

Towards Achieving the United Nations Sustainable Development Goals

Guidelines for the New Zealand Fresh Produce Value Chain
2023





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Glossary and Critical Interpretations

IFPS	International Federation for Produce Standards
MBIE	Ministry of Business, Innovation and Employment
MFAT	Ministry of Foreign Affairs and Trade
MfE	Ministry for the Environment
MPI	Ministry for Primary Industries
NVR	National Voluntary Revision
OAG	Tumuaki o te Mana Arotake/ the Controller and Auditor-General
RPC	Returnable Plastic Crate
SDGs	Sustainable Development Goals
UF TAG	United Fresh Technical Advisory Group
UN	United Nations
UNFSS	United Nations Food Systems Summit
UNSDGs	United Nations Sustainable Development Goals



Acknowledgements, Disclaimers, Authorship

This guide was prepared by the United Fresh Technical Advisory Group Team consisting of Dr Hans Maurer, Jacob Lawes and Tiago Inacio.

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Introduction



In 2015, the United Nations (UN) released their 17 Sustainable Development Goals (UNSDGs or SDGs) as part of the 2030 Agenda, Transforming our world: **The 2030 agenda for sustainable development¹**.

The New Zealand Government signed a non-binding acceptance document of the 2030 Agenda, including the 17 SDGs, on 25 September 2015, alongside 192 other UN member countries. Our Prime Minister at the time was John Key.

During 2016, New Zealand participated in scoping out global workplans for achieving the UNSDGs. In mid-December 2016, Bill English became Prime Minister. During his brief tenure, New Zealand continued to support and promote the UNSDGs.

Jacinda Ardern became Prime Minister in October 2017. In the following 5 years, work on the SDGs intensified globally, and the pace certainly also increased in New Zealand. Government agencies started to become involved. Our government examined existing policies in trying to understand to what extent these were already contributing towards the SDGs. Reports were released by several ministries, and all the time the clock kept on ticking, bringing us closer by the day towards 2030.

In 2019, New Zealand submitted a Voluntary Progress report to the UN, called, "Towards a better future together, New Zealand's progress towards the SDGs – 2019²".

Chris Hipkins became Prime Minister in January 2023. We can safely assume that his government, as well as those that will follow over time, will continue their support of the UNSDGs.

2030 is getting closer, however, and sooner or later government will turn to the various industries contributing to New Zealand's GDP and export earnings and ask, "well, and what is your industry's contribution towards achieving the SDGs going to be?"

When, not if, that question comes, the produce industry needs to consider itself as being addressed, and we will need to provide some answers.

If past experiences are anything to go by, this will lead to a flurry of activity where businesses across the entire industrial spectrum operating in our country will be tasked with achieving yet to be determined standards in a hurry.

In November 2022, the United Fresh Technical Advisory Group (UF TAG) had the privilege of being a key organiser of the inaugural global sustainability symposium held by the International Federation for Produce Standards (IFPS).

Since then, the UF TAG team has made it its business to understand New Zealand's sustainability position a whole lot better.

Are we concerned? Yes, we are!

Should you be concerned, operating as a horticultural production unit, a packhouse, a wholesale produce market, a retail business selling fresh fruit and vegetables, or a logistics provider servicing the physical produce supply chain structure? Yes, you should!

Our country has committed itself to achieving the 17 SDGs by 2030. Each SDG comes with several targets requiring immediate action. There are a total of 169 targets associated with the 17 SDGs.

In August 2021, Tumuaki o te Mana Arotake/the Controller and Auditor-General (OAG) prepared a report entitled “The Government’s preparedness to implement the sustainable development goals³”. The OAG report summary includes the following statement:

“Although the [2019 Towards a better future together] report refers to some targets that align with sustainable development goals, such as reducing child poverty and greenhouse gas emissions, it has not specified targets across all the sustainable development goals that New Zealand has committed to achieving by 2030, or whether the country is on track to achieve them.”

In plain language, very little appears to have been achieved in the six years between 2015 and 2021 towards helping New Zealand in general and, specifically, the produce industry to understand and work with the SDGs.

That is the rationale behind United Fresh deciding to publish this set of guidelines.

Fifteen years is not a long time to achieve ground-breaking change, and half of that time is gone already. We are a “can do” industry. Let’s get going and take responsibility for working consistently and consciously towards achieving the 17 UNSDGs, within the context and environment we can manage and influence.

And just to prove that it is possible to change typical behaviours, United Fresh will not distribute printed copies of these guidelines, as doing so would not be consistent with the overall need for evolving into a more sustainable world.

Instead, you will find these guidelines in the sustainability section of United Fresh’s website, <https://unitedfresh.co.nz/>.

Dr Hans Maurer

Chair, United Fresh Technical Advisory Group



The United Nations Sustainable Development Goals

The UN has developed a set of resources dedicated towards sustainability in general and the very specific objective of

Transforming our world: The 2030 agenda for sustainable development⁴

The UN Food Systems Summit⁵ (UNFSS), held in 2021, was focused on working through the challenges that need to be overcome in order to achieve the 17 UN Sustainable Development Goals (UNSDGs) by 2030. The UN Department of Economic and Social Affairs, which has responsibility for Sustainable Development states that the 17 SDGs⁶ and the associated 169 targets⁷ are;

“integrated and indivisible and balance the 3 dimensions of sustainable development: the economic, social, and environmental dimensions. The goals and targets will stimulate action ... in areas of critical importance for humanity and the planet”.

These areas are:



People

We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.



Planet

We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.



Prosperity

We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.



Peace

We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.



Partnership

We are determined to mobilise the means required to implement this Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focussed in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.



The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realised. If we realise our ambitions across the full extent of the Agenda, the lives of all will be profoundly improved and our world will be transformed for the better.

The above discussed areas are a direct quotation from the UN web page dealing with the 2030 agenda⁸.

The United Nations Sustainable Development Goals



Table 1



New Zealand's position on the United Nations Sustainable Development Goals

New Zealand was an early adopter of the SDGs and requested in a letter to UN officials in 2018, to be able to participate in the Voluntary National Review (NVR) process aimed at each participating country understanding its current position related to the SDGs and sharing this information with others. This report was published in 2019 and is available on the MFAT website⁹.

