DEMYSTIFYING ARBON



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CARBON TERMINOLOGY



Carbon footprint: total amount of greenhouse gases emitted directly or indirectly by an individual, organisation, event, or product.

Spend-based carbon emissions: an estimate of greenhouse gas emissions based on how much money an organisation spends on goods and services. It's one of the two main methods of carbon accounting, along with activity-based.

Activity-based carbon emissions: a method of calculating an organization's carbon footprint by tracking and measuring specific activities, such as electricity use or vehicle miles driven..

Carbon reduction: refers to actions taken to directly reduce/lower the amount of greenhouse gases produced by individual activities or organisational operations. This could involve altering manufacturing processes, improving energy efficiency, switching to renewable energy sources, or modifying business practices to emit fewer greenhouse gases. **Decarbonisation:** eliminate the use of fossil fuels and rapidly cut greenhouse gas emissions.

Carbon neutrality: achieving a balance between the amount of carbon emitted and the amount removed from the atmosphere.

Carbon offsetting: compensating for carbon emissions by investing in projects that reduce or capture an equivalent amount of carbon elsewhere.

Carbon capture/ sequestration: the process of capturing and storying carbon dioxide from the atmosphere in natural ecosystems or geological formations.

tCO2e : stands for tonnes of carbon dioxide equivalent. It's a standard unit used to measure greenhouse gas emissions.

Emissions profile: is a comprehensive overview of all greenhouse gas emissions associated with a specific area, company, or sector, outlining the sources of emissions and their magnitudes



WHAT IS CARBON?

Carbon is a fundamental chemical element found in all living organisms and many inorganic materials. It is essential for life.

- How is Carbon Stored in the Earth?
- How do Fossil fuels impact the Carbon Cycle?

REGULATORY ENVIRONMENT

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TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

- Compliance with the NZ government's requirement for climate-related disclosures.
- Large corporates who must currently report on CRD's have to include their supplier's emissions by 2025.
- Transparent reporting on greenhouse gas emissions, energy use, and climate risks enhances trust and credibility among stakeholders, insurers, visitors etc.
- Regulation has already hit the building sector all new builds have to report on greenhouse gas emissions.
- Staying ahead of the regulatory curve, through voluntary carbon counting or climate-related disclosures, can provide businesses with a competitive advantage as environmental laws become more stringent.
- Carbon credits/taxes are likely in the future.

OPERATIONAL EFFICIENCY AND COST REDUCTION

- Implementing energy-efficient technologies, electrification, and waste reduction practices can lower operational costs.
- Sustainable practices often lead to more efficient use of resources, which can reduce overhead costs over time.
- Environmental data can assist in decision-making processes, such as investment in new technologies or shifts in operational strategies to improve environmental performance.
- Increasingly, investors and insurers are looking at environmental performance as a criterion for their decisions.
- Enhanced environmental reporting can also boost a company's rating in environmental, social, and governance (ESG) criteria, which are becoming crucial for attracting global investors and partnerships.



CARBON FOOTPRINT IN TOURISM

TRANSPORT





ENERGY

SUPPLY CHAIN

Transportation is a major source of carbon emissions in the tourism industry, primarily due to the reliance on fossil fuels. Aviation, for example, is one of the most carbonintensive modes of travel, significantly contributing to the industry's greenhouse gas emissions. Similarly, cars, buses, and boats that use petrol or diesel combust these fuels, releasing carbon dioxide directly into the atmosphere. Waste generation in tourism—contributes indirectly to carbon emissions through the decomposition of organic materials, which produces methane, a potent greenhouse gas. Moreover, the processes involved in waste management, like transportation and landfill operations, also emit carbon dioxide, further increasing the carbon footprint of tourism-related waste. Energy consumption is central to the operations of tourism businesses, where it is used for heating, cooling, lighting, and more. When this energy is sourced from fossil fuels, significant amounts of carbon dioxide are released into the atmosphere. As tourism often demands high levels of energy use, it becomes a significant contributor to the sector's carbon emissions. The supply chain in tourism encompasses all the goods and services that go into delivering tourist experiences. Each step of the supply chain involves the emission of greenhouse gases, particularly if the materials are sourced from distant locations requiring long-distance transport. Additionally, manufacturing processes and the logistics involved in moving goods from producers to consumers are often energyintensive and carbon-heavy.

Definition of Carbon Footprint: The total amount of GHGs emitted directly or indirectly by a person, organisation, event, or product.

MEASURING YOUR BUSINESS CARBON FOOTPRINT



CARBON COUNTING ORGANISATIONS

THERE ARE A RANGE OF CARBON MEASUREMENT ORGANISATIONS THAT ARE AVAILABLE TO SUPPORT BUSINESSES IN MEASUREMENT. FROM SPEND-BASED, TO ACTIVITY-BASED MEASUREMENT.

