Seeka
SELECT EXCELLENCE

GROWING SUSTAINABLE FUTURES

SUSTAINABILITY REPORT JUNE 2024

Seeka Trainee Manager Tame Curtis

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We are proud to present Seeka's 2024 sustainability report

Seeka is dedicated to growing sustainable futures by connecting growers to the world with a sustainable service. Seeka is adapting operations to respond to the changing climate, bringing high-quality, sustainably-grown fruit from the orchard to the market.

This report outlines Seeka's progress over the past 12 months towards its environmental, social and governance sustainability goals.

Seeka is a horticultural business operating in rural areas of New Zealand and Australia. Seeka is connected to the health and productivity of the land, and the wellbeing of our communities. In the three years of La Niña up to March 2023, the industry encountered poor growing conditions and a series of extreme weather events. Record-low sunshine hours, persistent rain, floods, frosts, cyclones and hail, all combined to impact crop volumes and created quality issues. It has been a challenging period for the horticulture industry in Australasia. Seeka is building resilience in response to climate change by reviewing and learning from past impacts, exploring future scenarios, adapting orchard and post-harvest practices, and investing in new geographies and fruit varieties.

Building climate resilience

In 2023, Seeka conducted a comprehensive climate scenario analysis to understand the potential impacts and opportunities arising from a changing climate. Guided by the National Institute of Water and Atmospheric Research (NIWA) climate outlooks, Seeka's analysis explored three future temperature scenarios over different time scales: a limited 1.5°C increase, a moderate 2.5°C increase, and uncontrolled warming up to 4°C. This process allowed Seeka to conceptualise how different climate futures could impact temperatures, weather events, resource availability, fruit yields, consumers and markets. While these scenarios do not predict exact outcomes, they help guide Seeka's activities to build resilience in the face of climate change.

Following this analysis, Seeka released its first climate-related disclosure report, compliant with the New Zealand Climate Standards (NZ CS1-3), in February 2024. This first disclosure provided insight into the risks and opportunities associated with climate change, detailed current and anticipated impacts, and demonstrated how Seeka is planning to build climate resilience into its business model. More details on Seeka's climate disclosure can be found on page 23.

Targeting net zero emissions

Seeka has a five-year record of measuring and independently verifying its greenhouse gas footprint with Toitū Envirocare. This has provided Seeka with a good understanding of its emissions sources, informing the establishment of Seeka's GHG reduction targets and strategies.

In 2023, Seeka achieved a 21% drop in its GHG emissions, largely due to reduced crop volumes. The benefits of Seeka's investments to reduce refrigerant leaks, increase renewable power generation, and reduce electricity usage will be delivered over the coming years.

Seeka is striving for Net Zero by 2050 and has set interim targets of a 30% reduction in carbon emissions by 2025 and a 50% reduction by 2030. Seeka's greenhouse gas reduction strategy is in line with the goal of limiting global warming to 1.5°C.

On 30 June 2023, Seeka entered a Sustainability-linked loan with its banking syndicate. This agreement allows the syndicate to support Seeka's sustainability programme by offering incentives and penalties linked to annual carbon reduction, solar installation, and employee safety targets. More details on Seeka's Sustainability-linked loan can be found on page 6.

Commitment to our people and communities

The health and wellbeing of Seeka's people is a key focus. Seeka provides growth opportunities for its workforce, starting from interns, cadets and new employees, helping to train and build skilled workers to become future leaders.

Seeka's operations create jobs and enhance the economies of rural New Zealand communities. A notable example is Seeka's collaboration with iwi and local government to convert low-yielding land into productive kiwifruit orchards on the East Cape.

Seeka's diverse workforce brings a variety of perspectives and ideas, driving innovation and creativity. Seeka is proud of the significant representation of local community members, tangata whenua, backpackers, and Pacific and Asian RSE employees within the team. The kiwifruit industry has historically been male dominated, and Seeka is now reporting on its pay equity and gender diversity. In 2023, Seeka released its first gender pay gap which reduced from 22.3% in 2022 to 21.0% in 2023.

Caroline Botica, Leah Kino and Pearl Puru at Seeka OPAC

Sustainability highlights

21% drop

in GHG emissions, aided by lower crop volumes, solar and energy efficiency. See our CO2e journey on page 8

4 cadets

promoted to orchard management, developing rewarding careers in the horticulture industry

Keeping people safe with a

3.2

total recordable injury frequency rate, below the Sustainability-linked loan's 3.5 target

345kWh

of solar installed at Seeka Katikati, helping power kiwifruit and avocado packlines and coolstores

Recycled

258

tonnes of cardboard recycled by Seeka's packaging partner

140 bed

Turanga Whetu accommodation facility opened for Pacific & Malaysian RSE employees, providing comprehensive pastoral care

4 coolstore systems retrofitted with low impact refrigeration gases for sustainable cooling