The MFAT website also contains a page of high-level analysis of the SDGs and their relevance to New Zealand¹⁰.

In September 2021, Foreign Minister Hon Nanaia Mahuta gave a speech, which is reproduced on the official website of the New Zealand government¹¹. Here are several statements Mahuta made in her speech:

"Never before has our resilience, globally, as a country, and individually, been more important. The Sustainable Development Goals provide a framework for creating resilient societies."

"We require systems-level change to confront the global challenges that we face. And without effective global institutions and multilateralism, we will not achieve durable solutions to these global challenges."

"The Government has more work to do to better implement the Sustainable Development Goals in a strategic and co-ordinated manner."

Whilst MFAT appears to be the lead Ministry for New Zealand's SDGs commitments on the global stage, other government ministries also engage with SDGs. These include MfE, MBIE, MPI and others.

In a report entitled "Where to from here? How we ensure the future wellbeing of land and people. Consultation on the Ministry for the Environment's draft Long-term Insights Briefing 2022"¹² MfE officials are making reference to "... the failure to achieve the targets in the sustainable development goals (Naidoo and Fisher, 2020)."

The Naidoo and Fisher article¹³ referenced by MfE, is entitled "Sustainable Development Goals: pandemic reset", and is crafted around the following statement:

"COVID-19 is exposing the fragility of the goals adopted by the United Nations – two-thirds are now unlikely to be met."

It would only be natural that the current New Zealand government also subscribes to this view, although it is difficult to find any direct public government

statement on that matter. That position is, however, unlikely to stop future governments maintaining their commitments towards achieving the SDGs by 2030 and expecting industries to significantly contribute towards achieving those goals, by way of behavioural and process change across entire value chains.

In May 2022, MBIE published a draft report entitled "The future of business for Aotearoa New Zealand: an exploration of two trends influencing productivity and wellbeing – purpose-led business and use of blockchain technology"¹⁴.

The draft MBIE report sums the SDGs up as having the aims, "to end poverty, promote peace, share wealth and protect the planet by 2030".

The report goes on to say that "by focussing on the purpose of productivity (i.e., improving people's wellbeing), economies can become more environmentally sustainable and better for their citizens as well as more productive".



The Office of the Auditor-General report (August 2021)¹⁵ stated that, Government still needed to clarify:

- Whether it will set targets for each of the SDGs New Zealand will work towards, and, if so, in which areas
- What specific actions it will take to implement the SDGs
- How it will measure progress

The report also found that roles, responsibilities and expectations of Government agencies need to be more clearly defined. The need for increased engagement with stakeholders and the public, the need to be clearer about targets and the need for transparent reporting on progress are emphasised.

In September 2021, the United Nations held a Food Systems Summit (UNFSS). The purpose of that summit was to explore how UN members could achieve the SDGs by 2030. MPI was the New Zealand's government lead agency in engaging with the UN on SDGs in this instance¹⁶.

The New Zealand Prime Minister at the time, Jacinda Ardern, addressed the UNFSS in Rome in September 2021 and committed New Zealand to join the Indigenous People's Food Coalition. The key point she made on New Zealand's behalf in her address was: "We are committed to ensuring Indigenous Peoples can help lead the way forward".

Prime Minister Ardern further stated¹⁷:

"For New Zealand, this means promoting the significant role of Māori in our food sectors and encouraging the growth of Māori agribusiness by removing barriers and empowering Māori leadership."

The New Zealand Fresh Produce Industry's Position on Sustainability

Our industry has understood sustainability long before the phrase became the buzzword it is known for today.

A classic example of this are the returnable plastic crates (RPCs) which are extensively used in our domestic industry to move fruit and vegetables postharvest all the way into retail stores. The multiple journeys RPCs are capable of making, means they would need to be invented now to meet sustainability requirements, if they did not already exist. It is just, that as an industry, we take achievements like these for granted and do not give ourselves enough credit or market exposure for having found an answer to sustainable packaging needs decades ago.

Similarly, fruit and vegetable growers, market operators and retailers understand the perishable nature of the produce industry only too well. Produce and the resources needed to grow fruit and vegetables are constantly exposed to the elements. Soil is in danger of being eroded, crops require water and nutrients, pests and disease need to be managed and kept at bay, and volatile weather events are something the entire industry is very much used to.

All these factors, each one of them carrying the sustainability tag, one way or the other, form part of the daily challenges for our industry. We understand these.

We are also trying to understand new global challenges we are increasingly being exposed to. Such as,

- Weather bombs with unobserved dimensions
- Urban sprawl meaning productive horticultural land is lost forever as it is subdivided for residential development
- Multiple disruptions to our finely balanced supply chains, be they labour related, a consequence of a pandemic, climate change driven or connected to food safety and human health

All of this means that the produce industry from Kaitia to Bluff needs little persuasion to accept that sustainability is not just a point in time but a lifelong journey with a changing road map, requiring dedication, direction and conviction, in order to contribute to the long-term survival of our planet.

We know that we have to play our part in this. But in order to play our part effectively and efficiently, we need to plan. Particularly, as nobody knows our industry better than we do ourselves. The danger of not having a plan heightens the risk, that the closer we get to deadlines our government has committed New Zealand

to, including our industry, the more likely it will be that we are expected to achieve targets that:

- Are very difficult or impossible to reach
- Cannot be achieved, simply because we did not start early enough to introduce change
- We are not aware of, because the message that change would be needed had passed us by
- Have never been properly communicated in the first place
- Were too difficult for us to understand

In early 2023, Horticulture New Zealand launched the "Aotearoa Horticulture Action Plan¹⁸". This is a good start, but as horticultural products leave orchards, paddocks, fields and groves, and travel beyond the farmgate towards domestic and export market consumers, horticultural crops become part of the produce category. This is why we at United Fresh see our role in the industry as working on behalf of the entire produce value chain. The value chain includes the produce markets, the produce retailers as well as the logistics and transport providers, specialised service providers and last but not least, the consumer.

