

CASE STUDY

Komati Group and Naranja Packers

Naranja Packers and the Komati Group from the citrus industry, also talked to Confronting Climate Change about their experiences with the online carbon calculator. By **Carina Wessels**

About Naranja Packers

Naranja Packers is a specialised citrus packhouse in the Burgersfort Valley, suitably equipped for the sorting and packing of soft citrus fruit. They form part of ANB Investments (Pty) Ltd, a South African registered holding company of a diverse group of agricultural companies that developed individually. In 2008, these companies amalgamated as one operating group, known as the ANB Group. Naranja Packers pack all fruit produced by Indigo Fruit Farming in the Limpopo and Mpumalanga provinces, as well as fruit from other farmers in the Burgersfort region.

About Komati Group

The Komati Group is a family business that originated in 1954 when Theodore Maximillian Thalwitzer (Snr) bought his first farm along the banks of the Letaba River in Letsitele. The initial 100 ha citrus farm has since been expanded to what the Komati Group is today: comprising a number of farms, packhouses, and even a citrus tree nursery in the Limpopo and Mpumalanga provinces. The company packs more than 7 million cartons of citrus annually and exports it to more than 30 countries worldwide.

Which regions participate in the Confronting Climate Change (CCC) initiative?

In the period 2011 to 2020 the CCC database (including graded and ungraded data) has

grown to cover 19 775 unique hectares of citrus farms in SA. The area represents 23% of the citrus industry in the country.

CCC supports Komati Group and Naranja Packers in their respective carbon reduction strategies

Komati Group:

They currently have 11 active business units on the CCC platform and have been calculating their carbon footprint with the CCC carbon calculator for the past five years. Since they started using CCC, they have seen their carbon intense inputs decrease.

The Komati Group is driven by the concept of sustainable agriculture: they diligently measure all of their inputs and usage that the CCC tool considers farm hotspots. This includes their electricity and diesel use, their fertiliser, as well as agro-chemical inputs. They are looking into installing solar energy on some farms – two of their farms are already making use of hydro energy. They also measure and manage their water use and pride themselves in their irrigation management practices that ensure that no water is wasted. The group also makes use of specialists such as entomologists to ensure effective implementation of pest management strategies and solutions. The Komati Group are also committed to improving soil health, as healthy soil stores more carbon, ensures healthy root systems, and leads to healthy trees that bear maximum fruit in season.



Naranja Packers:

Naranja Packers' data entries on the CCC platform go all the way back to 2011. They use the CCC carbon calculator, and have also started trials with the Sherpa sustainability management system (<https://mysherpa.co.za/>) to determine their sustainability strategy.

Every year Naranja sets their environmental goals and targets, and they make 100% use of the CCC carbon footprint report to do so. They've used CCC to make general waste reductions, and discontinued plastic wrapping when they realised its impact on their carbon footprint. Naranja Packers have also replaced all light bulbs with LED lights in the packhouse. And they are currently in the process of installing about a hectare of solar panels for further carbon footprint reductions.

Farm hotspots

For both hard and soft citrus, electricity is the highest contributor to farm CO₂ emissions, followed by fertilisers and fuel.

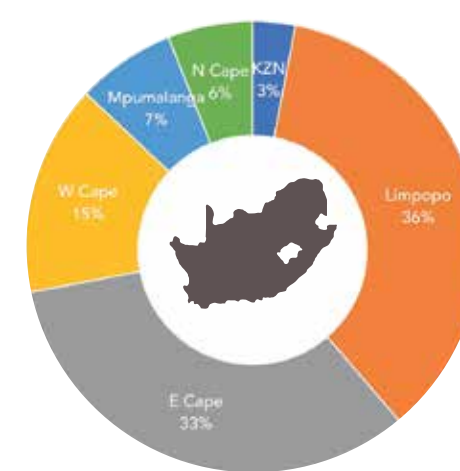
Packhouse hotspots

Most of the emissions at packhouse level are related to packaging material. For both hard and soft citrus, packaging contributes to more than 50% of packhouse CO₂ emissions, with the amount of cardboard and corrugated cardboard (cartons) used being the biggest culprits. Electricity is the second largest emissions source in the packhouse.

Describe your experience with the online CCC tool:

Komati: Initially I attended some of your training workshops just to make sure I understand how it works. But the tool is quite straightforward to use. I'm used to it now and know exactly what to do and what to look for in my annual report.

Naranja: The tool is extremely user-



Regions that participate in the CCC Initiative

By 2020 the CCC database had reached representation of 19 775 unique hectares of citrus farms in SA; representing 23% of the country's citrus industry.

Limpopo: Limpopo River, Hoedspruit, Letsitele, Senwes
Eastern Cape: SR Valley, EC Midlands, Patensie
Western Cape: Including Boland
Mpumalanga: Nelspruit, Onderberg
Northern Cape: Orange River
KwaZulu-Natal: Southern KZN, Pongola

friendly. I find the guidance icons that show you when you have not entered something correctly really helpful.

Has the carbon calculator been of value to your business?

Naranja: We work 100% off your carbon report to make reductions in our carbon footprint. For example, we've made waste reductions and we're looking at installing solar panels; we've moved away from plastic wrapping, and we've replaced all light bulbs with LED lights. Surprisingly, all of this brought about a financial improvement as well.

Komati: For me it's of value because I can see where our biggest risk lies, our electricity and nitrogen fertiliser are our highest use, so I can bring it to management's attention. The format of the report and the pie charts are easy to understand. The benchmarking is also of tremendous value, because you can compare yourself to others in the industry.

What do you think of the level of support that is given?

Naranja: Whenever I have a problem, you sort it out very quickly. Thanks so much for your support and for being so helpful.

Komati: No problems, we always get the right answers and quickly too. I have never struggled to get a report.

Have you found any particular value in having everything together online?

Komati: Yes, it helps me a lot to have all the business units' information online. I have one login, and everything is together. I can even pull all the information from previous years. It helps a lot.

Has CCC helped you communicate your carbon reduction journey to your clients? If so, how?

Naranja: Yes, there are some clients who we have sent the report to before. I think the driving force in the industry these days is becoming more and more to see people and companies become more environmentally friendly.

Have you attended a training workshop? If yes, was it helpful?

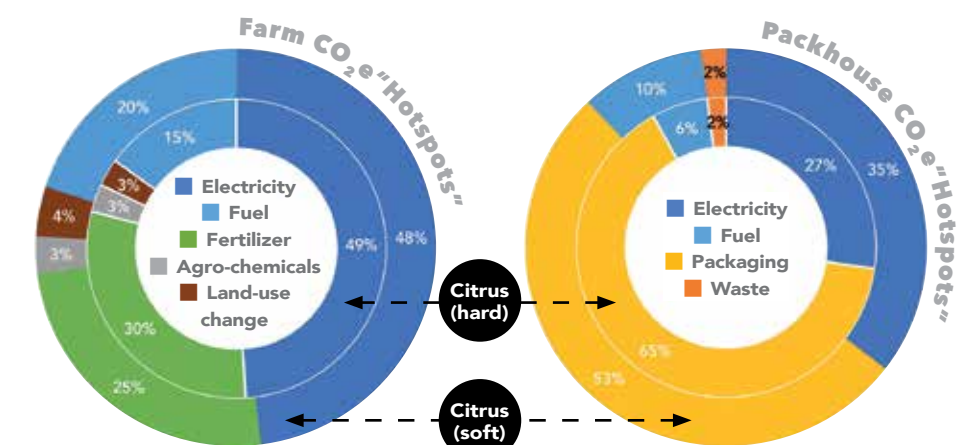
Komati: Yes, it was definitely helpful to understand how the tool works. I also learned that you can't just use any carbon calculator. You explained very nicely in the workshop, the impact SA's coal-based Eskom power has compared to some overseas countries that use more renewable energy. So it's important to use a local tool.

Would you recommend CCC to others?

Naranja: Yes, definitely. I recommended you to two of our other packhouses that are still fairly new. They started using CCC right away.

Komati: Yes! I had someone in my office the other day who just downloaded a carbon calculator from the internet. I told them how important it is to have one specifically for SA and gave them your details.

For more information on The CCC Initiative, please visit www.climatefruitandwine.co.za or contact us via email (support@bluenorth.co.za) or phone (063 688 5593).



Reduce your carbon emissions

On farm level, electricity is the highest contributor to farm CO₂ emissions, followed by fertilisers and fuel.



Nitrogen:
 (kg/bearing ha)
 Citrus (hard): 133
 Citrus (soft): 135



Electricity:
 (kWh/bearing ha)
 Citrus (hard): 2603
 Citrus (soft): 3069



Diesel:
 (L/bearing ha)
 Citrus (hard): 234
 Citrus (soft): 313

Most of the emissions at packhouse level are related to packaging material. Packaging contributes to more than 50% of packhouse CO₂ emissions (hard and soft citrus); use of cardboard and corrugated cardboard (cartons) is the biggest culprit. Electricity: second largest emissions source in packhouses.