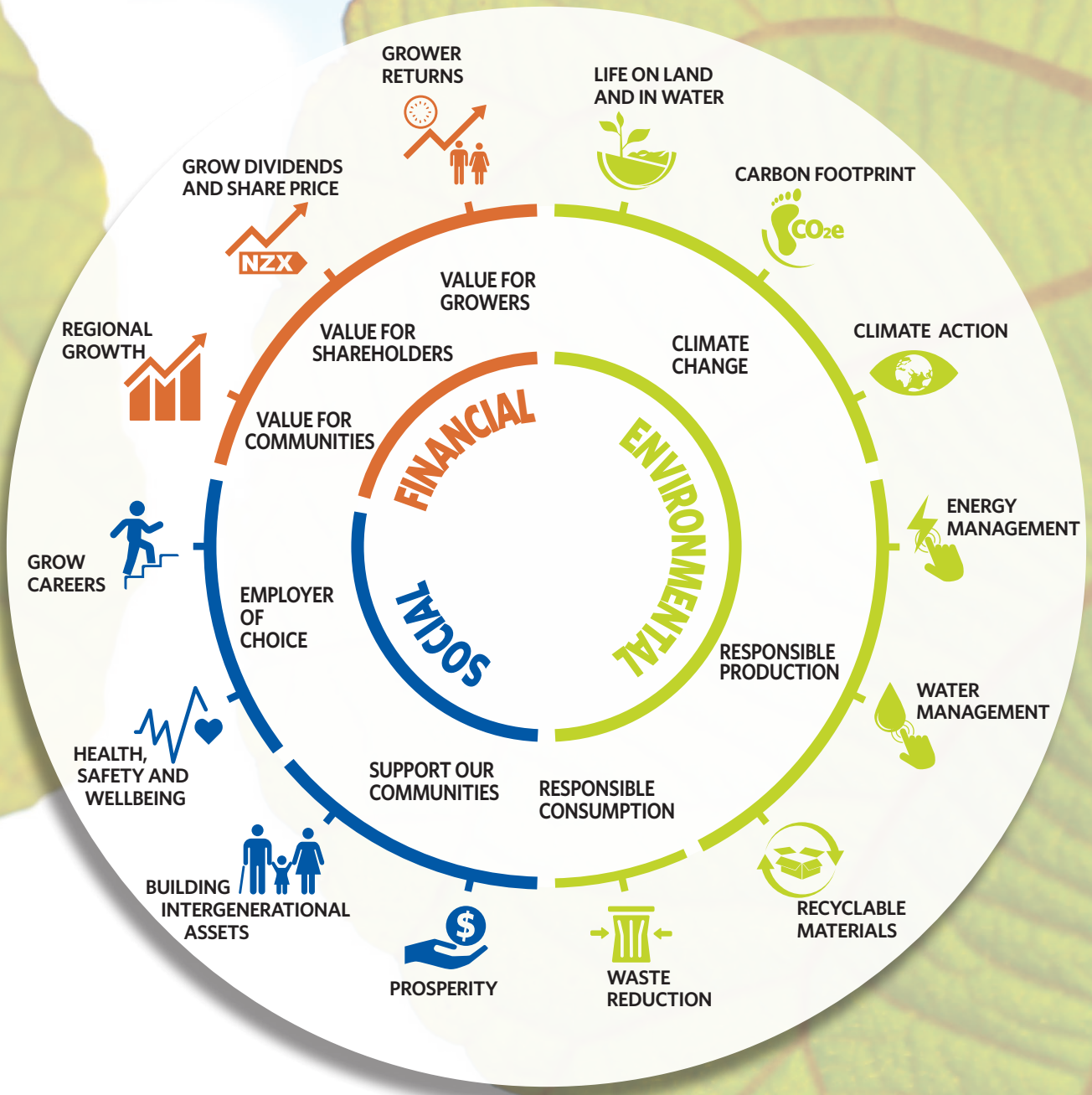
Reduced the gender pay gap to

21%

down from 22.3% in 2022, with Seeka's first disclosure on gender pay

Highlighted measures as at year end 2023

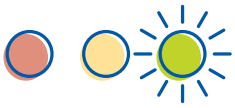
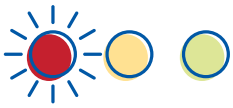
Sustainability strategy



Sustainability-linked loan performance

In June 2023, Seeka entered into a Sustainability-linked loan which set targets over a five year period for solar installations, health and safety, and greenhouse gas reduction. Seeka is pleased to share the first year performance against these ambitious targets, which highlight Seeka's commitment to deliver meaningful change.

In the first year of the Sustainability-linked loan, Seeka achieved an overall neutral result for the three targets. This resulted in no adjustment to Seeka's interest rate.

Target	Result	
Solar	ACHIEVED 	Seeka met its solar target by installing 345 kW of new solar power across the packhouse and coolstore roof space at Seeka Katikati. This installation is forecast to provide 12% of the site's energy demand.
Health and Safety	FAILED 	Seeka's Total Recordable Injury Frequency Rate (TRIFR) was 3.19, better than the agreed target of 3.50. However, the occurrence of two serious injuries resulted in a failure of the overall target. Seeka remains committed to the health and safety of its people, maintaining a zero serious injuries target year on year.
Greenhouse Gas Reduction	NEUTRAL 	In 2023, Seeka reduced its scope 1 and 2 emissions by 16% compared to 2022, below the discount threshold. However, an agreed upgrade to refrigeration gas leak detection was delayed due to hardware supply chain issues. The GHG intensity result was 59.8 tCO2e/$M revenue, below the threshold of 61 tCO2e/$M revenue, resulting in a neutral outcome.
Overall result	**NEUTRAL** 	**No adjustment to the interest rate**

Greenhouse gas reduction targets

Absolute and intensity-based greenhouse gas emissions reduction targets

2025 **30% Reduction**

2030 **50% Reduction**

2050 **Net Zero**
Greenhouse gas emissions

Morningstar Sustainalytics, in a third-party review of Seeka's absolute and intensity reduction targets, considered them ambitious and aligned to a 1.5 degree climate trajectory. 2022 is defined as the baseline year for the 2025 and 2030 targets.

Electrification & low emission technology

Solar

1000kW
of solar installed by 2025 (currently at 791kW). **3000kW by 2030**

Refrigerants

Reduce impact of refrigerant leaks from 2019 baseline
Down 50% by 2025 and
75% by 2030

Fleet Fuel

Percentage of total fleet either low or zero emissions vehicles
2025 = 15%
2030 = 25%

Circular material

100% of orchard strings recycled by
2025

100% of organic waste diverted from landfill by
2025

Seeka's greenhouse gas footprint

Seeka measures its greenhouse gas (GHG) emissions in accordance with *ISO 14064-1: 2018 - Greenhouse gases*. Toitū Envirocare has verified Seeka's GHG emissions inventory, providing assurance across applicable emission categories since 2019.

This verification has enabled Seeka to set and pursue ambitious targets for reducing its emission-intensive activities. Seeka aspires to achieve net zero emissions by 2050, with interim targets of a 30% reduction by 2025 and a 50% reduction by 2030. These goals align with the 1.5-degree climate pathway.

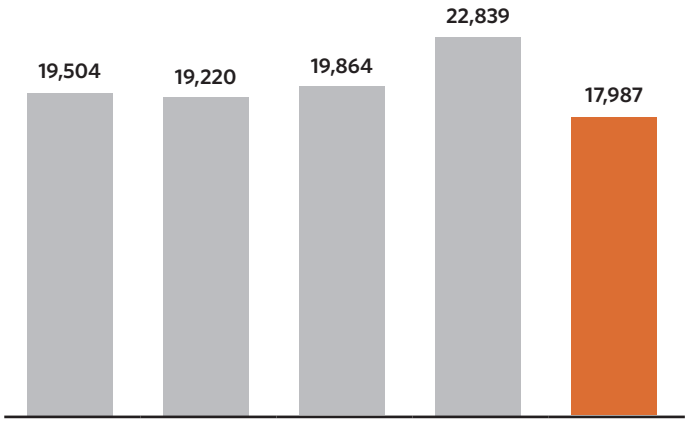
2023 GHG emissions reduction

In 2023, Seeka's GHG emissions decreased by 21% across all emission categories, including supply chain emissions, with Seeka's category 1 and 2 emissions down by 16%. This reduction was aided by:

- **Lower crop volumes**. The lower volumes experienced in 2023 reduced electricity demand. With fewer crops to process, plants and coolstores were shut down earlier, reducing electricity consumption and GHG emissions. Lower crop volumes also influenced transport and procurement activities, lowering scope 3 emissions.
- **Solar and energy efficiency initiatives**. Seeka's ongoing investments in solar power and energy efficiency projects are lowering energy demand. As a large energy consumer, Seeka is ensuring that it contributes to New Zealand's energy decarbonisation journey.
- **Increase in renewable energy**. The increase in renewable energy generation supplying New Zealand has reduced the GHG emissions intensity of purchased energy.

Annual GHG footprint, 2019 to 2023

Absolute carbon footprint in tonnes CO2e



Category	2019	2020	2021	2022	2023	Emissions
1	4,051	3,803	3,900	4,465	5,685	Direct emissions controlled by Seeka
2	3,973	3,696	4,487	5,708	2,892	Indirect emissions from purchased electricity
3	4,069	4,452	3,987	4,618	4,487	Indirect transport emissions from Seeka's supply chain
4	7,411	7,269	7,490	8,048	4,923	Other indirect emissions from Seeka's supply chain
Total	19,504	19,220	19,864	22,839	17,987	

Emission boundaries

Transport-related emissions from the orchard to the port are included in Seeka's calculations. Class 1 fruit emissions beyond the port, however, are controlled by the regulated marketer Zespri and are not included in Seeka's calculations.

Lack of control

Zespri set the quantity and type of packaging for Class 1 kiwifruit. While this makes it challenging for Seeka to manage the embodied emissions, Seeka supports and encourages sustainable packaging decisions and strives to minimise post-harvest waste.

Category 1 emissions

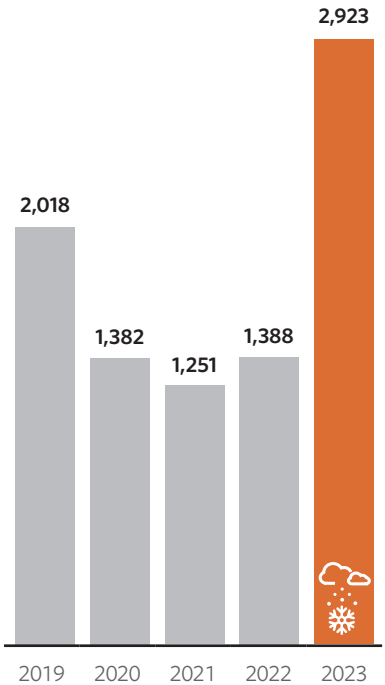
Category 1 emissions originate from activities directly controlled by Seeka. These include refrigeration gas leaks, fossil fuels consumed by Seeka's transport fleet and workshops, and synthetic fertiliser application.

Refrigeration gas emissions. Small refrigerant leaks can have a significant impact, especially if the gas has a high global warming potential (GWP). In 2023, Seeka had a substantial leak of R404A refrigerant (GWP = 3,943) at the recently-acquired Gisborne post-harvest facility. To mitigate this risk, Seeka is retrofitting high GWP gases with lower impact alternatives, and upgrading detection systems to quickly identify leaks.

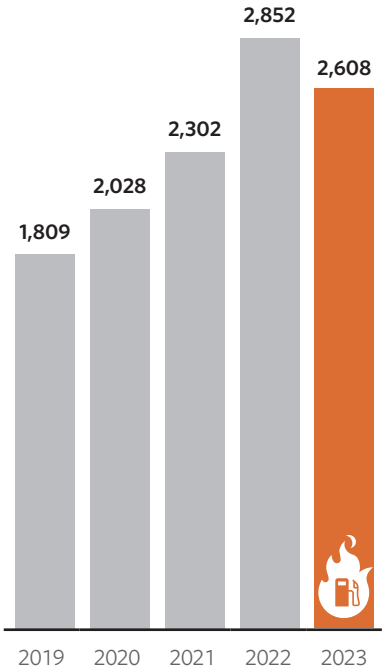
Fuel emissions. Seeka has a substantial vehicle fleet to move employees in rural locations. Where practical, Seeka uses hybrid vehicles, and is exploring battery electric vehicles (BEVs). However, vehicles which access orchards require off-road capabilities, which are not feasible with current BEV technology. Seeka will continue to monitor advancements in BEV technology.

Synthetic fertiliser emissions. Emissions occur when fertilisers break down and release GHG. Application rates vary between seasons, determined by soil and plant requirements. In 2023, Seeka achieved record-low fertiliser emissions due to lower crop loads and targeted application rates.

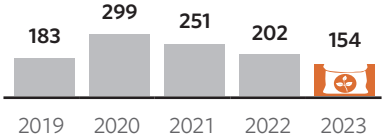
Refrigerants
Tonnes CO2e



Fossil fuels
Tonnes CO2e



Fertilisers
Tonnes CO2e



Category 2 emissions

Kiwifruit processing and cooling is energy intensive.

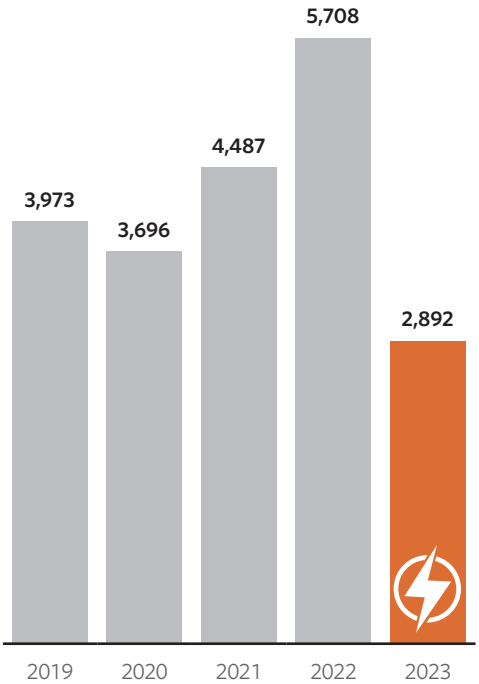
In 2023, Seeka's energy consumption was significantly lower than 2022, primarily from packhouses and coolstores closing earlier due to lower crop volumes. Seeka's solar also decreased energy demand by 490,000 kWh.

Seeka continues to improve energy efficiency per unit of fruit through packhouse automation and upgraded coolstore and lighting systems.

Whilst New Zealand has a high proportion of renewable energy generation, generation from non-renewable sources during peak demand increases the GHG intensity of New Zealand's electricity supply.

Annually, the ratio of renewable to non-renewable electricity generation varies which can have a non-controllable influence on Seeka's Category 2 emissions.

Category 2 emissions
Tonnes CO2e



RubyRed kiwifruit at Seeka Huka Pak

Greenhouse gas emissions intensity

Seeka reports on three intensity-based measures:

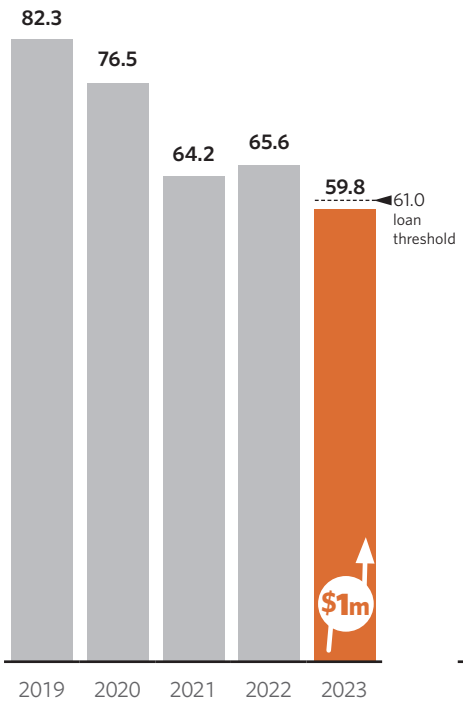
- Tonnes CO2e per $1,000,000 revenue
- Tonnes CO2e per 100,000 class 1 trays packed
- Tonnes CO2e per permanent employee

By normalising GHG emissions against business activities, Seeka can measure the performance of its sustainability initiatives in a growth industry. Seeka monitors GHG emissions per revenue, trays packed, and employee. This provides insights into operational efficiency and resource management.

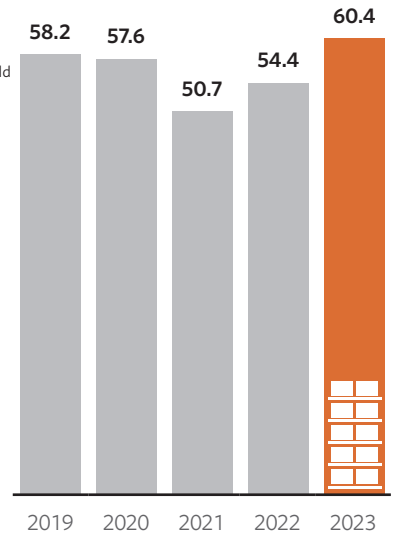
Seeka's Sustainability-linked loan uses CO2e per $1 million of revenue as a performance target. In 2023, the threshold was set at 61 tCO2e per $1 million, which Seeka achieved with 59.8 tCO2e per $1 million of revenue (see graph bottom left). Each year, the emissions intensity target is progressively reduced, with a long-term goal of achieving 42 tCO2e per $1 million revenue by 2027.

In 2023, Seeka's GHG intensity measures were influenced by lower crop volumes, as Seeka's fixed emissions associated with base operations had to be prorated over a reduced number of kiwifruit trays and permanent employees.

