

CASE STUDY: TABLE GRAPES

By Carina Wessels

JDK shares their user experience feedback on the CCC carbon calculator

About the CCC Initiative



The Confronting Climate Change (CCC) Initiative is a carbon footprinting project, developed to support SA's wine and fruit sectors through identifying and responding to the risks and opportunities associated with carbon emissions.

CCC asked a table grape producer and one of our longstanding users to share some of their experiences with the online CCC carbon calculator.

About JDK

JD Kirsten (Pty) Ltd, also known as JDK, is a family-owned South African based company that specialises in the production and packing of premium quality table grapes. The Kirsten family have been farming with table grapes in Paarl for over a 100 years, as the family settled in this beautiful and historical town next to the Berg River in 1916. Currently the fourth generation is managing the business. JDK predominantly serve the export market, however locally they supply to Woolworths and subscribe to Woolworths Farming for the Future.



JDK's history with CCC

JDK has been measuring their carbon footprint with the CCC carbon calculator annually since 2015. They will be conducting their 7th carbon footprint this year. Back in 2014, JDK identified a need for someone to project lead sustainability and compliance within the business. In 2015, Lara Kirsten joined the business after several years in corporate retail. One of her first tasks was to look at JDK's carbon footprint, as this was something that their supplier base was very focused on. Lara attended some of the CCC training days and the rest is history.

JDK saw the CCC carbon calculator as a good tool with which to measure their carbon footprint. Of particular interest to them was the benchmarking that CCC offered - the CCC tool allowed JDK to compare their own carbon footprint to other farms in the same region. Furthermore, the idea of being able to capture and track data on an annual basis and having all their data together and online, was of real value to JDK.

Regions that participate in the CCC Initiative

From 2011 to 2020 the CCC database (incl. graded + ungraded data) has grown to cover **9195** unique hectares of table grape farms in South Africa. This represents **44%** of the table grape industry in the country.

Region	Industry Ha	CCC Ha	%
Berg River	4934	1955	40%
Hex River Valley	6563	3468	53%
Northern Provinces	2522	422	17%
Olifants River	1224	231	19%
Orange River	5857	3119	53%



Photo provided by JDK

JDK's sustainability projects

JDK's philosophy is circled around economic success, social responsibility, and environmental sustainability, with innovation at the root of their success. They supply to premium markets globally and in order to supply to these markets they have to comply with the highest accredited standards.

Apart from calculating their carbon footprint, JDK runs various social and environmental projects. They recycle general waste and all funds generated from recycling goes to the farm workers. JDK has gone to great lengths to educate everyone living on the farms and the farming communities take great pride in what have been achieved with the recycling project thus far. Other environmental projects include organic compost production and invasive alien plant clearing, just to name a few.

