Food Economy and Agroecology Strategy

2022-2028

MORNINGTON PENINSULA
Shire

Executive Summary

A transformative Strategy for Agriculture on the Mornington Peninsula

The Mornington Peninsula's Agriculture, Food and Beverage sector is worth an estimated $1.3 billion and has been identified as one of the key growth industries in the local economy.

This Food Economy and Agroecology was commissioned to drive sustainable growth in the agriculture, food and beverage sector whilst preserving and enhancing the regions ecology and biodiversity through agroecological approaches to farming and production. It strongly aligns with Council's Climate Emergency Response and positions the Mornington Peninsula as an exemplar of future food economies underpinned by sustainable production and resilience to future climate or supply shocks. It also aligns with Council's Green Wedge Management Plan which provides much of the planning framework for land use planning in the Green Wedge (Mornington Peninsula Green Wedge Management Plan, 2019).

Council's vision for the Green Wedge is, "a place where the critical role of sustainable agriculture is recognised, protected and supported as a key land use and the productive capacity of land is conserved and enhanced for the future" [1].

This is an economic development Strategy, but it departs from traditional linear take-make-waste approaches to economic development by instead focussing on the development of a circular economy. This atypical approach means that conventional use of gross and net financial returns may not apply as we also need to consider the environmental and social benefits of the Strategy. Integrating circularity into all aspects of the food economy requires nothing less than transformation in how we grow, process and market food on the Peninsula.

There is a breadth of Federal, State and Local Government plans and strategies that promote sustainability and the need to progress towards a sustainable future. In developing a Food Economy and Agroecology Strategy, Council is taking a transformative approach to food and agriculture by building on the successes already achieved on the Mornington Peninsula and highlighted in the body of this document. In doing so, it is giving effect to its intentions, demonstrating leadership in tackling the challenges of climate change

The enthusiastic response from industry to the invitation to participate in public engagement for this Strategy demonstrated a readiness to engage in discussions about the future of food production on the Peninsula. Over 2020-2021 over 165 people directly contributed, heard, spoke, and considered ideas, debates and priorities through surveys, workshops, interviews, conversations and submissions.

Several themes emerged during the engagement, and these now form the five pillars, of the Strategy.

Pillar 1 reflects the importance of collaboration and the need for Council and community to develop solid institutional and regulatory structures to give this Strategy standing and credibility. It aims to ensure a funding and collaboration base which will allow strategic investment to drive other parts of the Strategy.

Pillar 2 aims to secure markets and sales by reinvigorating the Mornington Peninsula Produce (MPP) brand and aligning it with Mornington Peninsula's aim to become a centre of excellence in agroecological (regenerative) production.

[1] Green Wedge management Plan 2019, pg 9

Pillar 3 focuses strongly on supporting the transformation from conventional to regenerative agriculture through incentives and training.

Pillar 4 focused on skills and capacity development. The scale of change required is not underestimated and the need for new skills and their application to natural systems is central to supporting transitions to lower input sustainable production systems.

Pillar 5 In the fifth pillar, the importance of a range of parallel developments is recognised. It is critically important that this Strategy not only aligns with the climate change response and the Green Wedge Management Plan, but also with a range of concurrent initiatives that will support resilient and sustainable food industries on the peninsula. The Strategy details several initiatives of the Victorian government relevant to the Mornington Peninsula. Principal amongst these is the need to access recycled water from Melbourne's Eastern Treatment Plant and other smaller treatment plants.

Lessons from Covid-19 have shown that 'we are all in this together'.

Collaboration and cooperation at a local level are seen as keys with which to both protect and extract value from the region's abundant natural resources and benefit from our proximity to Melbourne markets.

The Strategy recommends a number of key initiatives including;

1. Establish a Taskforce to help Council drive transformation of agricultural production and a new food economy
2. Reinvigorate and expand the Mornington Peninsula Produce brand to become the driving promotional mechanism for sustainable food production on the Peninsula
3. Engage primary and secondary producers to ensure skills and capacity to participate in the new food economy

The Strategy establishes the Mornington Peninsula's Food Economy as an exemplar region for economic, environmental and social sustainability through collaboration, coordination and cooperation.