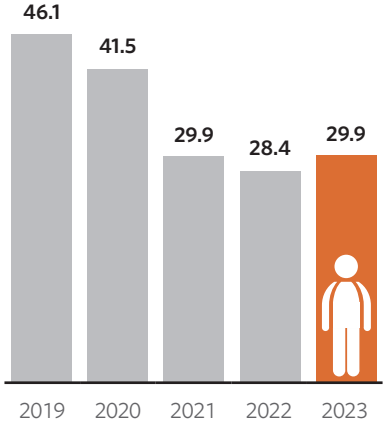
Per $1,000,000 revenue
Tonnes CO2e



Per 100,000 Class 1 trays packed
Tonnes CO2e



Per permanent employee
Tonnes CO2e



Carbon sequestration in kiwifruit orchards

Seeka recognises that its orchards perform a vital carbon sequestration function that helps regulate the climate cycle. Seeka, however, does not include sequestration in GHG calculations. Instead, Seeka adheres to the following principles:

- **Focus on absolute reduction**
  Seeka is prioritising efforts to reduce its absolute GHG footprint for both environmental and economic reasons. By directly lowering emissions, Seeka aims for a more sustainable and cost-effective operation.
- **Science-based methods**
  Seeka follows global best practices in monitoring and reporting its GHG footprint. Science-based methods for calculating carbon sequestration are evolving, and Seeka is committed to adopting reliable methods as they become available.

A 2011 Bay of Plenty study[1] found that a hectare of organic kiwifruit annually sequesters 2.4 tonnes of CO2e.

Other fruit trees, shelterbelts, and improvements to soil health across Seeka's operations likely sequester additional carbon.

Seeka's land improvement efforts, including converting under utilised or degraded land into productive orchards, increases carbon sequestration. Conversions can enhance soil carbon storage and CO2 absorption.

Seeka acknowledges the importance of understanding and fostering practices like regenerative horticulture to increase the carbon sequestration potential in its orchards.

1. Page, G., Kelly, T., Minor, M., & Cameron, E. (2011). Modeling Carbon Footprints of Organic Orchard Production Systems to Address Carbon Trading: An Approach Based on Life Cycle Assessment. HortScience, 46(2), 324-327. doi:10.21273/HORTSCI.46.2.324 (ASHS).

Greenhouse gas reduction initiatives

Renewable energy

Seeka is committed to a low-GHG energy future, and has set a goal to have 1000 kW of solar panels by 2025, and 3000 kW by 2030. Seeka will directly consume the energy from these panels and export any excess back to the grid.

In 2023, Seeka added 345 kW of solar at its Katikati post-harvest facility, which is forecast to supply 12% of total site energy demand (generation capacity is enough to power 60 homes).

Seeka Katikati was a good candidate for the solar installation due to its high sunshine hours and long operational window, handling both kiwifruit and avocado. To date, Seeka's post-harvest solar installations have been at sites that handle a range of crops which produces a more consistent energy demand throughout the year. The sites also have high sunshine hours which enhance solar efficiency and reduce the payback period.

Seeka is exploring new opportunities for solar installations, and considering battery technology to reduce peak energy demand.

Solar panels at Seeka Katikati

Electrification

Seeka is implementing advanced technologies and energy management strategies to reduce overall energy demand, including:

- LED transition - Replacing traditional lighting with energy-efficient LED lights.
- Natural daylight integration - Incorporating natural daylight in facility design to reduce artificial lighting.
- Smart lighting controls - Installing motion and lighting sensors that adjust light intensity based on occupancy and natural light levels.
- Coolstore insulation and refrigeration efficiency - Improving coolstore insulation and the efficiency of refrigeration systems.
- Coolstore consolidation and shutdown - Consolidating fruit storage at energy-efficient sites.

Low emission vehicles

Seeka is reducing its use of fossil fuels by transitioning to low-emission vehicles (LEVs). The transition factors in a number of operational requirements, including:

- Assessment of vehicle fleet needs - While mid-sized hybrids and electric vehicles are suitable for support operations, orchard operations require larger 4WD vehicles to transport equipment between orchards and navigate off-road conditions. Currently, the EV market does not offer viable off-road options.
- Hybrid vehicles - Seeka has 14 hybrids and is working with its leased vehicle provider to introduce battery electric vehicles to the fleet.
- Charging infrastructure - Seeka has a dual 7kW electric car charger at head office. Accessible through an app, the charger is available for staff, visitors and company vehicles. Seeka plans to expand its charging network to support the transition to LEVs.
- Modern vehicle fleet operations - Seeka is committed to operating a modern vehicle fleet that minimises emissions. This includes regularly updating vehicles to the most efficient models and best practice vehicle maintenance.

Sustainable coolstores

Synthetic refrigeration gases, particularly those with high global warming potential (GWP), have a significant impact on the environment. New Zealand has capped the import of high GWP gases. This has limited supply, increased prices, and further incentivised the transition to alternative refrigerants.

Ammonia coolstorage

Seeka has five coolstore facilities with ammonia technology. Ammonia is a natural refrigerant with a very low GWP. Key benefits include:

- Eco-friendly - Zero ozone depletion potential and negligible global warming potential, reducing Seeka's GHG footprint.
- Enhanced efficiency and storage capacity - Improved cooling performance, lower energy consumption and better storage capacity.
- Compliance - Aligning with New Zealand regulations and efforts to achieve national sustainability goals.

Drop-in low impact refrigeration gases

Seeka supports the regulated disposal of synthetic refrigerants, and incentives for refrigerant destruction through the Cool-Safe product stewardship scheme. By implementing the use of drop-in, low-impact refrigerants, Seeka is facilitating the transition to environmentally friendly alternatives. Following minor modifications, drop-in replacements significantly reduce the environmental impact of existing refrigeration systems.

In 2023, Seeka retrofitted 3 coolstore systems with low impact refrigeration gases for sustainable cooling.

Crop diversification and climate adaptation

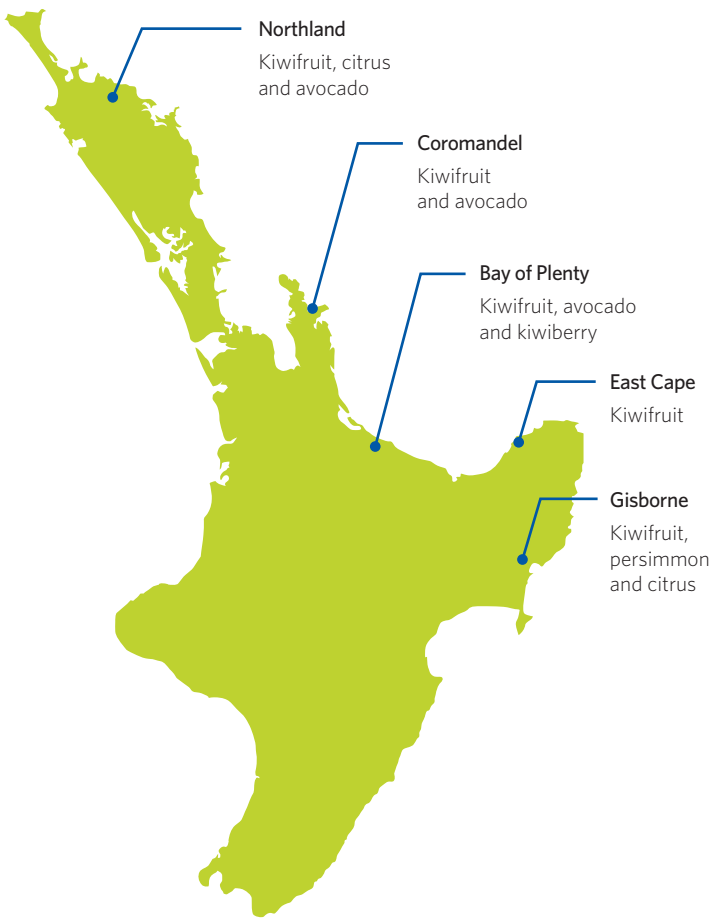
From its Bay of Plenty base, Seeka has expanded to include New Zealand's Northland, Coromandel, East Cape and Gisborne regions. These diverse growing areas help spread climate risk and provide valuable insights into how conditions impact fruit yields and quality.

