

Packhouse and Coolstore Activities Survey for 2007

This survey is endorsed by ZESPRI and is part of a large programme initiated by MAF to quantify greenhouse gas emissions from selected primary industries. Landcare is the lead research organisation and Massey University has been contracted to assist with this part of the project.

If you are able to complete it without assistance, please do so, however researchers from Massey University will plan to visit you between the 16th and 27th of July to provide further assistance. Meanwhile, please attempt to complete the survey, and provide feedback to us about any parts you have difficulty with.

For any questions on the survey contact:

John Mawson (06 350 5963; A.J.Mawson@massey.ac.nz), or

Andrew East (06 350 xxxx; A.R.East@massey.ac.nz)

The questions below are divided into two sections: questions 1 to 7 are priority questions, and questions 8 and 9 are secondary questions. If you have limited time, please focus on the priority questions. There are spaces provided for any optional explanatory notes that you think may be helpful to assist us to understand the data.

Note that all data should be for a full year that includes the 2007 kiwifruit harvest. A default year of 1st January 2007 to 31st December 2007 is suggested – but if records are kept on a different annual cycle this can be used instead.

Thank you very much for your help, and we look forward to meeting you.

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Sarah McLaren (Landcare Research)
Marcus Deurer (HortResearch)
Greg Frater (Massey University)
Andrew East (Massey University)
John Mawson (Massey University)

PRIORITY QUESTIONS**1. Packhouse**

Name of packhouse		
Location		
Period Chosen for Data Collection	(default is January to December 2007)	
Packhouse Details	Total Coolstorage capacity (Tray Equivalent).	
Room Details	Room 1 Size (Tray Equivalent) Room 2 Size Room 3 Size Room 4 Size Room 5 Size Room 6 Size Room 7 Size Room 8 Size Room 9 Size Room 10 Size Room 11 Size Room 12 Size Room 13 Size Room 14 Size Room 15 Size	
	Cooling system: separate or central refrigeration system?	
	Refrigerants used	
Contact Person and Phone Number		

Please provide details of products other than kiwifruit handled by the packhouse in 2007, and how long it was vacant during that year.

Product	Total quantity (kg)	Percentage volume/area of packhouse dedicated to the product	Length of stay (days, weeks or months)
Vacant period	-	-	

Notes:

2. Throughput

We need to know the throughput of fruit and other products through your packhouse(s)/coolrooms. **Ideally we would like both the total and monthly volumes.** If you have records available over an alternative time framework (e.g. daily or weekly) please submit them in that form. Electronic or hard copy returns are fine.

2.1 Total Quantity of Kiwifruit Processed At Packhouse

Variety	Total number of TE ¹ received	Number of TE export quality fruit sent to port	Number of TE returned from port	Number of TE non-export quality fruit sent to market	Number of TE of waste fruit
Green					
Gold					
Organic					

¹ Tray equivalents

Notes:

3. Waste Fruit

Please provide details of fruit wastage at the packhouse and the quantity of waste disposed of using each method. If the method of disposal used is not listed, please include it as a note below the table.

Variety	Number of TE of wastage (from last column of previous table)	TE sold as feedstock		Number of TE sent to landfill	Number of TE buried on site
		Number of TE	Price per TE sold as feedstock		
Green					
Gold					
Organic					

Notes:

4. Packhouse Processes Related To Kiwifruit

Please fill in and add any additional activities not listed below.

Process	Fruit variety	Duration (hours or days)			Notes
		Minimum	Maximum	Average (estimated)	
Initial short cooling	Green				
	Gold				
	Organic				
Storage of packed fruit (CA)	Green				
	Gold				
	Organic				
...					

Notes:

5. Use of Refrigerants

Please complete the table below.

Type of Refrigerant	Total quantity used to charge system (i.e. refrigerant in the system)	Total quantity purchased in year	Does this include recharging after accidental losses during year? Give number of accidents and quantities.

If this information is held by your refrigeration service company, please indicate their contact details below:

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Notes:

6. Fuel Use

Please complete the table below on fuel use data for activities in the packhouse. Add any other oils or fuels used which are not listed below.

Fuel type	Total quantity (litres)	Activities using this fuel
Diesel		
Petrol		
Lubricants		
CNG		
...		
...		

Notes:

7. Electricity Use

We would like to correlate your electricity usage with the coolstore and packhouse throughputs. If you have monthly electricity readings (in kWhrs) that would be ideal. You may prefer to give us permission to query your electricity provider for this information.

Please list details for all electricity meters if packhouse has more than one meter.

	Quantity (kWh)	Activities associated with this meter (e.g. packing line)	Notes
Meter 1			
Meter 2			
...			

Notes:

SECONDARY QUESTIONS**9. Transport**

Please include all transport activities not included under section 6 'Fuel Use'. Add any others not in the list.

Transport activity	Distance travelled (km)	Is the vehicle usually fully utilised on this journey?	Does the vehicle return empty?
Packed fruit pallets to port			
Waste fruit to landfill			
Waste fruit to farm as feedstock			
Waste packaging material to landfill			
Reject fruit from port to packhouse for repackaging			

Notes:

Please indicate the distance of your supplying orchards from your packhouse:

Distance	Number of Orchards	Proportion of Fruit
1-5 km		
5-10 km		
10 -20 km		
20 -50 km		
50 – 100 km		
100 – 200 km		
+ 200 km (please state maximum)		

Notes:

10. Packaging

Which companies provide your main packaging materials?

Company	Material	Company Location
Trays		
Strapping		
Plastic Liners		
Plixes		
Pallets		
Bins		

Notes: