

# Post-harvest Transparency Questions



Growers have requested increased transparency from post-harvest operators so that comparisons can be made to decide which operator will work best for their individual needs. As a part of NZKGI's Performance portfolio, below is a list of questions that we suggest growers ask post-harvest operators.

## Background

Growers play a critical role in ensuring the quality of their crop, as they are responsible for implementing best practices and maintaining high standards throughout the growing and harvesting processes, ultimately determining the quality of the fruit coming off their orchard.

Post-harvest operators are accountable for packing fruit to specification, maintaining optimal quality control measures, and delivering high-quality product to the marketer, ensuring that the fruit meets the required standards for domestic and international markets.

As the sole exporter and marketer of New Zealand kiwifruit, Zespri manages the global supply chain, markets and sells New Zealand-grown kiwifruit on behalf of the country's kiwifruit growers. Key activities include managing kiwifruit market access and export, global marketing and promotion, setting and enforcing quality standards and providing market insights and intelligence.

### Information for growers using this guide:

The questions for each section below have been ranked according to proposed importance for growers. NZKGI recommends that growers ask the first questions from each section, but may also like to ask further questions from the categories.

## Harvest

Regardless if your fruit is picked by a post-harvest operator, or some other way, it is important to understand how the packhouse will handle your harvest. Growers are encouraged to get a full summary of how post-harvest operators manage the harvest operation, including capacity management, harvest audit, fruit maturity settings, the inevitable harvest 'queue,' as well as other factors, such as the supply of bins. Growers need confidence that their fruit can be packed when it is ready and post-harvest operators should have strong strategies in place to manage the MainPack peak. This also includes understanding how they manage capacity constraints during KiwiStart weeks.

Question	Summary and definition
1 Can you please give me a summary of how you manage the harvest operations?	Understanding how your post-harvest operator will manage the harvest (e.g.: centrally, regionally, on behalf or managed orchards only) is important to ensure expectations are met. Understanding how the queue will be managed and how, if required, communication responsibilities between contractors are met. Some post-harvest operators will set picking charges, organise contractor and trucking, whereas for others this is the growers responsibility.
2 Regarding packhouse capacity, especially during MainPack; What is your general wait time during MainPack between harvest day and packing day?	Clear expectations around the management of capacity constraints and prioritising (if required), is key to a smooth harvest. Causes for constraints can be internal, such as facilities being unable to process the supply of kiwifruit. This can come about through sharply rising supply, handling and storage restrictions, equipment breakdowns, labour shortages, or quality issues. Capacity constraints can also be brought about by external factors, such as customer demand, supplier delays, or market conditions.
3 What is your track record regarding capacity constraints? Will you be able to process my fruit when it is at optimal maturity?	
4 What strategies and communications are put in place to ensure that my fruit will be processed at optimal maturity?	

## Harvest Questions continued...

5	Does your packhouse complete harvest auditing? If so, what is the process and what reporting can I expect? Do Harvest Auditing results impact my LOP?	To ensure best practice harvesting, many post-harvest operators will implement a harvest auditing process, usually a number of objective control points to ensure quality fruit is delivered to the packhouse.
6	What expectations do you place on growers during harvest with regards to presentation of fruit, bins filled appropriately, bin cards attached and picking day communication?	By understanding these expectations, growers can help ensure a successful harvest, maintain high-quality fruit, and build strong relationships with their post-harvest operator during harvest.
7	How do you manage the physical availability of bins? Can I get bins when I want them? How are these allocated?	Although many post-harvest operators work hard to ensure bins for everyone, it is crucial to confirm that your operator has sufficient bins and acceptable practices to address potential constraints.
8	How late in the day/evening can I deliver bins to the packhouse?	It is key to understand if your post-harvest operator is available to receive bins after a certain time, as some do close their gates in the evening.
9	What influence does my maturity at harvest have on the pool or load out decisions?	<i>See Pooling below</i>

### Notes:

# Packing Performance

Growers are encouraged to explore how post-harvest operators implement strategies to optimise the yield of Class 1 fruit from all delivered fruit, aligning with Zespri's goal of bringing the highest quality fruit to market.