Seeka's Australian operations further enhance the understanding of different soil types and irrigation requirements, and offer a view of potential climate futures. This experience allows the orchard team to build a knowledge base and adapt practices.

Seeka is expanding the range of fruits it grows and handles, including nashi, pears, plums, avocado, new kiwifruit varieties, Kiwiberry, jujube, persimmon and citrus. Seeka has also expanded the types of fruit it imports through SeekaFresh, Seeka's Auckland-based wholesale market.

Seeka's strategy of crop and fruit diversity enhances the ability to respond to changing climate conditions, ensures a more stable production system, and supports sustainable growth.

Seeka's primary New Zealand catchments



Dried jujube from Seeka Australia ready for retail. Jujube are sold fresh and dried.

Sustainability projects

Regenerative horticulture

Seeka recognises the importance of a holistic approach to orcharding. By employing regenerative horticulture methods, Seeka contributes to healthy ecosystems, catchments and biodiversity. Seeka balances the use of fertilisers and chemicals to maximise yield and minimise the environmental impact.

> Seeka's 2024 goal is to better understand the ecosystems and biodiversity in its catchment.

Geographical and crop diversity

Seeka has broadened its geographical reach and the variety of produce handled. This has enhanced the understanding of how different regional climates and soil types impact plant health and productivity.

> Seeka's 2024 goals are to assess new regions and crops, and adjust orcharding practices to improve the sustainability of fruit production and supply.

Value Recovery

Seeka's DNFC processing facility transforms fruit that does not meet retail grade standards into healthy and nutritious frozen and freeze-dried products. These products are sold in New Zealand supermarkets and supplied to the healthcare sector for post-operative recovery.

> Seeka's goal for 2024 is to continue to create healthy, nutritious products.

Energy efficiency

Seeka added more LEDs and motion sensors to its large post-harvest facilities in 2023. These LEDs use up to 70% less power than previous fittings.

> Seeka's 2024 goal is to continue installing energy-efficient lighting and motion sensors.

Sustainable supply chain

Seeka is expanding the recycling of orchard polypropylene twine into agricultural products.

> Seeka's 2024 goal is to encourage suppliers to take responsibility for their waste and follow accredited product stewardship schemes.

Sustainable coolstores

Seeka is upgrading refrigeration gas leak detection systems in all coolstores and retrofitting low-impact refrigerant gases.

> Seeka's 2024 goal is to continue the transition programme to low-impact refrigerants.

Packaging and waste

In 2023, Seeka adapted fruit-labelling equipment to use compostable labels, and partnered with packaging suppliers to collect and recycle all cardboard.

> Seeka's 2024 goal is to explore innovative solutions to reduce waste with our suppliers.

Low-carbon fleet

Seeka has installed a dual 7kW electric vehicle charger at Seeka 360 Head Office. Low carbon vehicles are being added to Seeka's owned and leased vehicle fleet which currently operates 14 hybrids.

> Seeka's 2024 goal is to increase the percentage of low-carbon vehicles.

Vermicomposting

Organic post-harvest waste is being diverted from landfill to Seeka's 100-tonne worm farm. Vermicompost from the worm farm is recycled back to Seeka orchards.

> Seeka's 2024 goals are to maximise worm farm waste recovery and investigate other avenues for organic waste.

Renewable energy

In 2023, Seeka installed a 345kW solar system at Seeka Katikati, bringing the total solar capacity across Seeka's network to 791kW. These solar installations are helping power Seeka's operations more sustainably.

> Seeka's 2024 goal is to add 200kW of solar to Seeka's network.

Case study
Diversification into citrus

Seeka has been diversifying its portfolio to handle more fruit in more markets. This includes New Zealand's citrus industry.

Seeka's expansion to citrus is providing Northland and Gisborne growers with a highly-efficient service that cares for their crop from orchard to market.

Seeka's Kerikeri and Gisborne sites packed 11 million kilograms of citrus, and contract packed nearly one million kilograms of persimmon for a third-party marketer in 2023.

With operations peaking during summer, prior to the kiwifruit harvest, Seeka's citrus service is providing continuous employment to local workers, and supporting regional economies and communities.

Product diversification also improves site utilisation, with post-harvest infrastructure being used to handle more fruit over a longer period.

Processing citrus at Seeka Gisborne

Quality obsession to minimise waste

Seeka aims to minimise waste and enhance circular systems. This ensures a higher percentage of our produce meets market standards, which reduces fruit downgrades or discards.

Growing techniques

Seeka's Technical Team and Orchard Managers work closely to cultivate sustainable volumes of high-quality, blemish-free fruit. This ensures that the fruit meets high-quality standards and reduces the likelihood of waste fruit. Seeka shares these insights with its grower community.

Verified Lab Services (VLS) Testing Laboratory

Seeka's testing laboratory monitors fruit maturity and provides clearance testing services for the kiwifruit industry. By ensuring fruit is cleared for harvest at optimal maturity, VLS minimises waste.

VLS also runs the KiwiGreen programme to control pests and meet local and export market conditions with timely and accurate results. Conducted in summer, KiwiGreen monitoring focuses on testing for scale, leafroller, wheat bug, and mealy bug.

SureStore Bins

SureStore bins are designed to protect fruit being transported from the orchard to the packhouse. This minimises waste from transport damage.

Soft-handling technology

Seeka employs advanced soft-handling technology, including automated camera grading, to sort crops according to market requirements. This technology ensures that quality fruit is selected for export, while lower-grade fruit can be directed towards the domestic market and value recovery.

Inventory management systems

Seeka's inventory management systems and innovative machine-learning technology optimise coolstore loadouts, ensuring that fruit is dispatched in the right order. This reduces the risk of waste from storage losses.

SeekaFresh

Seeka's marketing service SeekaFresh collaborates with retailers to match fruit supply with market demand. This includes promoting the seasonal availability of Seeka fruit to consumers to optimise sales and minimise waste by aligning supply with consumer demand.

Packaging innovations

Seeka has introduced net bagging for small or irregularly shaped kiwifruit and avocados, creating retail space for fruit that may not have met cosmetic standards. These innovative packaging solutions, such as "odd bunch" programmes, allow Seeka to sell a greater portion of its fruit, reducing waste and maximising value.

Picking innovations

Seeka has implemented innovative picking bags to handle kiwifruit more gently. The new bags reduce the potential for damage during the picking process, to decrease fruit waste.

Case study
Extracting maximum value

Seeka's wholly-owned subsidiary the Delicious Nutritious Food Company (DNFC), increases the nutrition value Seeka delivers to consumers.

DNFC specialises in producing the functional foods Kiwi Crush™ and Kiwi Crushies™ from kiwifruit that are unsuitable for direct consumer sales.

Using Seeka's proprietary process, DNFC extracts the kiwifruit's essential vitamins, minerals, and food fibre to produce high-value, easy-to-use foods. Kiwi Crush™ and Kiwi Crushies™ are available all year from New Zealand supermarkets, Chemist Warehouse and online, and are widely used post surgery as digestive aids.

Using a similar approach, Seeka also produces high-value avocado oil from each season's avocado crop.