The Aotearoa Horticulture Action Plan-Strategy makes reference to the 17 UNSDGs, on a page entitled "Alignment with the United Nations Sustainable Development Goals", stating that "aspects of the Action Plan strategy align with 10 of the 17 Sustainable Development Goals". No further explanation is provided.

The United Fresh Sustainability Guidelines for the New Zealand Fresh Produce Value Chain aim to bring the 17 SDGs alive from a produce industry perspective.

Anyone within the produce industry will be able to agree that the 17 UN Sustainable Development Goals are a worthwhile initiative towards the wellbeing of our planet and all its people. Yes, this might sound idealistic, but more effort is clearly needed to make sure that we leave an inhabitable earth for the generations that follow us.

The UNSDGs are an excellent framework that can be used to benchmark the achievements we are already able to claim, and the efforts we need to intensify in order to achieve those goals.

However, goals need to be broken into digestible components that are easy to understand, plan for, and achieve – and that needs to start at individual organisation level.

We simply cannot rely on goal achievement being regulated by well-meaning governments, which cannot possibly understand our industry as well as we do.

This guide is, therefore, aimed at supporting individual produce industry organisations, from paddock to plate, to take the initiative and start contributing towards the achievement of the 17 UNSDGs.



Indicators Aotearoa New Zealand



Our starting point is the “SDGs Map to Indicators Aotearoa New Zealand” included in the National Voluntary Review released by MFAT (2019). The indicators are shown in this guide as Table 2.

The purpose of these “Indicators Aotearoa New Zealand” is to bring the SDGs to life at a country–strategic level and provide an element of guidance on the decisions any organisation across the multiple industries that operate within New Zealand ought to consider when implementing SDGs from their respective perspectives.

Following on from the New Zealand’s Government commitment to achieving the UNSDGs by 2030, work has been undertaken by various government departments to align the objectives of the 17 individual SDGs within the New Zealand context.

The objective of the SDGs is to provide clear guidance towards “achieving an integrated and indivisible balance of the three dimensions of sustainable development: the economic, social and environmental”¹⁹. The 17 SDGs are defined, in more detail, in a list of 169 targets, which, in turn, have their progress tracked by 232 unique Indicators.

The unique Indicators associated with the SDGs are built on international best practice and serve as the means through which the progress made towards the SDGs is measured and tracked. The information gathered serves as the data source that assists organisations, entities and individuals when making informed decisions on matters relating to sustainability.

The Indicators Aotearoa New Zealand Table was published by MFAT in 2019. It is clear that considerable effort has gone into creating New Zealand context for the SDGs. This context is relevant for any industry operating in New Zealand and the fresh produce industry, therefore, needs to consider Indicators Aotearoa New Zealand as a valid starting point to develop and validate its sustainability journey further.



Examples of how the SDGs map to indicators Aotearoa New Zealand

1 NO POVERTY <ul style="list-style-type: none"> Child poverty Low income Homelessness Costs of extreme weather events 	2 ZERO HUNGER <ul style="list-style-type: none"> Soil health Productive land Access to safe water for recreation and food gathering Efficiency of land use Land assets Cultural ecosystem services Provisioning ecosystem services Active stewardship of land Net greenhouse gas emissions Biodiversity/native species 	3 GOOD HEALTH AND WELL-BEING <ul style="list-style-type: none"> Health expectancy Health equity Mental health status Amenable mortality Self-reported health status Spiritual health Suicide Injury prevalence Illness attributable to air quality Overcrowding 	4 QUALITY EDUCATION <ul style="list-style-type: none"> Core competencies Early childhood education Educational attainment Education equity Literacy, numeracy and science skills of 15-year olds Intergenerational transfer of knowledge
5 GENDER EQUALITY <ul style="list-style-type: none"> Value of unpaid work Domestic violence Experience of discrimination Income inequality Net worth Low income Justice equity Inequality of education outcomes Health equity 	6 CLEAN WATER AND SANITATION <ul style="list-style-type: none"> Drinking water quality Access to safe water for recreation and food gathering Quality of water resources Stock of freshwater resources Water stress Waste flows into waterways and coastal marine environments Material intensity, including recycling, land fill inflows, second hand economy 	7 AFFORDABLE AND CLEAN ENERGY <ul style="list-style-type: none"> Energy intensity Energy resources Renewable energy Energy consumption 	8 DECENT WORK AND ECONOMIC GROWTH <ul style="list-style-type: none"> Employment rate Hourly earnings Job satisfaction Job strain Not in employment, education or training Unemployment Work/life balance Workplace accidents Official development assistance Consumption of net greenhouse gas emissions
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE <ul style="list-style-type: none"> Infrastructure Resilience of infrastructure Modified land Commuting time to work Costs of extreme weather events Gross greenhouse gas emissions Material intensity, including recycling, landfill inflows, second-hand economy Net fixed assets 	10 REDUCED INEQUALITIES <ul style="list-style-type: none"> Low income Experience of discrimination Income adequacy Income inequality Material wellbeing Net worth Democratic participation Justice equity Health equity 	11 SUSTAINABLE CITIES AND COMMUNITIES <ul style="list-style-type: none"> Homelessness Housing affordability Housing quality Overcrowding Access to natural spaces Levels of pollutants Victimisation Resilience of infrastructure Waste generation Heritage assets 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION <ul style="list-style-type: none"> Material intensity, including recycling, land fill inflows, second-hand economy Waste generation Export of waste (net and gross) Consumption of greenhouse gases Energy consumption Efficiency of land use Productive land Modified land
13 CLIMATE ACTION <ul style="list-style-type: none"> Costs of extreme weather events Global CO₂ concentrations Gross greenhouse gas emissions Net greenhouse gas emissions Consumption of net greenhouse gas emissions Modified land Renewable energy 	14 LIFE BELOW WATER <ul style="list-style-type: none"> Fish stocks Ocean acidification Waste flows in waterways and coastal marine environments Quality of water resources Provisioning ecosystem services Regulating ecosystem services Cultural ecosystem services Biodiversity/native species Ecological integrity 	15 LIFE ON LAND <ul style="list-style-type: none"> Biodiversity/native species Ecological integrity Efficiency of land use Productive land Soil health Cultural ecosystem services Provisioning ecosystem services Regulating ecosystem services Quality of water resources Active stewardship of land 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS <ul style="list-style-type: none"> Generalised trust Institutional trust Justice equity Perceptions of safety/feelings of safety Harm against children Victimisation Experience of discrimination Domestic violence Sense of belonging Loneliness
17 PARTNERSHIPS FOR THE GOALS <ul style="list-style-type: none"> Foreign direct investment Official development assistance Remittances to other countries 	For reasons of brevity not all Indicators Aotearoa New Zealand that relate to SDGs are shown.		

