# Carbon Footprint

## Greenhouse Gas (GHG) Inventory Verification

Companies, institutions and government agencies are increasingly responding to customer and regulatory demand for carbon footprint reporting. Ducon offers ISO-14065 accredited third-party verification of carbon footprints (i.e., GHG inventories).

### PROFESSIONAL SERVICES

Ducon is a recognized leader in third-party certification, assessment, and testing around the globe for businesses, institutions, NGOs and government agencies. Ducon professionals will guide you through the process, and assess whether your emissions inventory is complete, accurate, and compliant with applicable reporting standards. We specialize in:

- **Personalized Attention.** We offer a high level of service tailored to your needs.

- **Technical Expertise**. We provide unmatched professional expertise in independent verification services. In addition, we have extensive knowledge of greenhouse gases based on our work certifying natural resources and conducting life-cycle assessments.

- **Rapid Turn-Around.** We can meet your demand for timely and efficient verification of your inventory.

Ducon offers verification for The Climate Registry (TCR), the Carbon Disclosure Project (CDP), and the World Resources Institute (WRI) GHG Protocol. We are accredited to ISO 14065 for GHG Verification by the American National Standards Institute (ANSI).

### GHG INVENTORY MEASUREMENT SERVICES

Ducon also provides greenhouse gas (GHG) inventory measurement services to help you develop your carbon footprint. This service assists clients in their efforts to report GHG emissions on a voluntary basis. GHG inventory measurement is conducted using advanced life-cycle assessment (LCA) metrics.

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## BENEFITS OF VERIFICATION

• Meet GHG reporting objectives for financial, environmental, marketing, and corporate social responsibility performance

• Gain a competitive advantage

• Determine GHG emissions baseline as basis for increasing operational efficiency

• Strengthen market position through voluntary GHG emissions reporting

• Prepare for potential governmental regulation of GHGs

• Obtain reliable GHG emissions inventory for risk management

• Increase shareholder value through leadership efforts

## CHOOSE DUCON

Ducon has been providing global leadership in third-party environmental and sustainability certification, auditing, testing, and standards development for nearly 30 years. Our programs span a wide cross- section of industries, recognizing achievements in green building, product manufacturing, food and agriculture, forestry, retail, and more. We are accredited to provide services under a wide range of nationally and internationally recognized certification programs. Consistent with our mission, we are a chartered benefit corporation and Certified B CorpTM, reflecting our commitment to socially and environmentally responsible business practices.

## VERIFICATION PROCESS OVERVIEW

**1.Application.** Complete an application form, including a description of the project and its location. Ducon staff will return a proposal to you for signature. To initiate the verification process, return a signed proposal and contract agreement.

**2.Submit Project Documentation.** The qualified SCS verification team reviews your submission for completeness and conducts a desk review of all documentation.

**3.Site Visit.** SCS conducts site visit(s) to assess project compliance with applicable program standards.

**4.Verification Report.** Ducon audit team makes a report

## Science-based

Stakeholders are looking for independent verification that organizations are meeting their net zero promises and on track with both near (2030) and long (2050) term targets.

### STEP ONE – DEFINE YOUR GHG BASELINE

Depending on your industry, GHG emissions will include scope 1 and scope 2 emissions, plus any relevant scope 3 categories.

- Scope 1 – direct emissions– company facilities, vehicles, etc.
- Scope 2 – indirect energy-related emissions – purchased electricity, heating and cooling, etc.
- Scope 3 – other indirect emissions:
  - Investments
  - Franchises
  - Leased assets (upstream and downstream)
  - Purchased goods and services
  - Capital goods
  - Fuel and energy (not in scopes 1 and 2)
  - Transportation and distribution (upstream and downstream)
  - Operational waste
  - Business travel
  - Employee commutes
  - Processing of sold products
  - Use of sold products
  - End-of-life treatment of sold products

### STEP TWO

The GHG inventory must be verified annually to demonstrate your progress against defined targets, and it should follow an internationally accepted standard, for example ISO 14064-1 – International Standard for GHG Emissions Inventories and Verification – or the GHG Protocol.

## Reporting

Your annual GHG inventory report should contain evidence of your data collection system, consolidation approach, operational boundaries, emissions and exclusions, base year recalculation policy and GHG calculations. Operating in line with ISO 14064-1 or the GHG Protocol will ensure it complies with generally accepted standards for GHG emissions reporting.

## Ducon verification

Ducon GHG emissions verification is carried out in line with ISO 14064-3 requirements.

## Benefits

- Identification of risks, errors and omissions in GHG emission reporting
- Understanding of impact on materiality
- Recommendation on improvements to meet compliance with GHG emissions accounting and reporting procedures
- Increased consistency and harmonization of approaches across operating companies with standardized checks

# Towards net zero

It seems in today's business landscape every organization is talking about their 'pathway to net zero'. Greenhouse gas (GHG) emissions are no longer a fringe concern, with a growing number of consumers, investors and governments taking an active interest in how businesses plan to achieve net zero.

## Changing drivers

Regulatory authorities around the world are responding to the need for greater action on GHG emissions. New legislation is being introduced to ensure organizations report their carbon footprint.

Simultaneously, investors' interest is shifting and while financial materiality remains core, environmental, social and governance factors are now also included in their decision-making process. A fundamental part of their assessment will consider GHG emissions and the ability to meet climate pledges.

Verified GHG emissions inventories provide confidence your data is accurate and allows for transparent disclosure of your progress in meeting Net Zero Targets.

## Ducon Climate Change Solutions

*GHG accounting and verification to help you meet your climate pledges*

# Net zero

**UNDERSTAND YOUR EMISSIONS**

Calculation of your GHG emissions should cover direct and indirect emissions, including value chain emissions both upstream and downstream. Value chain emissions are the hardest to tackle as they sit outside your direct control but, more often than not, represent your biggest impact. Scope 3 emissions' accounting is a journey that can start with approximations based on a robust methodology and consistent assumptions. Ducon can help you with methodology and assumption to identify hotspots (Mapping) and design a purposeful data capture strategy. Delaying assessments of scope 3 emissions because data is not readily available will negatively affect your net zero ambition and blind investors.

**UNDERSTAND YOUR PORTFOLIO EMISSIONS**

Further quantification and data quality improvement on Scope 3 emissions can also be achieved, especially for manufacturing companies, carrying out Product Carbon Footprints or Lifecycle Assessments (LCA). While the organizational Scope 3 footprint has a more holistic approach to upstream and downstream impacts, the product footprint identified hotspots of specific products and allows for comparison with similar products. Organizational Scope 3 footprint and product footprint are complementary and mutually beneficial in assessing risks and opportunities linked to decarbonization of supply chains.

**SET YOUR TARGETS**

A robust baseline and a coherent carbon management and data collection system are the pre-requisite to set achievable and incremental reduction targets. The Net Zero Standard call for targets in line with science and sets near and long-term minimum ambition requirements. When setting targets, consider the feasibility of your decarbonization initiatives, place priority on those achievable in the near term.

**IMPLEMENT AND COMMUNICATE**

There is no one size fits all when it comes to implementing decarbonization plans as each industry faces different challenges. Nonetheless, some key initiatives are common to all: demand-side measures include lowering the demand for primary resources by increasing circularity, increase energy efficiency, consider the use of renewable energy, replace feedstock or fuels with more sustainable options, reduce water consumption and waste. Verify and disclose your progress data with confidence.

# Flexible measurement options to meet varied applications



Cavity Ring-Down Spectroscopy (CRDS) analyzer
- Very compact light weight mounted on drones
- Very low-level (PPB) measurements for CH4 and CO2 in air samples





Gas Chromatography (GC-TCD FID PID MS ECD) analyzers
- Very compact light weight portable in vehicles
- Very low-level (PPB) measurements for SF6, N2O, PFC, HFC in air samples
- Use ECD FID PID TCD analyzer benches for accurate measurements

# DRIMS2

The Ducon Drone Information Management System, DRIMS2, our all-inclusive software, is used to view historical data, run diagnostics, configure, and set alarm levels for DR2000. Provided as part of the DR2000 package, the software is installed on our on-board server (default), Indusmation cloud-based server (default) and on your localized server (optional).
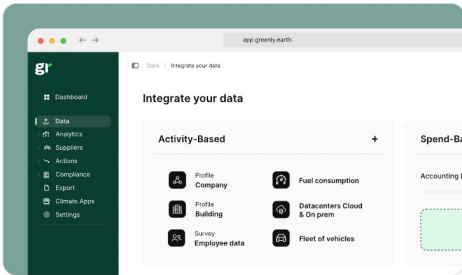
DRIMS2 provides easy analysis tools for an operator to determine pollutant hot spots, possible sources, sampled areas, and much more. The easy-to-use graphical interface allows anyone to run complicated data analytics without being a GIS expert.

DRIMS2 can control and display data from multiple DR2000s in the same fleet. Users can analyze data and monitor progress re-motely from a single platform.

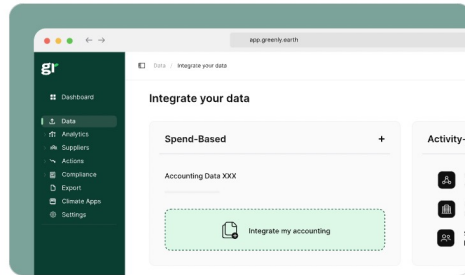Plus, as a valued Ducon customer, you will receive a free one-year subscription to our DRIMS2 cloud software.



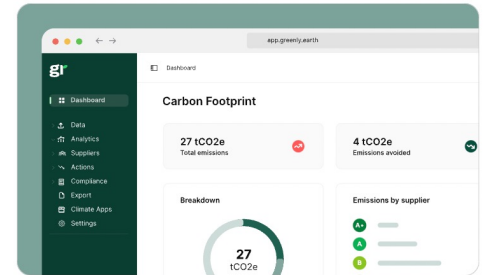# How does Greenly simplify the carbon assessment process?



### Step 1:

Start with your physical measurements: a key step towards a detailed and reliable analysis of your carbon footprint.

### Step 2:

Upload your accounting or financial-related files to measure the impact of your company's financial activities.

### Step 3:

Get your carbon footprint and access detailed dashboards, benchmarks and in-depth analyses.