By producing high-value, easy-to-consume foods from fruit that is not readily saleable, Seeka is reducing food waste and delivering more value from each crop.

See Seeka's Kiwi Crush™ webstore at www.kiwicrush.co.nz

Horticulture in changing climates

Climate change presents both opportunities and threats to Seeka's business. Variations in climate affect weather patterns, soil moisture, and the availability of natural resources. These changes can impact growing locations, as well as the quantity and quality of the fruit Seeka handles. Orchard productivity is impacted by physical risks, including:

- Weather events - Increased frequency and intensity of storms, hail, frosts, and extreme temperatures can damage crops, reduce yields, and affect fruit quality.
- Soil moisture - Changes in precipitation can cause droughts or excessive rainfall, impacting soil moisture levels and plant health.
- Natural resource availability - Altered water availability and changing nutrient cycles can affect the overall health and productivity of orchards.

Transitional climate risks

Along with physical risks, Seeka is also navigating transitional climate risks from the shift to a low-carbon economy. Seeka's transitional risks include:

- Regulatory changes - New regulations and policies aimed at reducing carbon emissions may require more stringent environmental practices and reporting standards.
- Market shifts - Consumer preferences for sustainably produced goods can impact market demand and increase operational costs.
- Technological advancements - New technologies for energy efficiency and sustainable orcharding are rapidly being developed.

Climate scenario analysis

In 2023, Seeka analysed three climate scenarios to understand the potential impacts and opportunities of a changing climate:

- 1.5°C increase - The limited warming scenario assumes minimal warming, with relatively stable climate conditions.
- 2.5°C increase - The moderate scenario anticipates moderate warming, with increased frequency of extreme weather events and altered resource availability.
- Up to 4°C increase - The uncontrolled warming scenario represents severe climate change impacts, with significant alterations to weather patterns, resource availability, and agricultural productivity.

Seeka's scenario analysis conceptualised how different climate futures could impact temperatures, weather events, resource availability, fruit yields, consumers, and markets, and is helping Seeka build resilience in the face of climate change.

Strategies for resilience

To address climatic challenges, Seeka is assessing climate-related risks and impacts and formulating strategies to remain resilient. Key strategies include:

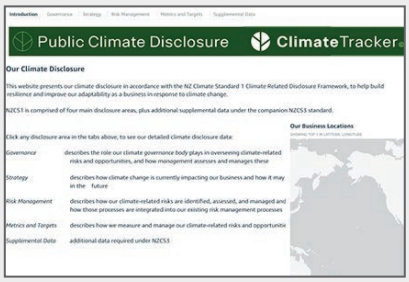
- Diversified crop portfolio - Growing a variety of fruits across different regions spreads risk and builds resilience.
- Enhanced irrigation systems - Implementing advanced irrigation technologies to manage water resources and maintain optimal soil moisture levels.
- Soil health management - Adopting practices that enhance soil health and fertility, such as cover cropping and organic alternatives.
- Orchard protection - Ensuring orchards have sufficient shelter, frost protection and drainage.

Climate-related disclosure process

Assessing climate change and creating appropriate mitigation and adaptation strategies are central to enabling a sustainable future for Seeka. In February 2024, Seeka released its first climate-related disclosure report, compliant with the New Zealand Climate Standards (NZ CS1-3) for NZX-listed companies. This report provides insights into climate-related risks and opportunities and explains how Seeka plans to build resilience in response to climate change. Seeka's climate-related disclosure process plays a crucial role in identifying opportunities to build resilience. This process involves:

- Risk identification - Systematically identifying climate-related risks, including extreme weather events, changing precipitation patterns, temperature fluctuations, and transitional climate risks.
- Impact analysis - Assessing the potential short and long-term impacts of these risks on different aspects of the business, from orchard productivity to supply chain stability.
- Strategic planning - Developing and implementing strategies to mitigate identified risks and capitalise on opportunities, including investing in renewable energy, improving energy efficiency, and adopting sustainable orcharding practices.
- Continuous monitoring - Monitoring climate trends and their impacts on operations to ensure strategies remain effective and adaptive to changing conditions.

Seeka's climate-related risks are regularly reviewed and incorporated into Seeka's risk management register.



See Seeka's public climate disclosures at www.seeka.co.nz/climate-change

Climate change risk and opportunity analysis

Seeka has identified climate-related risks and opportunities that could impact the business. The speed and severity of these impacts will depend on the rate of warming and the subsequent influence of climate changes. By identifying these risks and opportunities, Seeka is looking to adapt its operations and build resilience. This forward-thinking approach ensures that Seeka remains agile and prepared to navigate the evolving climate landscape, safeguarding the company's long-term sustainability.

Risks

Risk	Type	Description	Response
Changing weather patterns reduce fruit yields and quality.	Physical	Higher summer rainfall and lower winter chill hours could decrease kiwifruit yields, reduce fruit quality, and degrade storage performance, and increase the reliance on artificial budding chemicals. More droughts could dry soils and degrade soil quality and biodiversity. Higher winter temperatures may increase energy demand to cool fruit.	Implementing advanced weather forecasting systems, diversifying crop varieties, and enhancing soil health practices to improve resilience against changing weather patterns.
Extreme weather events reduce fruit yields and quality.	Physical	Extreme heavy rain, frost, hail, high winds, heat waves and fire can damage plants and degrade fruit yields and quality.	Investing in robust infrastructure to withstand extreme weather events, such as improved drainage systems, protective covers, and emergency response plans.
Rising sea levels cause coastal erosion and raise water tables.	Physical	Rising sea levels can raise the water table and increase the salinity of ground water. Soils will not drain freely causing rot. Unprotected coastal orchards are at risk of coastal erosion. Most orchards and post-harvest operations are away from the coast and are not expected to be impacted by rising sea levels.	Sea level rise and its impacts are considered when Seeka evaluates investments in orchards and infrastructure.
More pests and diseases impact fruit yields.	Physical	Pest populations may survive winter due to fewer frosts which act as a natural regulator. Higher temperatures could also create climates suitable for exotic pests and diseases.	Seeka's Technical Team in conjunction with Verified Lab Services conduct extensive pest monitoring throughout the season. In addition, information sharing and industry collaboration is essential to stay ahead of invasive pests and disease.
Changing consumer preference and market restrictions.	Transitional	Market access may be restricted by changes to border acceptance criteria. Changing consumer preferences for low carbon and organic fruit may reduce demand for conventionally-grown fruit.	Monitoring market trends, diversifying product offerings to meet changing consumer preferences, and obtaining certifications to access new markets with stringent sustainability requirements.

Risks

Risk	Type	Description	Response
Higher input costs associated with carbon footprint.	Transitional	Market mechanisms are a tool to charge polluters. Demand for carbon neutrality could increase the cost of carbon.	Investing in renewable energy sources, and exploring alternative, low-carbon input options to reduce costs and carbon footprint.
Regulations restrict chemical use.	Transitional	Restrictions on chemicals used for pest control and crop maintenance could impact yields and fruit quality.	Ensuring compliance with regulatory changes. Investments in organic and regenerative horticulture methods reduce reliance on chemical inputs.
Regulations restrict water use.	Transitional	Restrictions on orchard water use could impact plant health and yields.	Ensuring sustainable water supply is available for new and existing orchards. Implementing water-efficient irrigation systems and complying with regulatory restrictions.

