



Introduction:

Climate change is predicted to directly impact South Africa's mean annual temperature and rainfall ranges, influencing pest & disease distribution, flowering and fruiting seasons, and ground water resources. Climate change also impacts indirectly, through the growing awareness amongst consumers and the corresponding demand for carbon-efficient business processes. The agricultural sector is a large source of greenhouse gases (GHGs) through activities such as land-use change, agrochemical application and fossil fuel use. Through conservative energy technologies and sustainable farming practices, substantial emission reduction opportunities exist which can improve efficiency and reduce costs throughout the supply chain.

How to get involved:

The success of this project relies on the active involvement of the industry producers and exporters. Please log on to the website: www.climatefruitandwine.co.za or contact the project team, or your industry representative for more information.

Project Co-ordinator: Hugh Campbell, tel (021) 882-8470, email hugh@dfptresearch.co.za.

Project Manager: Shelly Fuller, tel (021) 461-1610, email shellyf@genesis-analytics.com.

Wine Industry Representative: Jacques Rossouw, tel (021) 809-7570, email jrossouw@distell.co.za.

what?

- an information source on climate change and agriculture issues,
- a carbon calculator tool for South African fruit & wine producers and exporters,
- a data capturing resource able to provide valuable benchmarking statistics and trends for the industry.

why?

- to understand the risks and opportunities that exist in the current and future market place,
- to evaluate your current production systems in terms of GHG emissions and energy usage,
- to change where necessary to improve on efficiency and reduce emissions and financial costs,
- to learn how you compare to your fellow growers, producers and exporters.

how?

- use the information provided on the website to understand the impact of climate change on your business,
- use the easy and quick step-by-step Carbon Calculator to determine your carbon status,
- use the results and information to better manage your operational systems to reduce financial and physical risks going forward.



The calculator:

Step-by-step guidance is offered in the Protocol document – download it and familiarise yourself with the process involved.

The development of the calculator and relevant protocol is in line with leading international GHG accounting standards, such as the GHG Protocol and the PAS 2050, and has been calibrated to South African conditions where possible.

Depending on how you define your carbon footprint boundaries (i.e. what section of the supply chain you are accounting for) some of the information required to complete the audit may include:

- **Fuel usage** based on type of fuel, quantity used, type of vehicle consumed in, and which activity within the supply chain it is relevant for (for example the different transport legs or specific farm production machinery).
- **Electricity consumption** broken down, where possible, into different units (for example winery processes, farm housing, offices, irrigation pumps etc.).
- **Production activities** which mainly includes fertilizer and other agro-chemical usage (herbicides, insecticides, fungicides and pesticides).
- **Post-production and packaging activities** which include activities within fruit and wine processing, storage and packaging.

Log on to www.climatefruitandwine.co.za and see for yourself.

