

# GAP ANALYSIS - GREENHOUSE GAS EMISSION TOOLS

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Name of tool	Provider	Free	Sectors	Pro	Con	Used by	Recommendation
Voluntary guide	MfE	✓	Retail, Business Support, Tourism	Ease of use and good guide	Tool has been improved to make it suitable to more sectors. Refrigeration calculation difficult.	Southland District Health Board, Meridian Energy, Enviromark, Kiwi Rail and many other businesses.	Best free tool. Making it easier to use tool will assist businesses measuring emissions.
ACE Catalyst	Catalyst NZ	✓	Retail, Business Support, Tourism	Additional kilometre and other calculators (e.g. flight). Monthly business input.	Monthly input is time consuming. Reliability of calculators is questionable. Not suitable for all sectors (land-based, processing), refrigeration calculation difficult.	Have not heard of anyone using this tool. Recommended by the Sustainable Business Network.	Not advisable to use tool.
Greenhouse Gas Protocol	World Resource Institute	✓	All sectors of the economy	Worldwide used guide, developed by businesses with good examples. Also developed product and other emission calculation standards.	No suitable calculation tools. Lengthy guide.	Lot of businesses around the world, but also Consultants and Advisors.	Useful to get a deeper understanding and overview of case studies etc.
Climate Care Calculator	Climate Care	✓	Households	Simple calculator for flight and small events. Includes radiative forcing (x1.19) in all flight calculations. Can buy	Not enough detail for business assessments.		To find out footprint for small event or flight.

				emission offset directly through system (only GDP, Euro, USD or Taiwan New Dollar).			
Enterprise Carbon Accounting	BraveGen	✓	All sectors	Cloud Accounting Software providing services to account for carbon emission, but also other related areas as well as safety and supply chain management.	Monthly on-going service fee (cost upon inquiry).	NAB, Optus, Singtel, Virgin, bnz	Only recommended if using for other purposes
Airshed	Airshed	✓	Retail, Business Support, Tourism	Simple calculator. Can support offsetting mechanism as well.	Some of the data inputs are wrong. Not for businesses.		Not recommended
Overseer	MPI, Ag Research, Fertiliser Ass.	✓	Farming	Sophisticated tool tying in with nutrient budget. All farms required to use tool to develop nutrient budget and environmental plan by mid '19. Training provided for different components incl. training specifically for Greenhouse gas emission component.	Difficult to be used by farmers. Missing quite a few areas e.g. refrigeration, different types of heating, gas usage and flight emissions.	Operated through farm consultants who provide nutrient budget with input from fertiliser companies and supplied to associations (e.g. Fonterra).	Recommended if using consultant who can adjust components of figures by using other calculator
Farm Carbon Footprint Calculator	Lincoln, Meridian, Agrilink, Westpac	✓	Livestock farming	Simple user-friendly tool. Can input methane and nitrous oxide emission from Overseer. Can chose from different IPCC assessments up until 2014. Takes around 10 minutes to determine.	No guide or contact details for further information, latest available year is 2016. Missing urea application, coal, gas, wood, aviation and other.		Recommended to get basic overview for livestock farms.
Cool Farming Tools	Aberdeen Uni and Netherlands	✓	Farming	Simple tool with a variety of areas (incl. biodiversity, supply chain management), does also provide data on soil	Not customised to NZ factors with e.g. different energy emissions figures,	Used by Pepsi and Unilever farmers.	Recommended if wanting to get good overview – however not

				management. Takes around 1 hour to obtain data.	minimal tree options etc.		customised to NZ setting.
Carbon Calculator	Carbon Farming Group	✓	Farming, Agriculture	Basic calculator works out ETS liabilities.	Does not seem to have been updated recently.		Not recommended
ICAO flight calculator	International Civil Aviation Organization	✓	Flights only	Recommended by MfE based on distance travelled, aircraft type and load factors. Travel kilometres pretty similar to Great Circle Distance.	No option to include Radiative Forcing (RF).		Recommended to calculate individual flight emission. If wanting to include radiative forcing apply a factor of 1.19 to emissions data.
Enviromark (Cemars and Carbon Zero)	Manaaki Whenua – Landcare Research	\$5500 – 30000	All sectors of the economy	NZ wide recognised certification scheme. Wealth of experience through NZ business interactions. Offsetting mechanisms through Carbon Zero and working with Science Based Targets to provide additional help in target setting. Have got simple free calculators for travel and can buy emission offsets directly from a range of projects.	Price starting at \$5,000 and time a barrier for uptake. Enviromark does not offer to review companies' emission profile – they have to use Enviromark tools to calculate. Science Based Targets start at additional USD 5,000.	Meridian, Auckland Airport, Ministry for the Environment, ABB, various Councils and District Health Boards	Recommended if resources and time are available. High brand recognition.
Thinkstep	Thinkstep AG	\$5000 - 30000	All sectors of the economy	Working with some of the biggest companies in the world. NZ team has been part of writing ISO standards and has wealth of experience. With sophisticated tools and a range of additional services incl. Science Based Targets,	Price starting at \$5,000	Unilever, Daimler, Kraft Foods, Hochtief, Tesco, hp, Johnson & Johnson, Kapiti City Council	Recommended if resources are available. Recognisable to an international market but can also provide

				offsetting initiatives and Enviromark certification scheme, life-cycle analysis and signed up to provide Cradle to Cradle advice.			Enviromark certification.
EKOS	EKOS	\$250-3000	Retail, Business Support, Tourism	Social enterprise providing calculator for businesses to download and supply to EKOS to get answer. Provide support to measure carbon from \$250 onwards (discount on the price if buying carbon credits). Can receive certification for carbon credits, has got one Southland project.	Not suitable for all sectors (land-based, processing), no refrigeration and other items missing.	Thank you payroll, Victoria Uni, Mevo.	Very basic calculator only recommended if wanting to offset emissions with EKOS as well.
Carbon South	Carbon South	\$750 - 2500	Most sectors of the economy	Working with small to medium sized businesses. Small cost for accounting between \$700 - 2,500. Review for the following year will be cheaper.	Some production and manufacturing sectors might be more complex and will not be able to be analysed.		Recommended if wanting to get overview but do not want to undertake work
Other Consultants		No		Variety of sustainability consultants throughout New Zealand can provide input on greenhouse gas emission. Thinks to look out for if they organisation is ISO 14065 and the consultant ISO 14066 certified.	Assessment capabilities and understanding of greenhouse gas emission reporting will depend on experience.		