Opportunities

Opportunity	Type	Description	Response
Regional climate shifts.	Physical	The development of new growing regions due to climate change may facilitate geographic expansion, crop diversification, and enhance resilience, and allow Seeka to sustainably grow operations.	Exploring new growing regions that become viable due to climate shifts, optimising planting schedules, and investing in research to understand and adapt to new climate conditions.
Increased atmospheric CO2.	Physical	Higher atmospheric CO2 levels will increase soil CO2, which can improve plant water use, optimise photosynthesis, reduce transpiration, enhance stress tolerance, and promote robust root systems.	Utilising soil sampling, orchard data, maps and technology to better understand and capitalise on soil health.
Sustainable financing.	Transitional	Sustainable financing for sustainability-driven companies and low-carbon developments may transform project funding and execution.	Entered a Sustainability-linked loan.
Sustainable produce.	Transitional	Growing consumer demand for sustainably-produced and healthy foods is a significant opportunity as consumers make environmentally conscious and health-oriented choices. Market access may become more open if New Zealand and Australia transition faster than other global economies.	Diversifying sustainable offerings, obtaining relevant certifications, and marketing sustainable practices to access new market segments.

Social sustainability

Founded on relationships

At Seeka, social responsibility is captured in our brand attribute, "Founded on Relationships". Founded by kiwifruit growers in 1987, Seeka has remained focused on delivering better fruit to the markets and lifting supply chain efficiency. While Seeka has rapidly grown, the commitment to nurturing relationships continues. Seeka aspires to be an employer of choice, cherishing the bond with growers, clients, employees, investors and communities.

Seeka fosters a positive and inclusive work environment and promotes equal opportunities for all employees. Seeka nurtures professional growth, and prioritises the satisfaction and success of our growers and clients to build robust, trust-based relationships. Seeka supports local initiatives that promote social development, environmental sustainability and economic growth.

Our people

Seeka is committed to being an employer of choice. Seeka is working to report performance on pay equity and follows clear and equitable remuneration structures, provides training opportunities, and offers career pathways that attract and promote the best individuals within the industry. Seeka's people are the driving force behind Seeka's success, and Seeka celebrates and values their contribution.

Seeka's ongoing commitment to the workforce ensures that Seeka creates an inspiring and rewarding company culture. Seeka strives to be an employer that attracts, retains, and nurtures top talent.

Partnering with Māori

Seeka holds partnerships with Māori in high regard. Seeka has the largest number of Māori kiwifruit growers, and is investing with Māori to develop kiwifruit orchards. Seeka's partnerships stimulate the Māori economy and support growth in rural communities.

With a substantial shareholding in Seeka, the Māori perspective, values and aspirations are incorporated in Seeka's business activities.

Commitment to our people and diversity

Seeka is dedicated to fostering an inclusive environment that embraces a diversity of thoughts and skills. Seeka's diversity policy encompasses gender, ethnic background, religion, marital status, culture, disability, economic background, education, language and sexual orientation.

Drawn from local and international communities, Seeka's workforce is notably diverse, including tangata whenua, backpackers, and people from the Pacific and Asia through the RSE scheme.

Seeka's Board views the composition of its independent directors as a key measure of diversity and inclusion. In 2023, the proportion of independent directors identifying as female increased to 50% (2022: 25%). Additionally, the percentage of all directors and senior managers identifying as female rose to 29% (2022: 20%).

The kiwifruit industry was traditionally male dominated. Seeka measure gender pay equity, and is committed to closing the gap. The gender pay gap reduced from 22.3% in 2022, to 21.0% in 2023.

Vine maintenance in Te Kaha

Case study
East Cape orchard developments

In 2023, Seeka's partnership with iwi and Kānoa (Regional Economic Development & Investment Unit) is creating employment, generating long-term wealth, and strengthening communities in the East Cape. Our co-investments in Raukokore, Te Kaha, and Hāwai have flourished.

The orchard developments have significantly boosted the Māori economy, improved land utilisation, created local jobs, and returned value to Māori as orchard owners. In Raukokore, Seeka remains a foundation partner of the $14 million Wai o Kaha orchard development. This investment has created skilled roles and spurred economic development, encouraging tangata whenua to return home and contribute to their community.

The Iwi, Kānoa, and Seeka-funded development has established 40 hectares of Hayward kiwifruit orchards on former maize and grazing land, irrigated by a Kānoa-funded water system. Seeka has supported the establishment of the local contractor Raukokore Kaimahi, which continues to work on the development and other orchards in the region.

The revitalisation of Raukokore, guided by Willie Te Aho, now includes Kānoa-funded housing that is helping locals into home ownership through a rent-to-own scheme. This initiative is providing stable housing and fostering a stronger sense of community.

Willie Te Aho and the iwi of Te Whānau-ā-Apanui are committed to growing this venture, with a vision to expand to 100 hectares of kiwifruit in Raukokore. As these orchards continue to grow, so do the communities and workforce, showcasing the profound impact of strategic partnerships and sustainable development.

Health and safety

Seeka's "Our Health, Safety, and Wellbeing" programme is focused on minimising harm and enhancing the wellbeing of Seeka's employees. The programme is supported by a dedicated health and safety team to ensure that everyone remains safe on the orchard and in post-harvest facilities. Seeka also offers health and life insurance benefits and adheres to the GlobalG.A.P. GRASP module which addresses workers' health, safety, and welfare in agricultural operations. Seeka's health and safety initiatives include:

- **Sustainability-linked loan** - Targeting zero serious injuries with a TRIFR less than 2.5 by 2027.
- **Dedicated health and safety team** - Focused on protecting employees working with moving machinery, tractors, forklifts, and heavy vehicles.
- **Safety investments** - Guards and barriers to prevent collisions and AI camera proximity detection systems protecting workers from moving forklifts.
- **Tracked on-orchard movements** - One-step Seeka app sign-in provides direct access to accurate orchard maps that clearly mark hazards.
- **Employee Assistance Programme (EAP)** - Free and anonymous access to professional support.
- **Health and wellbeing programme (SeekaYou)** - Comprehensive health and wellbeing initiatives.
- **Weekly safety focus toolboxes** - Regular safety briefings and updates.
- **Whistleblowing policy** - Clear channels to report any wrongdoing within Seeka.

Case study
RSE programme supports Pacific social and economic development

Seeka's RSE employees are an integral part of the company, fostering a reciprocal relationship where Seeka benefits from valued skilled labour, and the RSE employees receive fair compensation that contributes to the social and economic development of their families and communities in their home countries in the Pacific and Malaysia. During 2023, Seeka welcomed 1,300 RSE employees.

Seeka complies with all requirements and works hard to make the RSE employees feel welcome in New Zealand. Beyond providing wages, Seeka's scheme provides access to new orchard skills and knowledge. RSE employees are supported by pastoral care workers who help ensure they feel a sense of belonging and connection within the Seeka workforce. Seeka values and protects the physical, mental and spiritual wellbeing of its RSE employees.

Recognising the pressures on RSE accommodations, Seeka built Turanga Whetu, a new accommodation facility located on Sharp Road in Katikati. Meaning "Star Base," Turanga Whetu accommodates up to 140 people, significantly expanding the area's quality accommodation capacity.

Turanga Whetu offers modern amenities, including recreational areas, lounges, kitchen and laundry facilities, and facility-wide Wi-Fi. Opened by a special blessing ceremony in August 2023, Turanga Whetu is a welcoming and well-equipped accommodation facility for Seeka RSE employees.

Esera Isaako, RSE employee from Samoa performing at the Turanga Whetu opening ceremony

Social impact initiatives

With "Select Excellence", Seeka strives to continually improve the performance for stakeholders and deliver an excellent service that supports prosperous communities.