Question	Summary and definition
1 How do you maximise class 1 packout?	Post-harvest operators should communicate a clear strategy and processes so that you have clear expectations about the requirements for the best Class 1 packout. This will support you to deliver the best crop to the packhouse, and ultimately to market.
2 How do you ensure consistent fruit quality across multiple sites (where a multi-site Post-Harvest operator is in the same region)?	Post-harvest operators typically operate multiple sites or graders. While this expands their capacity, this also means that fruit from the same KPIN or maturity area may be packed at different physical sites and or graders, leading to potential variations in results. Growers should be aware of this possibility and have realistic expectations managed accordingly.
3 When can I usually expect a pack-out result to be delivered?	Fruit is typically packed one to two days after it is received from the packhouse. We also encourage growers to understand when their packing results will be available.
4 Can I watch my fruit being packed?	A lot, if not all, post-harvest operators like growers to watch their fruit being packed.
5 Can you please confirm how you handle pest finds at packing? How are they handled, is fruit segregated to ensure pests are not at risk of getting into other growers' fruit? How are growers informed if they have a pest?	It's important post-harvest can identify pests so the industry can reduce market restrictions on kiwifruit, enabling export to more countries and apply market holds for quarantine pests to fruit when required.

## Notes:

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---



## Storage Performance

Fruit storage decisions and performance can be influenced by the quality of the fruit that arrives at the packhouse, grower motivation to maximise storage incentives or minimize risk, and environmental conditions that support good long term storage for kiwifruit. Post-harvest operators should have strategies in place that support both good inventory management decisions and grower expectations.

Question	Summary and definition
<p>1 How do you traditionally perform with onshore fruit loss? How does your supplier accountability results compare against the rest of the industry?</p>	<p><b>Onshore fruit loss</b> is recorded and processed by the post-harvest facility, in which fruit is unable to be exported because it does not meet the quality requirements set by Zespri. It shows a post-harvest operators ability to get packed fruit to the market.</p> <p><b>Supplier Accountability</b> is how post-harvest operators' fruit performs in the market and the financial penalty or premium suppliers receive for that performance. Suppliers are rewarded for supplying quality fruit, and face penalties when fruit of a lesser standard is supplied. These financial results often impact on the pool.</p>
<p>2 What tools do you implement to ensure growers are not exposed to disproportionate fruit loss?</p>	<p>Not all fruit can be shipped at a time growers or post-harvest operators want. Growers and their individual orchards will have different fruit storage motivations, dependant on risk appetite. Post-harvest will have strategies and tools, including both inventory management commitments and/or pooling mechanisms, to ensure market commitments and grower expectations can be balanced.</p>
<p>3 What did you learn from the quality challenges in previous seasons? What process/ improvements have been made as a result?</p>	<p>2022 produced a disproportionately high fruit loss for the industry. The Quality Action Plan (see Resources below) was formed in October 2022 with the main output being the industries 7-point plan. Post-harvest operators should have their own response to this plan.</p>

### Notes:

---



---



---



---



---



---



---



---



---



---



---



---



---



---



---



---

## Pooling

Pooling enables post-harvest operators and therefore growers to collectively manage the risk of fruit loss, which typically escalates during longer storage. This collaborative approach can take various forms, including storage incentives, different risk pools or deferred payment distributions among growers, often referred to as storage or time payment pooling systems. Growers are encouraged to understand when and how the supply entity or council reviews their pooling mechanisms, as a clear understanding of escalation and communication pathways if they ever have any pooling or fruit loss concerns. In this section we include KiwiStart where cut-off strategies can differ between post-harvest.