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Acknowledgement of Country

Mornington Peninsula Shire acknowledges the Bunurong people, who have been the custodians of this land for many thousands of years; and pays respect to their elders past and present. We acknowledge that the land on which we meet is the place of age-old ceremonies, celebrations, initiation and renewal; and that the Bunurong peoples' living culture continues to have a unique role in the life of this region.

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The Overview

1. Introduction

Mornington Peninsula covers an area of 72,328 hectares (723km2), of which 70% consists of rural land designated under the Mornington Peninsula Planning Scheme as “Green Wedge”.

Estimated resident population for 2019 was 167,636. The population is expected to grow to 181,097 by 2036. Mornington Peninsula supports 52,682 jobs and has an annual economic output of $15.898 billion.[2] The food economy on the Peninsula yields the second highest value food production per hectare in Victoria.[3]

In commissioning this Food Economy and Agroecology Strategy 2022 – 2028, Council recognises the importance of the food economy to the future of our community. It also recognises that we are facing an uncertain future due to climate change and shifts in global power structures. Central to this Strategy is the need to chart a course to a more sustainable future. The six-year Strategy sets out aspirations, goals and targets to help navigate a challenging and difficult transformation in our food economy.

The recommended changes to land management practice within this Strategy closely mirror recommendations across industry groups and land and water management authorities. Agricultural research and extension have driven tremendous breakthroughs in crop nutrition, plant breeding and crop protection to deliver quality food and fibre at low cost. However, we now understand that the abundance and cheapness of food and fibre comes at a cost. That cost is frequently borne by the environment and is manifest in soil quality decline and biodiversity loss amongst other impacts. These realities provide the impetus for change. Indeed, there are many change makers throughout the Mornington Peninsula farming community who are already leading the way in transitioning to regenerative farming practices. This Strategy provides the basis for the Mornington Peninsula Shire to partner with the food and farming community to capitalise on this ground swell. In seeking more sustainable models of food production Australian farmers adopting regenerative practices continue their trajectory of world’s best practise in improving food systems. We are in a race for more ambition and a path to a better future. If the MP can be a shining example of a prosperous sustainable food system, we lead the way for those in more marginal areas, with greater challenges, to follow.

Our grandparents or great-grandparents would marvel at the range of foods available to us year-round. Industrial agriculture has delivered this bounty but at a cost. Agriculture is responsible for considerable damage to our natural environment by way of greenhouse gas emissions, soil erosion and loss of biodiversity. Food quality is an emerging issue[4] due to chemical residues[5] and declining nutritional quality[6]. Increasingly consumers are seeking greater connection with who is growing the food, and where and how it is grown.

The reality of climate change brings a raft of concerning issues for future food security. Long called for, transformational change in food production systems is coming, demanded in part by consumers and driven by climate change realities.

Transformational change in food production recognises a pre-eminent need to better steward our natural resources. Systems of production that value soil health, that reject the suite of chemical sprays that support industrial agriculture, and that value the social connection that comes with an appreciation of provenance, are being rewarded by motivated consumers. Production systems that prioritise natural capital are coalescing under a common banner of regenerative agriculture. Regenerative agriculture is informed by the science of Agroecology – a branch of science that investigates the application of ecological principles to agricultural systems and practices.

[2] profile.id.com.au/mornington-Peninsula & https://app.remplan.com.au/morningtonPeninsula/economy/summary?state=7zbXC7DybFobV0MsB4Dn8dTnSRSoxK

[3] MPSC 2010, Mornington Peninsula Shire Agriculture Report, pg. 4.

Agroecology is an holistic approach to the study of interactions between plants, animals, humans and the environment within agricultural systems. Regenerative agriculture is a system that gives effect to the science of agroecology in that it seeks to work with the forces of nature to enhance production, reduce reliance on external inputs, and increase farmer wellbeing. Regenerative agriculture does not mean organic agriculture. Rather, regenerative approaches seek to balance the needs of production with protection and enhancement of natural processes. This means that fertilisers, herbicides or other chemicals can be used in a regenerative context; the difference is that they be used strategically and selectively so that collateral damage is minimised and the net impact on the health of the natural environment from farming practices remains positive.