Responsibility	Initiative	Achievements
Engage youth into industry	Cadetship	Promoted four Cadets into orchard management positions in 2023. Seeka's cadetship provides a three-year skills development pathway covering orchard and post-harvest operations that give Cadets comprehensive knowledge about the industry. Current key achievements include: – Integration of Tikanga Māori. – New post-harvest stream that broadens learning and development. Currently a first-year Cadet has chosen the post-harvest stream with a second-year Cadet moving to post-harvest next year. – Cadets help with Seeka information and social events to gain valuable networking opportunities with the grower community, improve Cadet confidence and support Seeka's community engagement. Second-year orchard Cadets are in supervisory roles and developing leadership skills with our RSE employees while also developing their orchard management skills. Third-year orchard Cadets are working towards trainee manager roles, where there is significant competition. Third-year post-harvest Cadets have performed a broad range of packhouse leadership roles, and are taking a supply and distribution course.
Upskilling	Trainee Orchard Management Programme	Seeka has two trainee Orchard Managers that oversee a small portfolio of orchards. With close support and mentoring from their Regional Manager, the trainees learn all aspects of orchard management, until they are ready to manage 50 hectares.
	Level 3 Training Programme	Recently created, the Level 3 Programme allows leaders to increase their supervisory and management skills, and to improve Seeka's operational efficiency through standard processes and procedures.
	Internships	General Managers consider projects suitable for interns. Interns gain experience in the area they are studying, create networks, increase awareness, grow aspirations and develop skills.
	Toi Ki Tua Internship	The people and capability intern came through the Toi Ki Tua Māori Internship Programme which is focussed on helping Māori tertiary students enter high-value career pathways.

Responsibility	Initiative	Achievements
Wellbeing	'*Seeka You*'	Seeka's People and Capability Team have partnered with Health and Safety to form the support platform *Seeka You*. *Seeka You* covers emotional, mental, physical and financial support, and has a set of convenient tools and handy apps that help employees prioritise their wellbeing. The *Seeka You* calendar also keeps employees up to date and encourages participation in activities that promote wellbeing, such as Gumboot Friday and Pink Shirt Day.
Cultural, age and gender diversity	Diversity study	Seeka's 2023 diversity study showed a 58% male and 42% female workforce, with the study informing diversity strategies to ensure a fair and equitable environment for all employees. By prioritising diversity and inclusion, Seeka enhances its workplace culture and strengthens its business by leveraging a variety of perspectives and skills, contributing to the social wellbeing of its employees and the broader community.
Working with MSD	Help New Zealanders into meaningful employment	Seeka works closely with the Ministry of Social Development (MSD) to prioritise introducing New Zealanders into the workforce, and liaises with multiple agencies to find suitable work in the orchard and post-harvest operations.
Understand Seeka people; who we are, our aspirations, and our relationship with Seeka	Annual performance and development review	Provides employees with the opportunity to discuss their workplace experience, clarify expectations, and plan for future professional development. These reviews encourage communication, setting goals, and supporting employee growth.
	Exit survey	Explores both positives and negatives to guide improvements. The survey is offered to all departing permanent employees.
Seasonal worker engagement	Seasonal work campaigns	Keeping people engaged to work at Seeka throughout the harvest season. Seeka was fully staffed through the harvest. Incentives and a range of fun and inclusive activities, such as food shouts and dress-up days occurred throughout the season.
RSE employee engagement	RSE pastoral care and fair compensation	In 2023, Seeka welcomed 1,300 RSE employees, providing fair compensation and contributing to the development of their communities in the Pacific and Malaysia. Seeka complies with all requirements and creates a welcoming environment. Employees gain orchard skills and knowledge, supported by pastoral care. In August 2023, Seeka opened Turanga Whetu, see page 29.
Community engagement	Community sponsorship	In 2023, Seeka donated $201,240 to support New Zealand youth development, community, cultural, and sports groups, as well as community health programmes.

Seeka and the United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (UNSDGs) are a collection of 17 interlinked global goals designed to be a "*blueprint to achieve a better and more sustainable future for all.*" Established in 2015 by the United Nations General Assembly, the UNSDGs are intended to be achieved by 2030.

Seeka's operations are aligned with the following eight United Nations Sustainable Development Goals (UNSDGs):

Supplier of healthy nutritious whole foods.

Providing a safe and healthy work environment.

Developing skills and communities.

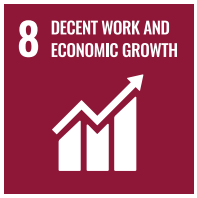
Safety always.

Measuring and reporting GHG.

Disclosed climate-related risks and opportunities.

Targets aligned to 1.5 degree pathway.

Incentivised through Sustainability-linked loan.



Providing economic development to local, rural, and Pacific communities.

Upskilling and supporting people into the workforce.

Partnering with Māori growers.

Converting low value pastureland to horticulture.

Protecting sensitive receiving environments.

Enhancing soil health to minimise sedimentation and nutrient leaching.

Environmental compliance.

Seeka strives to be agile, innovative, and industry leading.

Automation and machine learning to maximise efficiency and minimise fruit loss.

Investing in solar renewable energy.

Diversified geographies and crops for economic and climate resilience.

Value and protect ecosystem services.

Promote healthy biodiversity.

Enhance plant and soil health.

Protect native flora and fauna.

Environmental compliance.

Targeting zero food waste to landfill.

All cardboard recycled.

Vermicompost from worm-farm

Using recycled PET fruit packaging.

Compostable fruit labels.

Founded on relationships, Seeka is connecting sustainable fruit production with world markets.

SUSTAINABLE DEVELOPMENT GOALS

Read more about Sustainable Development Goals
See the United Nations Sustainable Development website.

Glossary

Term	Definition
Category	Category emissions were developed by ISO 14064-1: 2018 to examine Scope 3 emissions in more detail. Category 1 and 2 are identical to Scope 1 and 2, with Scope 3 divided into four categories. – Category 1 - Direct emissions from sources owned or controlled by an organisation. – Category 2 - Indirect emissions from purchased electricity, steam, heat, and cooling. – Category 3 - Indirect emissions from transportation. – Category 4 - Indirect emissions from products an organisation uses, including employees working from home, waste and leased assets. – Category 5 - Indirect emissions (use of products sold) including lifetime emissions, end-of-life emissions and financed or investment emissions. – Category 6 - Indirect emission from other sources (everything else).
Global warming potential	The ability of a gas to trap extra heat in the atmosphere over time relative to carbon dioxide (CO2). Also know as GWP.
Greenhouse gases	Gases in the earth's atmosphere that trap heat, including carbon dioxide (CO2), and traditional refrigerants. Also known as GHG.
Net zero	Achieving a balance between the amount of greenhouse gas produced and the amount removed from the atmosphere.
Refrigerants	Gases used to transfer heat in coolstore systems.
Regenerative horticulture	A conservation and rehabilitation approach to food and farming systems.
Renewable energy	Energy derived from natural sources, such as sunlight, that are replenished at a higher rate than they are consumed.
Recognised seasonal employer	A New Zealand government scheme that allows land-based employers to hire people from overseas when there are not enough local workers. Also known as RSE.
Scope	Scope emissions were developed by the Greenhouse Gas Protocol to categorise direct and indirect greenhouse gas emissions into 3 scopes. – Scope 1 – Direct emissions from sources owned or controlled by an organisation. – Scope 2 – Indirect emissions from purchased electricity, steam, heat, and cooling. – Scope 3 – All other emissions associated with an organisation's activities.
Sustainability-linked loan	Financing mechanisms that aim to facilitate and support environmentally and socially sustainable economic activity and growth.
Total recordable injury frequency rate	The rate of recordable injuries that occur per 200,000 hours worked. Also known as TRIFR.

Seeka

34 Young Road, RD 9, Te Puke 3189
PO Box 47, Te Puke 3153, New Zealand
+64 7 573 0303, info@seeka.co.nz

seeka.co.nz