Question	Summary and definition
<p>1 What is your entities approach to pooling?</p> <p>2 What do you see as the benefits and risks to that approach?</p>	<p>Pooling options differ between post-harvest operators, ranging from one, to many pools on offer, and different risk ratios within each pool. The available pool-to-direct ratios include various combinations such as 70:30, 30:70, 60:40, and 50:50, as well as regional pool options. Growers may enjoy the flexibility to select from eligible pools that best align with their individual preferences and needs. By pooling their inventory, post-harvest operators can efficiently manage inventory, maintain fairness, and protect individual growers from excessive risk exposure.</p>
<p>3 Can you please explain your entity set up and processes such as growers councils, meeting frequency, management of grower funds and audit processes?</p>	<p>Knowing the entity setup and processes helps to identify the decision-making hierarchy, roles, and responsibilities within the organization, while offering complete transparency and accountability, while ensuring that the entity has adequate processes in place for audit and financial management.</p>
<p>4 KiwiStart; Explain the process around cut off, testing dates, KiwiStart pooling (if any) and other unique pooling rules (for example, does my testing strategy determine my order in the KiwiStart queue?).</p>	<p>Zespri motivates growers to harvest early by offering compensation for potential losses in fruit size and taste premiums, aiming to secure a market advantage by beating competitors to the shelves - known as KiwiStart. Each post-harvest operator has its unique approach to managing the KiwiStart weeks and cut off queues.</p>
<p>5 Could you provide an overview of your supply entity's governance structure, including the decision-making processes, complaints and issue escalation procedures?</p> <p>This should also include meeting schedules, frequency and opportunities for grower participation and engagement.</p>	<p>Supply entities are usually comprised of growers elected or appointed who represent all the major growing regions (sometimes known as wards). There are multiple supply entities in the kiwifruit industry and one of the key functions is the management of the pool and fund distribution. As the industry and its' volumes continue to grow, it is important that pooling also remains fit for purpose.</p>
<p>6 If multiple pools are adopted, do I have a chance to opt in / out of pools and why / when?</p>	<p>Pooling options differ between post-harvest operators, ranging from one, to many pools on offer, and different risk ratios within each pool. The available pool-to-direct ratios include various combinations such as 70:30, 30:70, 60:40, and 50:50, as well as regional pool options. Growers may enjoy the flexibility to select from eligible pools that best align with their individual preferences and needs.</p>
<p>7 How does pooling differ in some of the smaller fruit groups outside Gold and Green conventional, e.g.: How is OB (Organic) handled in pooling? Is GAOB stand alone or in a GACK pool?</p>	<p>Growers need to understand how different fruit groups are handled within their entity's pools. In this example, some entities may choose to deliberately include or exclude organic grown fruit from their conventionally grown fruit. This has its own benefits and risks.</p>

### Notes:

## Pooling Questions continued...

<p>8 What influence does my maturity at harvest have on the pool or load out decisions?</p>	<p>Post-harvest operators strive to receive top-quality fruit at the packhouse to optimize both Class 1 packout percentages and storage incentives. To achieve this, they closely monitor harvest maturity levels, which may influence the pools you are allocated to or the load out plan, depending on their specific standards and thresholds.</p>
<p>9 Please explain the Class 2 programme. How does the programme work and the impact it has on your growers?</p>	<p>Complementing the standard packing of Zespri branded Class 2, the handling of Class 2 fruit varies among post-harvest operators, with some selling additional product marketed under their own branded fruit or participation in joint venture arrangements. Each have their own benefits that growers should understand.</p>

### Notes:

## Inventory Management

Growers are encouraged to understand the principles of their post-harvest operators Load Out Priority (LOP) process so they have clarity about how their fruit will be handled in storage. An effective inventory management program benefits all stakeholders, from growers and packhouses to marketers and consumers, by ensuring optimal quality, minimizing waste and fruit loss, reducing costs, and streamlining the supply chain to deliver high-quality kiwifruit to market.

Question	Summary and definition
1 How do you make inventory decisions about which fruit is shipped and when?	Post-harvest operators will manage a LOP process, the process that decides what fruit goes where and when.
2 Describe how the inventory management practice can increase my outcomes and what influence I may or may not have over the LOP or drawdown of my fruit.	Post-harvest operators may employ varying load-out and inventory management strategies across different pools. While transparency is maintained, it is essential for growers to be aware of, and understand these differences to ensure their expectations are aligned with the specific pool they are a part of.
3 What influence as a grower do I have over my LOP for the season and drawdown decision(s)?	Operating a pooled inventory system means that fruit shipments may not always align with the desired timelines of growers or post-harvest operators. Growers are advised to familiarise themselves with the drawdown process management, understand the protocol for addressing concerns, and have realistic expectations about the responses they can expect to receive.
4 What is the complaints and support process with regards to a too fast or too slow draw down?	It is key, as part of the pooling mechanisms, to have a clear understanding of escalation and communication pathways if you ever have any pooling or fruit loss concerns.

**Notes:**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---



## Shareholder and Capital

To achieve the necessary growth in the coming years, post-harvest operators are assessing their capital needs to support infrastructure expansion. This includes, but is not limited to, evaluating the impact on retained earnings and considering how to balance funding requirements with shareholder interests, both current and new.