Table 2

From Indicators Aotearoa New Zealand to Our Fresh Produce Value Chain

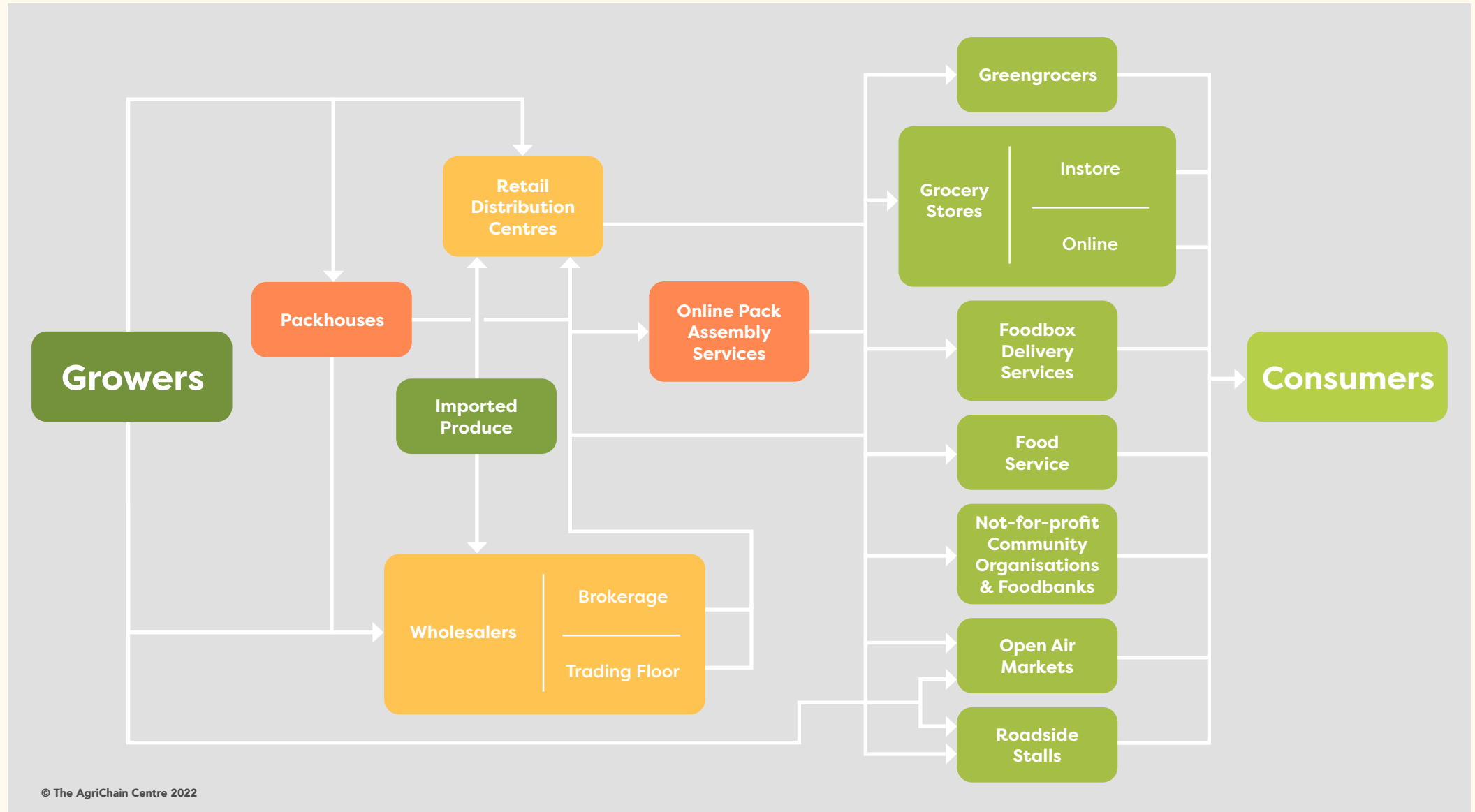
Even though the Indicators introduced in the National Voluntary Review (Table 2) released in 2019 are detailed in what metrics to use when tracking the SDG progress, they are not specific enough to meet the needs of every industry, organisation or individual.

These Indicators need to be interpreted in such a way that allows organisations to convert the overarching goals of the Indicators into value chain specific and meaningful opportunities and actions. For example, SDG 2: Zero Hunger, has “Productive land” as one of its Indicators, which means something different for the horticulture industry than for other land-based industries. The meaning of an Indicator will also vary between the various parts of the same industry, as the sustainability expectations of a vegetable grower are likely to differ in parts from those of a fruit grower.

A simplified model of today's domestic produce industry value chain is shown on the following page. Any active produce value chain participant can attest to the fact that the reality of navigating our value chain is far more complex than the illustration suggests.



New Zealand Fresh Produce Value Chain



In light of such complexity within our value chain, United Fresh is presenting here its first earnest attempt at aligning the Aotearoa New Zealand Indicators with a range of suggested actions that will see the fresh produce industry contributing towards the achievement of the 17 SDGs.

We would like to think that Table 3 on pages 16 to 19 will play an important role in assisting any organisation within the fresh produce value chain to form a view on how it might contribute towards the SDGs from their organisation's perspective.

Despite the knowledge and understanding United Fresh has of the Sustainable Development Goals, targets and indicators, we can only guide you in this area, as we do not understand your organisation, and its intricacies, as well as you do.

The purpose of this document, therefore, is not to hand out all the answers, but to provide guidance on how a fresh produce focused organisation, operating in Aotearoa New Zealand, can structure its sustainability journey with the help of the SDGs.