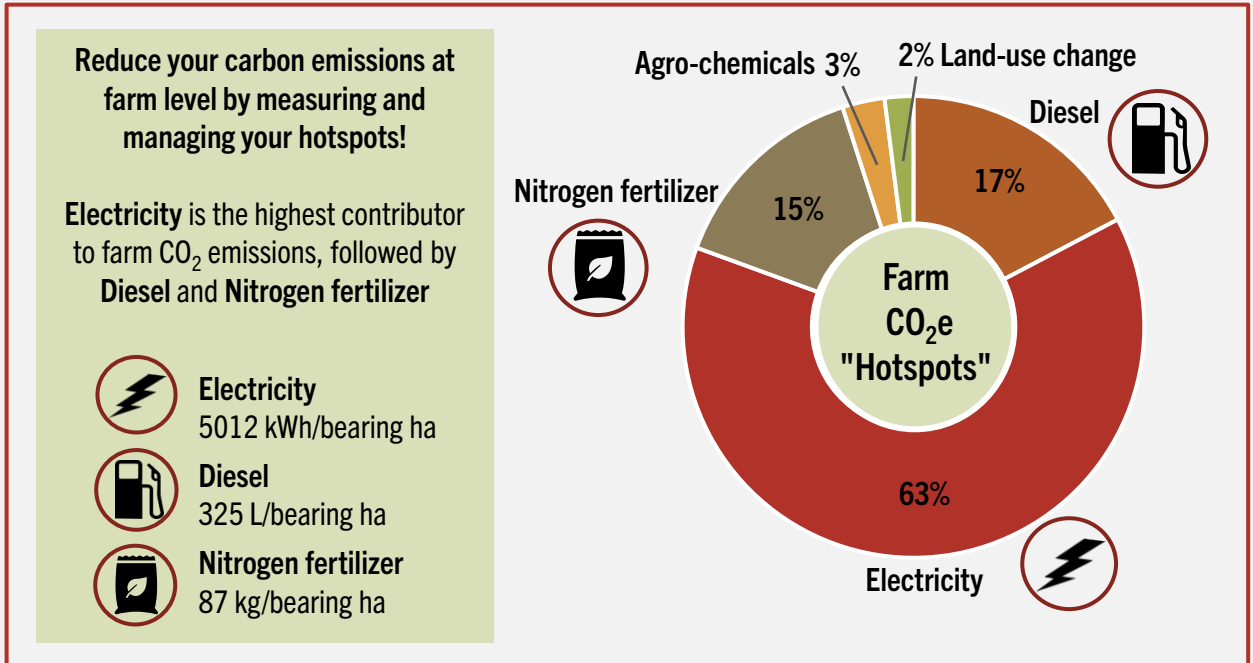


Recycle bins on JDK farms. Photo by JDK.



Organic compost heaps. Photo by JDK.

They way one handles waste could have a large impact on your carbon footprint. For example, the recycling of waste will result in a lower carbon footprint than the disposal of waste at a landfill site. JDK is working towards lowering their carbon emission through the source separation of their waste and recycling. Composting also play an important role in soil health, which results in a myriad of benefits in terms of production, but also lowering your carbon emissions. One such benefit would be the increase in soil water holding capacity, which will reduce the amount of water required to irrigate your crops, which in turn means reduced electricity usage for the pumping of water. Using less electricity is not only good for your pocket but also means a reduction in your farm level carbon emissions!



CCC supports JDK in their carbon reduction strategy

In many ways the CCC tool has helped JDK to shape their broader sustainability goals for the future. Calculating their carbon footprint with the CCC tool has allowed JDK to become more aware of the impact of their inputs and develop an improved understanding of which inputs and activities contribute most to their overall carbon emissions.

Electricity

At some stage in their carbon reduction journey JDK considered installing solar panels on their packhouse. With the CCC tool they were able to see that their packhouse electricity use was actually not one of the main contributors to their carbon footprint, as they only pack for four months of the year. Installing solar panels would not make financial sense nor lower their overall carbon footprint significantly.



Diesel

Since JDK has started calculating their carbon footprint, they have also looked at ways to reduce their fuel use. For example, they have gradually started replacing old tractors with more fuel efficient versions. The first step in reducing fuel consumption is to lower speed, so JDK have capped the speed on all tractors, trucks, and other farm vehicles. They also track all their vehicles to make sure no unnecessary driving takes place.

Fertiliser

Realising that synthetic fertilisers actually contribute a lot to their carbon footprint and that these fertilisers also have several negative impacts on the soil and vineyards, has helped JDK to set long term goals in reducing the use of synthetic fertilisers. According to their latest carbon footprint report, JDK's pure nitrogen input per bearing hectare, as well as per ton fruit produced, were much lower than that of other table grape farms in the region. The fact that they are able to check fertiliser usage over a 12-month period and compare it to previous years also help to maintain accountability within JDK's management structure. JDK often uses their carbon footprint results in presentations to their board of directors and/or their clients.

Contact Confronting Climate Change today to start measuring and managing your carbon emissions!



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