Spend-based measurement:

- Cogo
- Carbon Trail

Activity-based measurement:

- Toitu Envirocare
- Ekos
- Environmental Accounting Services



SPEND-BASED EMISSION MEASUREMENT

SPEND-BASED EMISSION MEASUREMENT IS GREAT FOR:

- Calculating the carbon footprint of a basket of products of services
- Understanding you supply chain emissions in a fast and costeffective (or free) way
- Learning about carbon footprint of your supply chain and/or financed emissions
- Using data you already have or that is publicly available
- Easy data to interpret and informative steps to help carbon reduction
- Businesses can track their emissions overtime data gets uploaded more regularly (as apposed to once a year for most activity-based measurements)

SPEND-BASED EMISSION MEASUREMENT IS NOT IDEAL FOR:

- Choosing between two businesses / suppliers / products in the same industry
- Getting a detailed breakdown of emissions for a specific product or service
- Getting data for a specific product (when compared to a similar product)
- Activity data is more extensive and thorough, so best to add activity data, if you want a more accurate estimate

WHAT IS THE COGO VISTR CARBON MANAGER TOOL?

WHAT IS COGO?

Cogo estimates a businesses carbon footprint* through integration with a business's accounting software (Xero, MYOB, Quickbooks). Cogo's underlying technology analyses financial transactions and automatically categorises spending across various industries. Each transaction is linked to an emissions factor specific to the industry and Cogo converts that transaction into a carbon emissions estimate. This approach is known as the spend-based method enabling businesses to track their carbon footprint in real-time.

*Carbon footprint is the total amount of greenhouse gases emitted directly or indirectly by an individual, organisation, event, or product.

WHAT IS THE VISTR CARBON MANAGER TOOL?

The Vistr Carbon Manager tool is a dedicated version of the Cogo Business Carbon Manager tool, tailored for the regional tourism and hospitality sector. The intuitive tool provides a quick and easy way for you to assess the carbon footprint* of your business.

The Vistr Carbon Manager includes **premium features** not available in other unpaid versions including increased compatibility and automated monthly report generation. It also allows Destination Queenstown & Lake Wānaka Tourism to track tool uptake across its members, and receive aggregated, anonymised data about the tourism profile across the region.





WHY USE COGO?

Cogo started in Aotearoa New Zealand in 2011. Since then, they have had hundreds of business and individual customers worldwide, measuring their carbon footprint through the tool.

Cogo is trusted by SMEs and major corporations worldwide including major international banks, such as; Kiwibank, Westpac, Natwest Group, CommonWealth Bank, TSB and <u>more</u>, who use Cogo's Carbon Engine to provide carbon data to their customers.

Destination Queenstown and Lake Wānaka Tourism chose to fully subsidies the tool to support our memberships because of its easy user experience. Providing solutions to many barriers of accurate carbon measurement, Cogo's international reputation and alignment to global best practice in carbon measurement.

When compared to other carbon measurement tools, Cogo provides an easy, ongoing way to measure your business's carbon footprint and track it over time. This allows ongoing, indepth insights into emission trends across a business.



THE DISTRICT PICTURE

VISTR SECURELY AGGREGATES THE COGO TOOL DATA FROM ALL BUSINESSES IN THE QUEENSTOWN LAKES DISTRICT AND CREATES A DISTRICT-WIDE, TOURISM INDUSTRY CARBON FOOTPRINT.

- By working together, as an industry, we can establish shared challenges in carbon reduction, like supply chain emissions, energy mix and shared infrastructure. The insights from the regions collective carbon footprint will inform how the RTOs (DQ and LWT) can best support businesses and establish systems-wide solutions to drive district-wide change.
- <u>Vistr</u> is dedicated to enabling businesses in the tourism economy to take informed, data-driven steps towards sustainability. As part of this mission, Vistr is gathering carbon footprint data from businesses within the tourism sector.

STARTING POINT TO REDUCE CARBON



ENERGY EFFICIENCY

Review where your energy comes from. Switch to renewable energy sources where possible, this will improve energy efficiency in operations and reducing costs in the longer term.

TRANSPORTATION

Review transportation operations and opt for sustainable transportation where possible. This could include changing to electric vehicles, ride sharing, reducing transport required within your business.

WASTE REDUCTION

Complete a waste audit of your business and see how you can reduce waste to landfill. This might be through implementing composting, reviewing recycling processes, reviewing supply chain and mitigating waste from the source.

CARBON COUNTING

Start counting with the Cogo tool to gain an estimate of your businesses carbon footprint, and where you can work to directly reduce those emissions.