We encourage you to start your sustainability journey or validate what you have already achieved with the help of this guide.



Produce Value Chain SDG Opportunities mapped against the Sustainable Development Goals and Indicators Aotearoa New Zealand

SDG	Produce Value Chain SDG Opportunities
	<ul style="list-style-type: none"> - Pay the living wage as a minimum along the entire value chain. - Increase the attractiveness of fresh produce value chain employment opportunities for both permanent and seasonal staff. - Increase employment opportunities for people with physical or mental disabilities, as well as for senior citizens.
	<ul style="list-style-type: none"> - Maintain and develop Aotearoa New Zealand's capacity and capability to grow all fruit and vegetable varieties that can be commercially produced in our climatic conditions, contributing to food security. - Encourage increased fruit and vegetable consumption. - Improve access to affordable fruit and vegetables for all.
	<ul style="list-style-type: none"> - Consistent, accurate and science-based promotion of fruit and vegetables' health benefits. - Investment into the role of fruit and vegetables as functional foods components. - Workplace policies that encourage team health from both physical and mental perspectives. - Ensure all team members have a safe working environment at all times.
	<ul style="list-style-type: none"> - Delivery of relevant topical and achievable training and learning opportunities at secondary, tertiary and industry levels, within the horticulture sector, as well as along the entire fresh produce value chain. - Educate consumers on fruit and vegetable related challenges, such as, seasonality, commodity pricing principles, weather related supply issues and food security. Increasing consumer knowledge to the extent that commodity price fluctuations that occur are not automatically leading to sustained negative price value perceptions. - Achieve effective distribution of produce industry relevant knowledge across industry members. - Improve the delivery of on-the-job training to complement educational qualifications at different levels. - Develop ongoing educational growth opportunities within the fresh produce business sector, aimed at improving the sector's attractiveness to new workforce entrants.
	<ul style="list-style-type: none"> - Continue to support and strengthen "Women in Horticulture". - Support initiatives in the horticulture sector and in the produce industry aimed at giving women equal rights to economic resources as well as ownership and control over land, in accordance with New Zealand law. - Seek to ensure that no one is discriminated against in the fresh produce industry on gender grounds, and that everyone feels safe working in the industry. - Achieve income equality under the "same job/same experience/same qualification/ equal pay" principle.

SDG	Produce Value Chain SDG Opportunities
	<ul style="list-style-type: none"> - Provide potable water in all situations where humans are working along the produce supply chain. - Provide commercially and hygienically sound sanitation facilities in produce production, harvest, packing and distribution locations. - Ensure industry practices and processes minimise water required, waste water produced and water pollutants released. - Implement water reuse mechanisms where these can be utilised within the fresh produce industry.
	<ul style="list-style-type: none"> - Participate in the development of affordable, reliable, sustainable and modern energy solutions for horticulture and the produce industry. - Reduce industry reliance on fossil fuel-based energy systems. - Install clean energy solutions where possible to support improved business and natural disaster resiliency and reduce energy costs for the industry costs.
	<ul style="list-style-type: none"> - Grow the horticulture sector and the produce industry into a valued and sustainable segment of the New Zealand agribusiness portfolio, on the basis of productive employment and decent economic growth for all. - Apply these principles consistently across both the domestic and export produce industries. - Seek further premium and value-add opportunities to enhance the contribution our industry makes to the New Zealand economy, combined with generating higher level of job satisfaction, improved work-life balance and better retention rates. - Develop structured career and staff advancement opportunities along the entire fresh produce value chain, to improve our industry's ability to attract and retain workers at every level. - Improve our knowledge on produce industry related opportunities to reduce consumption of greenhouse gas emissions and find ways to participate.
	<ul style="list-style-type: none"> - Accelerate the pace of industry relevant science/research/knowledge integration into produce industry processes and behaviours. - Extend this approach to all aspects of the produce supply chain, including packhouse logistics and transport management. - Develop resilient supply chain infrastructure that uses environmentally sustainable processes, in terms of building supplies, heating and cooling technology, Wi-Fi capability, transport network strengthening and data management and traceability.
	<ul style="list-style-type: none"> - Increase partnership opportunities with Māori at Iwi and Hapu level within the fresh produce value chain. - Improve current produce industry salary and wage structure beyond the living wage in both existing roles and roles created through technical advancement. - Develop holistic RSE training and remuneration solutions that are not only focused on the primary purpose of needing seasonal labour in New Zealand, but also on a secondary purpose of transferable skills development that can benefit food production in the RSE workers countries of origin. - Support workforce diversity, and the value different perspectives bring to our industry, i.e., age, cultural background, gender, etc. - Create equitable access to fresh fruit and vegetables for all consumers. - Develop sustainable produce value chains that enable all participants to earn equitable margins that support both an adequate income and the ability to re-invest in their business.

SDG	Produce Value Chain SDG Opportunities
	<ul style="list-style-type: none"> - Ensure year-round access to fresh fruit and vegetables, both locally grown and sourced through imports. - Contribute towards solutions that reduce fresh produce related waste in the food chain. - Achieve a balance between the need for urban development as a result of population growth, and the critical requirement to protect prime horticultural land, in order to ensure food security. - Adopt sustainability principles and practices for the growing locations, packhouses, wholesale markets and other sites where we conduct business, in alignment with the needs of the communities we operate within.
	<ul style="list-style-type: none"> - Reduce food waste related to harvesting, transporting, storage and preparation/processing of fruit and vegetables. - Grow, harvest, pack and market fruit and vegetables in ways that do not contribute further towards waste, climate change, biodiversity loss and pollution. - Improve the management of supply chain inputs, such as fertiliser, fruit labels, energy, etc., to reduce environmental impacts. - Align at consumer level, purchases of fruit and vegetables with actual consumption in order to reduce waste in the fruit bowl/fridge/pantry. - Improve our efficiency and productivity, by growing to the climactic conditions, resulting in reduced inputs and increased yields. - Develop and extend alternative channels to consumers for distribution of safe-to-eat fruit and vegetables unable to meet product specifications related to their originally intended use.
	<ul style="list-style-type: none"> - Improve knowledge of the horticultural sector's and the produce industry's impact on climate change. - Mitigate the impact of climate change in those areas the horticultural sector and produce industry can directly influence (e.g., greenhouse gases, renewable energy and waste). - Add the overall industry's voice to those environmental risk discussions our industry can influence indirectly. - Investigate constraints, options and opportunities to reduce the cost of recovering from extreme weather events and implement systems and plans to act upon the opportunities identified, and options selected.
	<ul style="list-style-type: none"> - Increase our understanding as an industry of the relationship between nutrients applied to soil and the quality of the waterways in the vicinity of soil to which nutrients have been applied. - Eliminate, where possible, chemical and other runoffs into rivers, streams and other waterways. - Implement effective soil erosion controls on fields and paddocks, active produce supply chain locations (e.g., packhouses) and produce industry related development sites. - Contribute towards the achievement of ecologically sustainable water management. - Develop a greater level of respect for fresh water as a finite resource and integrate water related business decisions as an actively considered aspect of operating a horticulture production unit or produce business.