Question	Summary and definition
1 Do I have to become a shareholder to pack with you (either today or in the future)?	As New Zealand's access to the capital landscape evolves and post-harvest operators strive to meet the forecasted five-year growth, their capital requirements will shift. Depending on their ownership structure, each operator will need to develop distinct strategies to secure the necessary capital and support their future growth plans.
2 In situations where growers can be shareholders, what have the returns been over the last five years?	

### Notes:

## Reporting

Visibility to growers own performance is important, as well as the availability of information of your fruit's performance against your peers and the whole industry. This includes supply, payment, and inventory information.

Question	Summary and definition
1 What reporting do you automatically provide to growers? What additional reporting is available on request?	Clarity and communication of your own performance enables and proves data-driven decision making and supports transparency and accountability.
2 Does that reporting include industry benchmarks? Are the benchmarks set by Zespri, or have you made any adjustments to that benchmark?	Section C of <a href="#">Schedule 12</a> of the Supply Agreement sets out the minimum requirements for industry reporting and details what growers can expect, and the process to follow if the registered supplier is unable to provide it. As this is a contract between Zespri and post-harvest operators, some items have been redacted.

### Notes:

## Future

There are a number of excellent initiatives currently taking place in the industry and we encourage growers to engage with their post-harvest operator in this space to ensure your post-harvest operators future direction aligns with your values and understanding.

Question	Summary and definition
1 What is being spent on technology to automate packaging? What further funding is required in the form of capital?	Automating packing processes is a strategy adopted by some post-harvest operators to increase capacity and reduce dependence on labour. By understanding a post-harvest operator's approach to packing automation, growers can gain insight into potential future capacity limitations or increases. Additionally, being aware of any funding requirements for automation projects informs growers about potential capital investments or raises, allowing them to make informed decisions.
2 How do you intend on managing the volume in five years' time?	With consideration to the industry's forecasted growth and evolving landscape over the next five to 10 years, we urge growers to engage with their post-harvest operators to understand their medium to long-term plans and strategies.
3 What is your CA strategy (start, grow, maintain, none?) and why?	Controlled Atmosphere (CA) technology involves adjusting CO <sub>2</sub> and O <sub>2</sub> levels to slow down fruit ripening, effectively putting it in a dormant state. CA helps preserve firmness and freshness and many post-harvest operators have adopted this technology to manage peak harvest weeks and maintain fruit quality. As CA plays a role in capacity management and preserving fruit quality, CA capability should be included in consideration when selecting a post-harvest operator, if this is important to you.
4 What is the potential for you to manage my orchard? 5 If you do not manage orchards directly, who do you partner with?	Post-harvest operators are increasingly expanding their capacity in orchard management services. If management is part of your orchard's future, consider whether they offer orchard management services. If this service is not provided in-house, ask about potential strategic partnerships with external orchard management providers to ensure you have access to comprehensive support for your orchard's needs.

### Notes:

## Other

Question	Summary and definition
1 Detail your sustainability and climate change strategies and objectives. Do you 'know your numbers' in this space?	A number of post-harvest operators are working towards reviewing their climate change impact and strategies. If this is a motivation for you, growers are encouraged to have this conversation with your operator.
2 What measures and practices do you have in place to ensure the welfare, safety, and well-being of your workforce, and how can we be assured of your compliance with relevant labour laws and regulations, including but not limited adequate accident registers, and examples of worker welfare and pastoral care?	Ensuring the welfare, safety, and well-being of workers is a fundamental ethical responsibility of any organization. By asking about these measures, you can assess the organization's commitment to its workers' well-being, its compliance with regulations, and its overall social responsibility, where as a safe and healthy work environment can improve worker productivity, reduce absenteeism, and increase retention rates.
3 Do you have NIR (Near Infrared) capability?	NIR grading technology offers real-time results of fruit quality attributes such as dry matter, brix, and colour as fruit passes over the grader. The primary advantage of NIR is its ability to identify and recover fruit that falls short of Zespri's dry matter standards, enabling growers to maximize their Class 1 packout and achieve optimal results. However, not all operators offer this.
4 For multi-site operators: How is my fruit handled and what incremental cost would I occur if packed / stored / carted out of region?	Post-harvest operators typically operate multiple sites or graders, expanding their capacity. However, this also means that fruit from the same KPIN or Maturity Area may be packed at different physical sites and or graders. This could lead to potential variations in results due to the natural variability of kiwifruit or additional costs for cartage. Growers should be aware of this possibility and have realistic expectations managed accordingly, to avoid any misunderstandings.
5 What is your strategy for addressing any negative social or environmental impacts associated with your business, including worker welfare, health and safety and social license?	Protecting worker welfare and preserving social license is essential for building trust with customers, investors, communities, and for safeguarding the long-term sustainability and success of our industry.
6 How much interaction can I expect to have with my post-harvest rep?	Depending on your business model and or the level of support you require, it is important to understand how much interaction you can have with your rep, who is the key relationship holder between you and the packhouse.