Farming on the Peninsula is highly diverse with a high number of small-scale growers producing a great diversity of produce. It is recognised that different farming types/systems have different opportunities to achieve regenerative goals. There is a “toolbox” of regenerative practices and regenerative agriculture will not look the same on all farms. By its nature, regenerative agricultural practices are shaped by conditions on farm and the emerging design of the individual agro-ecosystem.

This Strategy aims to position the Mornington Peninsula at the forefront of change by transforming the way food is produced on the Peninsula, and as a result, significantly changing the way food and beverages are processed, marketed and distributed. Council recognises the tremendous opportunity afforded by Mornington Peninsula’s natural resources and proximity to the Melbourne market[7] and through this Strategy commits substantial resources to support change and grow the local food economy.

The Strategy builds on a solid foundation of previous work that characterised, analysed and advanced the food economy of the Mornington Peninsula. Major strategies and plans include:

- Shire Community Plan – Our Peninsula
- Ensuring our future – Climate Emergency Response
- Green Wedge Management Plan
- Economic Development Strategy
- Agricultural Audits
- Local Food Strategy
- Health and Wellbeing Plan
- Beyond Zero Waste Strategy
- The Mornington Peninsula Wine Industry’s Economic Value Report
- Nursery Audit
- Aquaculture Audit
- Footprint Melbourne research and reports and,
- Biodiversity Conservation Plan

The majority of those engaged in discussions for this Strategy expressed concern about the future of food production and agriculture on the Peninsula, and in the peri-urban fringes of Melbourne. These include:

- Climate change and associated impacts
- Urban encroachment
- The implications for farmers and landowners
- Role of Council in driving change
- Role of State Government in supporting change
- Water insecurity
- Improved resource use (regenerative agriculture and the circular economy)
- Entry opportunities for a new generation of producers.

[4] Pesticides and other chemicals in food
[5] Chemical residues in food
[6] Food quality
[7] Roadmap for a resilient and sustainable Melbourne foodbowl: Food Print Melbourne

This document is heavily influenced by Council's Ensuring our Future 2020 climate emergency response. Given the current and future impacts of climate change on food production and local economies, it is appropriate that this Strategy addresses not only the need for change, but that it also strongly supports some of the core initiatives of the climate emergency response. Two key initiatives are particularly relevant to this Strategy, namely:

1. By 2030, sequester 1 million tonnes of atmospheric carbon in plants and soil, and
2. By 2030, 20% of farms adopt regenerative practices.

Recommended actions for the future

This Strategy sets out priority actions under five pillars – themes that emerged from the community consultation. Figure 1 (right) – Strategy on a Page – presents the primary structure of the Strategyy together with its vision..

As conventional economic development drivers, they are designed to support innovation and collaboration, develop strong consumer markets, create jobs, grow regional businesses, and improve coordination across various food/ beverage sectors and within supply chains.

As drivers of transformational change, they make sustainability and regenerative practices central to Mornington Peninsula's food economy and highlight these principles as part of its brand and identity. In addition, they contribute to the growing momentum for sustainable, low emission, and low impact food production in Australia.

> "The five pillars and their targets will change paradigms and systems."

The Five Pillars

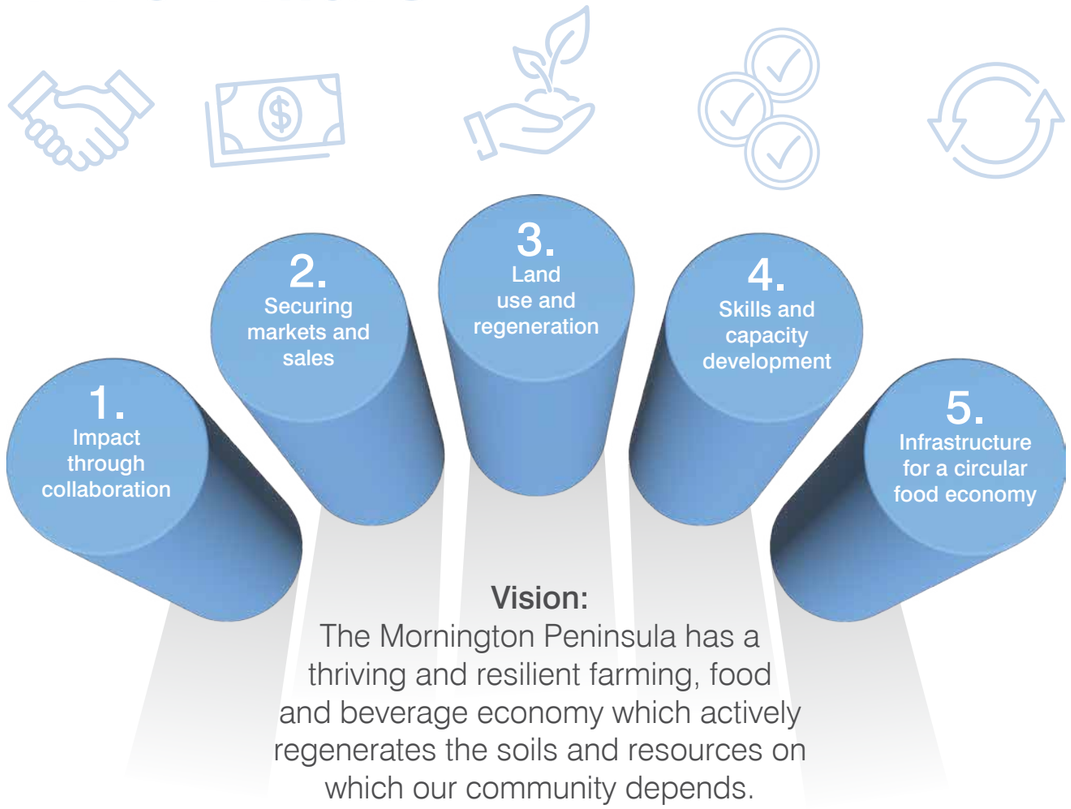


Figure 1. Strategy on a page. Food Economy and Agroecology Strategy, Mornington Peninsula Shire Council, 2022-28

Current position and challenges

1.1. Current position

The Land Capability Assessment completed by Agriculture Victoria (Imhof et al., 2018) identified areas of highest agricultural potential and suitability for a range of crops. This data provides a sound basis to inform and guide sustainable production and increase application of agroecological principles on the Mornington Peninsula. Figure 2 shows land capability classes for the Mornington Peninsula where class 1 is has the highest capability and class five the lowest (Imhof et al., 2018).

Productive land uses on the Mornington Peninsula are dominated by perennial horticulture such as vineyards and orchards. Annual horticulture – principally vegetable growing – is also significant. Figure 3 shows principal land uses but does not show livestock production as a significant land use. Grazing land does make up a significant proportion of land use on the Peninsula but according to the Shire's 2014 Agricultural Analysis, both the beef and sheep industries have declined over recent decades. It is difficult to specify the area of land under grazing as many small holdings running cattle but are not being picked up in census data. Reductions in property sizes reduces herd sizes and fragments the formerly consolidated beef and sheep industries. Many grazing properties are now running horses as the equine industry continues to expand.

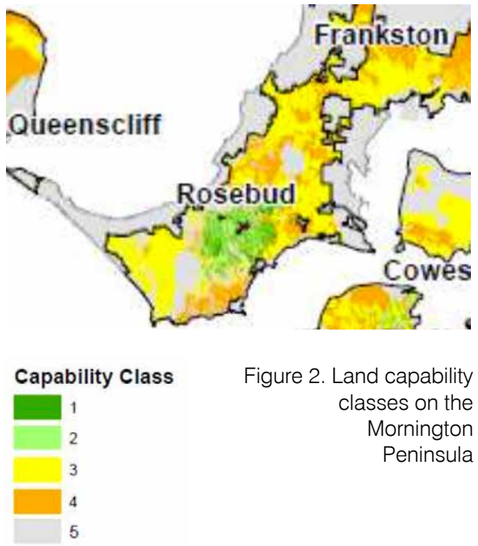


Figure 2. Land capability classes on the Mornington Peninsula

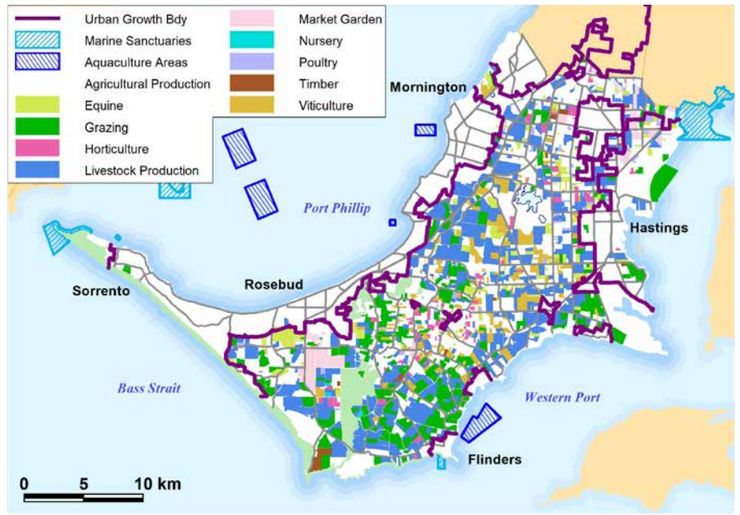


Figure 3. Principal land uses on the Mornington Peninsula

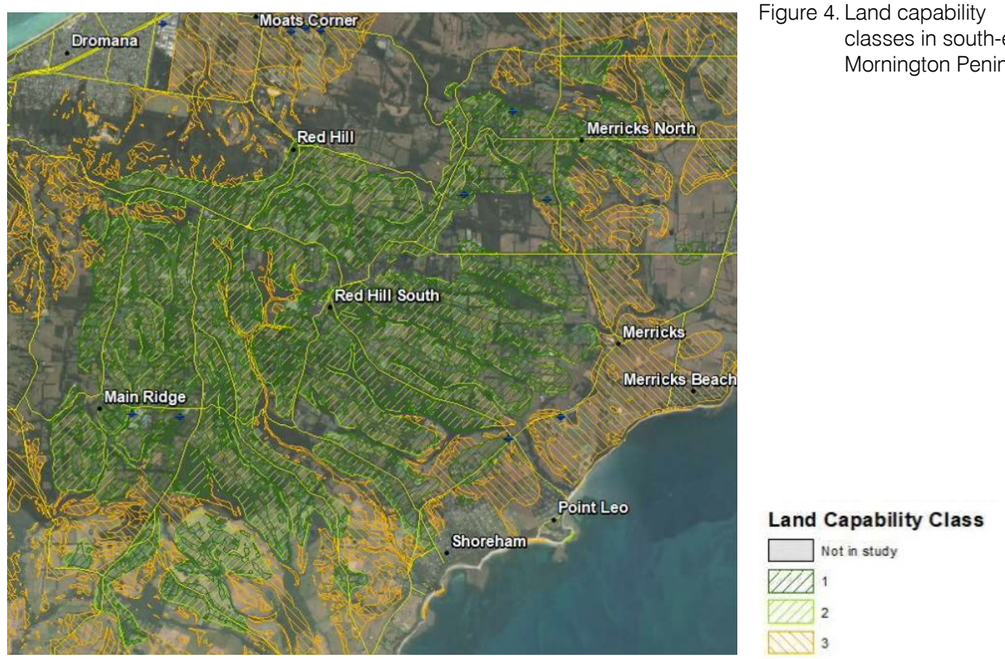


Figure 4. Land capability classes in south-east Mornington Peninsula

Figure 4 shows land capability classes in south-east Mornington Peninsula demonstrating high value in terms of production potential. These classes of land may present an opportunity to secure long-term irrigation using Class A recycled water from the SE treatment plant. This land could become more economically viable with connection to such a reliable water supply. There is local support for such a development, and so protection of high value agricultural land is an important factor in building a case for it (Imhof et al., 2018). Regions suited to agriculture, close to markets, and with reliable water such as Mornington Peninsula are becoming increasingly valuable.

These data show the potential for high value agriculture on the Peninsula. This potential must be balanced against the suite of contributing policy documents shown above which seek to sustain environmental, economic and social health on the Peninsula. This challenge is central to this Strategy.