SDG	Produce Value Chain SDG Opportunities
	<ul style="list-style-type: none"> - Focus on <u>both</u> economically and ecologically viable horticultural production units. - Improve the wider produce industry's knowledge of land related challenges to achieve the "right land for the right crops" outcomes more often. - Promote sustainable stewardship of the land, by implementing ecological practices at all points along the food supply chain, such as Integrated Pest Management, waste management, water management, reduced use of agrichemicals and infrastructure that is environmentally friendly. - Implement sound environmental practices along the entire fresh produce supply chain, including healthier soils, reduced waste, improved water quality, reduced greenhouse gas emissions and increased circular economy opportunities.
	<ul style="list-style-type: none"> - Speak with one voice in ensuring that the contribution horticulture and the produce industry are making to the wellbeing of individual consumer health and the nation are understood, valued and appreciated. - Make the industry's voice heard by way of relevant, articulate and future focused engagement with Government, to support the development of effective and workable legislation and regulations impacting our industry. - Ensure that the New Zealand produce industry's achievements of transparency along the fresh produce value chain and low levels of corruption are maintained and strengthened. - Conduct our industry's business within the entire legal framework of Aotearoa New Zealand. - Strengthen our understanding of, and ability to integrate, Treaty of Waitangi principles into our industry's practices and processes.
	<p>1</p> <ul style="list-style-type: none"> - Encourage partnership within and outside the fresh produce value chain, with a particular focus on industry sustainability efforts. - Further strengthen our ability to work as one industry focused on increasing the consumption of fruit and vegetables, based on the core SDG principles. - Stay output focused, with the realisation that problem solving related to sustainable development also requires a global partnership approach and cannot solely be achieved at the national, regional or local level of our society. - As an industry, in cooperation with government, identify pathways to support similar industries in other parts of the world with relevant technology, knowledge, science and infrastructure, in order to assist them to implement environmentally sound practices. - Develop pathways by which food industries in developing countries can partner with our industry, to understand and implement the required systems and practices for food production, that enables the developing countries' food industries to consistently meet New Zealand's market access standards and commercial expectations.

Table 3

¹ Readers might reasonably expect to see a reference to partnership with Māori in the Indicators for SDG 17. However, the UNSDG Indicators and Targets are based on the interaction between nations with regards to SDG 17, with the focus being development aid. We have, therefore, placed our indicator for partnership with Tangata Whenua into the SDG 10 – Reduced Inequalities realm.

Linking UN Sustainable Development Goals, the Indicators Aotearoa New Zealand, and the Resulting Implications and Opportunities for the Produce Industry with your Business

Rationale

The produce industry does not exist in isolation and is part of the wider food offer New Zealand makes to its domestic consumers as well as its export customers. The difference in expectation of domestic consumers and export customers is getting more and more blurred. Both groups have access to internet-based information; in many cases the price New Zealand consumers pay for quality food in our stores is directly linked to what our exporters achieve in the global markets; and domestic consumers and export customers share a common concern about matters that affect us all.

Many of these matters are captured very well within the 17 UNSDGs.

Methodology

The 17 UNSDGs are fairly explicit, but also expressed in a general fashion that allows them to be further shaped and crafted. The UN teams have done that themselves to an extent, by developing 169 targets, that are very detailed and relate to the 17 goals. But as detailed those targets may be, they are not focusing on specific industry sectors, but on industry as a whole.

Establishing produce industry related targets is, therefore, something only the produce industry can achieve.

Given that the SDG framework is global in nature and has been put into place by the United Nations, we need to work with the UNSDG framework and make it work for us, rather than coming up with frameworks of our own that operate in isolation.

These Sustainability Guidelines are the United Fresh contribution to the New Zealand's produce industry's efforts to take charge of its own sustainability destiny.





Action

Pages 23 to 31 of this guide show the content of Table 3, Produce Value Chain SDG Opportunities mapped against the Sustainable Development Goals and Indicators Aotearoa New Zealand, in an Action Plan format, inviting you to consider how to convert the produce value chain SDG opportunities United Fresh has identified into meaningful SDG related changes for your business.

Sustainability touches many parts of every business. The common thread within those various touch points in individual businesses and across multiple businesses and organisations is that sustainability constitutes a journey rather than an event.

The way to start your business' direct journey on achieving a meaningful contribution towards reaching the SDGs by 2030 is straight forward.

- Consider what actions you are able to take
- Determine who in your business should take responsibility
- Settle on a starting date

Concluding Comments

Not engaging as an industry is not an option. Engaging now will allow us, both as an industry, as well as individual businesses within the produce industry, to consider and implement behavioural and process changes that we know our businesses can cope with, whilst making a meaningful contribution to SDG achievement.

The unpleasant alternative would be to wait for central and local government regulators to impose rules on our industry and our businesses in a way that would create far more challenges than if we were to take responsibility as an industry and on an individual business basis.

After all, we all share a common interest in the health of our planet. Wouldn't it be fantastic if we were able to reduce the environmental impact that we as an industry can influence now, so that future generations are able to enjoy life on Earth, knowing their forebears in our generation recognised the environmental challenges and contributed substantially towards finding meaningful solutions.

