Projects

Benefits of issuing Green/Social/Sustainability Bonds

Issuing a green, social or sustainability bond demonstrates leadership and fosters sustainable development while providing long-term finance opportunities.

Our services:

Second Party Opinion: Alignment of the Bond Framework

with ICMA's Bond Principles

Assurance:

Compliance of the bond with the Bond Framework

MANAGEMENTALISM

+ More information →

GREEN/SOCIAL/ SUSTAINABILITY BONDS

From an issuer's perspective, issuing these types of bonds increases the investor base, such as pension funds, hedge funds etc. From an investor's standpoint, these types of bonds are becoming increasingly popular, because they can offer the same rates of return as vanilla bonds, but by investing in sustainable projects.

Sustainability Services

CLIMATE BONDS

What are Climate Bonds?

Climate Bonds are a form of green bond and are used to finance or refinance green projects related to climate change.

Climate Bonds Initiative (CBI)

The CBI is a not-for-profit organization which has developed the Climate Bonds Standard (CBS), as well as the Climate Bonds Taxonomy. The former sets out criteria for Pre- and Post-Issu-ance certification, and the technical requirements of the sector criteria for each project type. The Taxonomy describes the different categories of Climate Bonds and specific Project types within them, e.g. the energy category contains, amongst others, solar and wind projects. Only projects, which have approved sector criteria, can be certified against the CBS.

Certification Process

Certification is carried out in two stages. Pre-Issuance Certification is performed prior to bond issuance, focusing on eligibility of assets and the issuer's internal processes. Post-Issuance Certification focuses on the actual use of proceeds and reporting. Post-Issuance Certification needs to be performed within 24 months after Bond Issuance.

Our services

- Pre-Issuance Certification of Climate Bonds against the CBS
- Post-Issuance Certification of Climate Bonds against the CBS





SUSTAINABILITY Assurance of Sustainability **REPORTING** Reports according to ISAE3000 or AA1000AS **ASSURANCE**

Our services:

+ More information →

What is a Sustainability Report?

A sustainability report is a formal document published by a company or organization disclosing the economic, environmental and social impacts related to its business activities. A sustainability report can also serve as a platform to present an organisation's strategy and values.

Benefits of Sustainability Reporting

Besides legal compliance (e.g. with the EU regulation on Non-Financial Reporting), there are various benefits for organisations to issue a sustainability report

- Building trust among stakeholders
- Brand Enhancement
- Strategy Development
- Competitive Advantage
- Customer Loyalty
- Access to financial capital

Benefits of Assurance

An independent assurance of your report, aside from risk mitigation, offers various advantages to your business

- Credibility of reported information
- Assessment of systems and processes related to reporting
- Adherence to various reporting guidelines and initiatives (e.g. UNGC, GRI)
- Adherence to local legislation related to CSR Reporting (e.g. 2014/95/EU)
- Identification of opportunities for improvement



Sustainability Services

LIFE CYCLE ASSESSMENT (LCA)

What is LCA?

LCA is a tool to assess environmental impacts associated with all stages of a product's life from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. Organisations use LCA to identify sources of environmental impacts and reduce material or financial inputs. Consumers use LCA to compare products and make informed decisions.

How does LCA work?

According to the ISO 14040 and 14044 standards, a LCA is carried out in four distinct phases:

- Goal and Scope Definition
- Inventory Analysis
- Impact Assessment
- Interpretation

Benefits of verification

Having your LCA verified by an independent body ensures the correct assessment of your environmental benefits and thus allows

- comparability of products
- optimisation of process and material flows
- financial savings
- increased consumer credibility



Sustainable Resources Services

What is Sustainable Biomass?

Sustainable biomass describes any type of biomass, which, by certification has been recognized to be sustainably produced and distributed. Sustainable biomass provides means to meet the increasing demands for fuels and other products.

Our services:

Certification according to the EU Renewable Energy Directive

- ISCC
- REDcert

Voluntary certification

- ISCC Plus
- REDcert²
- + More information →

SUSTAINABLE BIOMASS

Scopes of Sustainable Biomass Certification

- Biofuels (EU Renewable Energy Directive)
- Food, Feed (voluntary certification)
- Bio-based products in the Chemical Industry

Benefits of Certification

- Legal compliance with EU Renewable Energy Directive
- Sustainable production
- Market recognition
- Development of new markets

Sustainable Resources Services

What is Sustainable Forestry?

Sustainable Forestry balances the needs of the environment, wildlife, and forest communities—supporting decent livelihoods while conserving our forests for generations to come.

Chain of Custody

Chain of Custody" (COC) product certification relates to wood from certified forests and forest management. This particularly affects the following stages within the supply chain:

- Procurement
- Processing
- Storage
- Sale

Benefits of Certification

Certified companies demonstrate commitment to the environment and to ethical behaviour. At the same time, the wood can be clearly identified at any time and at all stages of processing and trading. Inspection and certification by TÜV NORD CERT provides clear benefits to the customer and market partners, such as:

- Increased confidence through proof of fulfilment of the requirements of Internationally-recognised standards
- Greater acceptance of the wood and wood products on the part of customers and consumers who place importance on proof of origin
- Acquisition of new groups of customers who have a high level of environmental awareness when making purchases
- Use of recognized labels as an effective marketing instrument over competitors without the certification
- Proof that the wood does not originate from questionable sources

SUSTAINABLE FORESTRY



Sustainable Resources Services

Our services:

Assessments according to the LBMA Responsible Sourcing Programme for

- Responsible Gold
- Responsible Silver
- + More information →

LBMA RESPONSIBLE SOURCING PROGRAMME (LBMA)

What is the London Bullion Market?

The London Bullion Market is the world's most important overthe-counter (OTC) market for trading of precious metals (e.g. gold and silver).

Responsible Sourcing

LBMA has developed a responsible sourcing programme to protect the integrity of the global supply chain for the wholesale precious metals markets. The programme requires refiners to be audited annually.

Benefits of Assurance/Verification

Any refiner applying to be accredited by the LBMA needs to undergo a responsible sourcing audit by a third party to become a member of the Good Delivery List.



TÜV NORD CERT - you can rely on our expertise

"Throughout the world the name TÜV® stands for safety and quality – and has done for more than 150 years. In German-speaking countries the brand has a familiarity rating of 99 per cent and is synonymous with reliability. Consumers trust a company, a product or service much more if it bears a TÜV® test mark."

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TUV NORD /
Certification

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