Current challenges

There is a number of immediate challenges concerning how food is currently produced and how external economic pressures may impact the local food economy.

Unsustainable production systems

It may be argued that on agricultural land, the balance between environmental, economic and social issues has, since the end of WWII, favoured economic and social factors at considerable environmental cost. There is now broad understanding and concern that production methods associated with industrial agriculture are unsustainable. This is not immediately evident to many landholders because of the slow rate of change in land degradation caused by land use change (clearing) and land management practices. However, research has shown that declines in environmental condition are real and are having potentially devastating consequences for the future of humankind[8]. As an example, average global soil formation rates are in the order of 110mm per thousand years (Stockmann et al., 2013) and average global soil loss is in the order of 10mm per year (Wuepper et al., 2020). Average topsoil depths across much of Australia's arable landscapes is in the order of 200mm. Soil loss of 10mm per year represents a critical threat to the future of food production. Therefore, soil must be regarded as a non-renewable resource.

The situation on the Mornington Peninsula reflects a more benign climate. Overall scores of environmental health improved between 2019 and 2020 mainly due to good rainfall which saw improvements in tree cover, river flow and soil moisture.[9] However, when data from 2000-2020 are viewed (figure 5)[10] there is no clear trend in condition. This Strategy contexts this information within broader climate change predictions for south-eastern Australia in the knowledge that the Mornington Peninsula is buffered by moderating influences of a coastal location and relatively reliable rainfall.

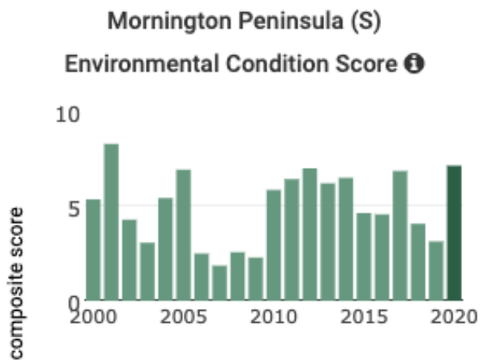


Figure 5. Environmental condition score for the Mornington Peninsula

[8] Decline in environmental condition
[9] MP 2020 regional report card
[10] MP Environmental Score

In spite of the abundance delivered by modern agriculture, awareness continues to grow of the cost of food production in terms of food miles and the energy used in transport and storage. Agriculture is responsible for considerable damage to our natural environment by way of greenhouse gas emissions, loss of biodiversity and soil erosion. At the same time, climate change threatens global water cycles and weather patterns,[11] and biodiversity is threatened by a multitude of pressures including climate change, land use change, habitat fragmentation, and fire.[12]

The case for change is clear and the need to reduce emissions, reduce waste, improve environmental stewardship, and prioritise social wellbeing has been articulated directly and indirectly in the suite of policy documents above. Long called for, transformational change in food production systems is coming, demanded in part by consumers and driven by climate change realities.

Transformational change in food production recognises a preeminent need to better steward our natural resources. Systems of production that value soil health, that reject the suite of chemical sprays that support industrial agriculture, and that value the social connection that comes with an appreciation of provenance,[13] are being rewarded by motivated consumers.

Developing a competitive edge

The Peninsula will not be able to compete with other areas in terms of the economies of scale and agglomeration that characterise large scale industrialised farming. However, in terms of overall production and critically, the value of production, it retains a number of key advantages. The area's natural features such as soil types and climate, and economic advantages such as access to markets and the willingness of consumers to pay for assured quality produce presents the Peninsula with a unique competitive edge.

In this context the economic argument lends support to environmental and food security considerations in terms of the need for change in the Peninsula's farming systems and farming economy. Diversification through new direct-to-consumer marketing channels and complementary on-farm activities (on-site value adding and associated recreational / tourism-based activities) can also support a shift from gross production to increased value capture.