The elegance of the 17 UNSDGs and the associated 169 targets is that they are specific enough to provide focus for us, general enough to allow us to target them at individual business related activities and credible enough because some very clever people around the globe were thinking about how to address what the planet needs in order to survive.

Further Readings and References

Victoria University of Wellington New Zealand Sustainable Development Goals:
<https://www.sdg.org.nz/>. Accessed on 1 May 2023.

United Nations SDG Progress Report:
<https://www.un.org/sustainabledevelopment/progress-report/>. Accessed on 1 May 2023.


United Nations Food System Summit reports:
<https://www.un.org/en/food-systems-summit/documentation>. Accessed on 1 May 2023.

IFPS Position Paper sitting in UF Website:
<https://unitedfresh.co.nz/assets/site/assets/resources/Position-Paper-Sustainability-as-an-Industry-Goal-July-2022.pdf>. Accessed on 1 May 2023.







- ¹ <https://sdgs.un.org/2030agenda>. Accessed on 1 May 2023.
- ² <https://www.mfat.govt.nz/en/peace-rights-and-security/our-work-with-the-un/sustainable-development-goals/new-zealands-first-voluntary-national-review-vnr/>. Accessed on 1 May 2023.
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- ⁴ <https://sdgs.un.org/2030agenda>. Accessed on 1 May 2023.
- ⁵ <https://www.un.org/en/food-systems-summit>. Accessed on 1 May 2023.
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- ⁸ <https://sdgs.un.org/2030agenda>. Accessed on 1 May 2023.
- ⁹ <https://www.mfat.govt.nz/en/peace-rights-and-security/our-work-with-the-un/sustainable-development-goals/new-zealands-first-voluntary-national-review-vnr/>. Accessed on 1 May 2023.
- ¹⁰ <https://www.mfat.govt.nz/en/peace-rights-and-security/our-work-with-the-un/sustainable-development-goals/#bookmark1>. Accessed on 1 May 2023.
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- ¹² <https://environment.govt.nz/assets/publications/Consultation-on-the-draft-Long-term-Insights-Briefing-2022.pdf>. Accessed on 1 May 2023.
- ¹³ https://www.zoology.ubc.ca/conservation/wp-content/uploads/2021/10/Naidoo_COVID_2021.pdf. Accessed on 1 May 2023.
- ¹⁴ <https://www.mbie.govt.nz/dmsdocument/20253-the-future-of-business-for-aotearoa-nz-word-version>. Accessed on 1 May 2023.
- ¹⁵ <https://oag.parliament.nz/2021/sdgs/docs>. The Government's preparedness to implement the sustainable development goals. Page 16. Accessed on 1 May 2023.
- ¹⁶ <https://summitdialogues.org/dialogue/22938/>. Accessed on 1 May 2023.
- ¹⁷ <https://www.un.org/en/food-systems-summit/news/world-leaders-commit-tackling-global-hunger-climate-change-and-biodiversity-loss>. Accessed on 1 May 2023.
- ¹⁸ <https://www.hortnz.co.nz/about-us/aotearoa-horticulture-action-plan/>. Accessed on 1 May 2023.
- ¹⁹ United Nations General Assembly Resolution A/RES/70/1. Seventieth session. Agenda items 15 and 116. 21 October 2015.

Produce Industry Opportunities mapped against SDGs and Aotearoa New Zealand Indicators Worksheet



SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
 1 NO POVERTY	<ul style="list-style-type: none"> - Pay the living wage as a minimum along the entire value chain. - Increase the attractiveness of fresh produce value chain employment opportunities for both permanent and seasonal staff. - Increase employment opportunities for people with physical or mental disabilities, as well as for senior citizens. 			
 2 ZERO HUNGER	<ul style="list-style-type: none"> - Maintain and develop Aotearoa New Zealand's capacity and capability to grow all fruit and vegetable varieties that can be commercially produced in our climatic conditions, contributing to food security. - Encourage increased fruit and vegetable consumption. - Improve access to affordable fruit and vegetables for all. 			
 3 GOOD HEALTH AND WELL-BEING	<ul style="list-style-type: none"> - Consistent, accurate and science-based promotion of fruit and vegetables' health benefits. - Investment into the role of fruit and vegetables as functional foods components. - Workplace policies that encourage team health from both physical and mental perspectives. - Ensure all team members have a safe working environment at all times. 			



SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Delivery of relevant topical and achievable training and learning opportunities at secondary, tertiary, and industry levels, within the horticulture sector, as well as along the entire fresh produce Value Chain. - Educate consumers on fruit and vegetable related challenges, such as, seasonality, commodity pricing principles, weather related supply issues and food security, increasing consumer knowledge to the extent that commodity price fluctuations that occur are not automatically leading to sustained negative price value perceptions. - Achieve effective distribution of produce industry relevant knowledge across industry members. - Improve the delivery of on-the-job training to complement educational qualifications at different levels. - Develop ongoing educational growth opportunities within the fresh produce business sector, aimed at improving the sector's attractiveness to new workforce entrants. 			



SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Continue to support and strengthen "Women in Horticulture". - Support initiatives in the horticulture sector and in the produce industry aimed at giving women equal rights to economic resources as well as ownership and control over land, in accordance with New Zealand law. - Seek to ensure that no one is discriminated against in the fresh produce industry on gender grounds and that everyone feels safe working in the industry. - Achieve income equality under the "same job/same experience/ same qualification/ equal pay" principle. 			
	<ul style="list-style-type: none"> - Provide potable water in all situations where humans are working along the produce supply chain. - Provide commercially & hygienically sound sanitation facilities in produce production, harvest, packing and distribution locations. - Ensure industry practices & processes minimise water required, waste water produced and water pollutants released. - Implement water reuse mechanisms where these can be utilised within the fresh produce industry. 			
	<ul style="list-style-type: none"> - Participate in the development of affordable, reliable, sustainable and modern energy solutions for horticulture and the produce industry. - Reduce industry reliance on fossil fuel-based energy systems. - Install clean energy solutions where possible to support improved business and natural disaster resiliency and reduce energy costs for the industry. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Grow the horticulture sector and the produce industry into a valued and sustainable segment of the New Zealand agribusiness portfolio, on the basis of productive employment and decent economic growth for all. - Apply these principles consistently across both the domestic and export produce industries. - Seek further premium and value-add opportunities to enhance the contribution our industry makes to the New Zealand economy, combined with generating higher level of job satisfaction, improved work-life balance and better retention rates. - Develop structured career and staff advancement opportunities along the entire fresh produce value chain, to improve our industry's ability to attract and retain workers at every level. - Improve our knowledge on produce industry related opportunities to reduce consumption of greenhouse gas emissions and find ways to participate. 			
	<ul style="list-style-type: none"> - Accelerate the pace of industry relevant science/research/ knowledge integration into produce industry processes and behaviours. - Extend this approach to all aspects of the produce supply chain, including packhouse logistics and transport management. - Develop resilient supply chain infrastructure that uses environmentally sustainable processes, in terms of building supplies, heating and cooling technology, Wi-Fi capability, transport network strengthening and data management & traceability. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Increase partnership opportunities with Māori at Iwi and Hapu level within the fresh produce Value Chain. - Improve current produce industry salary and wage structure beyond the living wage in both existing roles and roles created through technical advancement. - Develop holistic RSE training and remuneration solutions that are not only focused on the primary purpose of needing seasonal labour in New Zealand, but also on a secondary purpose of transferable skills development that can benefit food production in the RSE workers countries of origin. - Support workforce diversity and the value different perspectives bring to our industry, i.e., age, cultural background, gender, etc. - Create equitable access to fresh fruit and vegetables for all consumers. - Develop sustainable produce value chains that enable all participants to earn equitable margins that support both an adequate income and the ability to re-invest in their business. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
 11 SUSTAINABLE CITIES AND COMMUNITIES	<ul style="list-style-type: none"> - Ensure year-round access to fresh fruit and vegetables, both locally grown and sourced through imports. - Contribute towards solutions that reduce fresh produce related waste in the food chain. - Achieve a balance between the need for urban development as a result of population growth and the critical requirement to protect prime horticultural land, in order to ensure food security. - Adopt sustainability principles and practices for the growing locations, packhouses, wholesale markets and other sites where we conduct business, in alignment with the needs of the communities we operate within. 			
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	<ul style="list-style-type: none"> - Reduce food waste related to harvesting, transporting, storage and preparation/processing of fruit and vegetables. - Grow, harvest, pack and market fruit and vegetables in ways that do not contribute further towards waste, climate change, biodiversity loss and pollution. - Improve the management of supply chain inputs, such as fertiliser, fruit labels, energy, etc., to reduce environmental impacts. - Align at consumer level, purchases of fruit and vegetables with actual consumption in order to reduce waste in the fruit bowl/ fridge/pantry. - Improve our efficiency & productivity by growing to the climactic conditions, resulting in reduced inputs and increased yields. - Develop and extend alternative channels to consumers for distribution of safe-to-eat fruit and vegetables unable to meet product specifications related to their originally intended use. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Improve knowledge of the horticultural sector's and the produce industry's impact on climate change. - Mitigate the impact of climate change in those areas the horticultural sector and produce industry can directly influence (e.g., greenhouse gases, renewable energy, and waste). - Add the overall industry's voice to those environmental risk discussions our industry can influence indirectly. - Investigate constraints, options and opportunities to reduce the cost of recovering from extreme weather events and implement systems & plans to act upon the opportunities identified and options selected. 			
	<ul style="list-style-type: none"> - Increase our understanding as an industry of the relationship between nutrients applied to soil and the quality of the waterways in the vicinity of soil to which nutrients have been applied. - Eliminate, where possible, chemical and other runoffs into rivers, streams, and other waterways. - Implement effective soil erosion controls on fields & paddocks, active produce supply chain locations (e.g., packhouses) and produce industry related development sites. - Contribute towards the achievement of ecologically sustainable water management. - Develop a greater level of respect for fresh water as a finite resource and integrate water related business decisions as an actively considered aspect of operating a horticulture production unit or produce business. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Focus on <u>both</u> economically and ecologically viable horticultural production units. - Improve the wider produce industry's knowledge of land related challenges to achieve the "right land for the right crops" outcomes more often. - Promote sustainable stewardship of the land, by implementing ecological practices at all points along the food supply chain, such as Integrated Pest Management, waste management, water management, reduced use of agrichemicals and infrastructure that is environmentally friendly. - Implement sound environmental practices along the entire fresh produce supply chain, including healthier soils, reduced waste, improved water quality, reduced greenhouse gas emissions and increased circular economy opportunities. 			
	<ul style="list-style-type: none"> - Speak with one voice in ensuring that the contribution horticulture and the produce industry are making to the wellbeing of individual consumer health and the nation are understood, valued and appreciated. - Make the industry's voice heard by way of relevant, articulate and future focused engagement with Government, to support the development of effective and workable legislation and regulations impacting our industry. - Ensure that the New Zealand produce industry's achievements of transparency along the fresh produce value chain and low levels of corruption are maintained and strengthened. - Conduct our industry's business within the entire legal framework of Aotearoa New Zealand. - Strengthen our understanding of, and ability to integrate, Treaty of Waitangi principles into our industry's practices and processes. 			

SDG	Produce Value Chain SDG Opportunities	What is My Organisation's Starting Point Towards Achieving the SDGs?	Who is responsible?	Starting when?
	<ul style="list-style-type: none"> - Encourage partnership within and outside the fresh produce value chain, with a particular focus on industry sustainability efforts. - Further strengthen our ability to work as one industry focused on increasing the consumption of fruit and vegetables, based on the core SDG principles. - Stay output focused, with the realisation that problem solving related to sustainable development also requires a global partnership approach and cannot solely be achieved at the national, regional, or local level of our society. - As an industry, in cooperation with government, identify pathways to support similar industries in other parts of the world with relevant technology, knowledge, science and infrastructure, in order to assist them to implement environmentally sound practices. - Develop pathways by which food industries in developing countries can partner with our industry, to understand and implement the required systems & practices for food production, that enables the developing countries' food industries to consistently meet New Zealand's market access standards & commercial expectations. 			