### Notes:

---



---



---



---



---



---



---



---

## Resources

### Definitions

---

**CA** Controlled Atmosphere

---

**LOP** Load Out Priority, the order in which what fruit is shipped where.

---

Full list of acronyms and definitions can be found by [clicking here](#).

---

**Fruit Loss** Onshore Fruit Loss is recorded and processed by the post-harvest facility, in which the fruit is unable to be exported because it does not meet the taste, size or shape requirements set by Zespri. These requirements are important because they can impact on the taste experienced by consumers, how well it stores and travels to market and ultimately, orchard gate returns. Learn about fruit maturity and Zespri's quality requirements to reduce your fruit loss [here](#).

---

**Direct vs Pool** Direct is where premiums, penalties and fruit loss are at the direct cost or benefit of the KPIN or Maturity Area. Pool is where said premiums, penalties or fruit loss are against 'the Pool'. Your contribution to the pool, e.g. submit, is your share of the pool.

---

**ECPI** Export Consignment Product Inspection - is the onshore (in New Zealand) inspection of kiwifruit that is ready for export to ensure compliance with Zespri's (ZIL) standards. This inspection occurs at the wharf checkpoint. The inspections cover all specifications required by Zespri's Quality Assurance export process policies.

---

**Supplier Accountability** Zespri operates Offshore Supplier Accountability systems to monitor and ensure that good quality kiwifruit is supplied to the market. There are two frameworks within Supplier Accountability which have their own unique in-market checking processes and criteria for a period of 14 days from port of entry.

- Suppliers are rewarded for supplying excellent quality fruit.
- Suppliers face penalties when fruit of a lesser standard is supplied.

More about incentive payments [here](#).

---

**ZIL Standards** Zespri International Ltd (ZIL), set the standards which the industry must follow to export kiwifruit. These can be summarised as the Quality Manual, Supply Agreement, and the EDI Manual.

---

**EDI** Electronic Data Interchange; how packhouses and Zespri communicate electronically. To read more, click [here](#).

---

**Colour Protocols** Early Gold Fruit has a light green hue to it and to develop it to the more marketable Gold must be managed in coolstore. The colour development stages are known as protocols.

---

**5-Year Outlook** Zespri's Five-Year Outlook gives a forecast of future supply and demand, [here](#).

---

**Zespri Pools** Zespri allocates costs and revenues to individual pools (Gold/Green/Red). Zespri's Pool Policy allows Zespri staff, suppliers, and growers to understand how costs and revenues are allocated to individual pools. Note, these differ from the post-harvest pool policies which vary between post-harvest.

More about Zespri's pool manual [here](#).

---

**Quality Action Plan** The Quality Action Plan was formed by the Industry Advisory Council in October 2022 in response to poor fruit quality continuing to be experienced by customers and rising costs of quality. Reviewing the Zespri onshore Quality Assurance programme with an objective of keeping quality problems onshore is a key component of the 7-point Quality Action Plan:

1. Understand the Cause(s).
2. Commercial drivers / incentives.
3. Communicate best practice for premium fruit.
4. Assess fruit flow decision making – end to end.
5. Zespri on-shore QA – keep the problem onshore.
6. Supplier accountability – commercials + consistency.
7. Improve transparency of the in-market information on quality & costs.

---

**Supply Agreement** Click here to view [Supply agreement](#) details on Canopy.

---

**Grower Contracts** Click here to view [Grower contracts](#) details on Canopy.

---