Cultural and landscape values

The form of agricultural production has a critical impact on social / cultural values as well as on the physical environment, particularly in areas where there are strong cultural associations. The Mornington Peninsula has long been recognised as an area which plays an important role in liveability of the whole of the Melbourne region, with a rural area of outstanding natural beauty valued for its informal recreational opportunities as well as supporting a strong tourism industry. In this sense, landscape character is both a social and economic resource which can either be harnessed, through production systems that protect landscape values or undermined by systems that require an increasingly intensive and monocultural approach, with associated landscape impacts. Equally, although an assessment of Aboriginal Cultural Heritage is well outside the scope of this study, it is important to recognise that values of custodianship can be substantially affected by land use decisions. Production systems which are in harmony with nature are more likely to respect these values than those which require excessive landscape modification.

Agroecology and regenerative agriculture

Regenerative agriculture recognises historical dependencies on external inputs and the damage done to productive soils from industrialisation and mechanisation. It aims to chart a middle ground by mimicking natural processes and supporting these with strategic and innovative use of

[11] Water and Climate Change www.ucsusa.org/resources/water-and-climate-change#:~:text=With%20climate%20change%2C%20the%20water,every%201%C2%BAF%20rise%20in%20temperature.
[12] Threats to Australian biodiversity www.environment.gov.au/system/files/resources/e9f0d376-78eb-45cc-9359-797c6b0f72ff/files/chapter5.pdf
[13] Slow Food Melbourne

fertilisers and other farm chemicals. The science of Agroecology has developed over the past thirty years in recognition of the fact that farms are agroecosystems, i.e. ecological processes continue to function as nature intended, but are substantially impacted by agricultural practices that have developed at great pace since the advent of the green revolution. Regenerative agriculture is the practical application of the science of agroecology.

Mimicking natural processes recognises the importance of biodiversity both above and below ground. Below ground biodiversity is central to nutrient cycling via decomposition processes, carbon sequestration, nutrient acquisition by plants, access to water, maintenance of a balance between pathogenic agents and beneficial organisms, detoxification of chemicals and purity of surface and groundwater. Above ground biodiversity is essential for pest and disease control, pollination, seed dispersal, soil aeration, oxygen manufacture and nutrient cycling. The benefits of biodiversity to landholders and the general population go largely unnoticed but it is biodiversity that sustains natural (and cultivated) system health. The benefits of biodiversity are collectively termed 'ecosystem services' and without the healthy function of diverse micro – meso – and macro-organisms, our natural systems would be heavily depleted.

Case Study

Barragunda Estate, Cape Schanck

Barragunda Estate is a regenerative grazing and horticulture farm. Enterprises include beef and sheep grazing, a mixed fruit orchard and vegetable production. Barragunda's orchard has a diverse range of heritage pome fruits (nashi, pears, apples), stone fruits (cherries, plums, apricots, peaches, nectarines), nuts (almond, pistachios), citrus (lemon, grapefruit), figs and quinces, avocados and olive trees. The market garden and hot houses produce a diverse range of vegetables

Their philosophy and approach to farming uses regenerative agriculture practices that generate quality products, sequester carbon, and enhance biodiversity. They strive to use agriculture to restore the landscape, rather than trying to control it.

The system has responded in a number of ways including: increased diversity of native grasses and reduced weed pressure; increase in rebound time of pastures; better soil structure; improved water holding and reduced irrigation demand; and better tasting produce!

We are witnessing such depletion in our agricultural landscapes where biodiversity has been impacted most seriously. As a result, we have become dependent on biocides where nature once used predatory insects or similar biocontrol agents. Regenerative agriculture aims to inform a new way of farming that acknowledges and values ecosystem services to release farming from its unsustainable dependencies. The federal government's funding of $4m to the National Farmers' Federation to develop and trial an Australian Agricultural Sustainability Framework recognises the importance of biodiversity in improving land stewardship.[14]

While an assessment of the modern equivalence of regenerative agriculture to Aboriginal custodianship is problematic, it is appropriate to acknowledge the fact that Aboriginal land management worked closely with natural processes and through their spiritual and cultural practices, recognised the critical importance of what we now call ecosystem services to their survival and long-term wellbeing. Aboriginal farming practices did substantially change the Australian landscape but in doing so, established a sustainable equilibrium that allowed healthy ecosystem function over millennia. We will partner with Aboriginal associations and land councils to increase knowledge and integration of their land management practices.

Case Study

Transition Farm, Fingal

Transition Farm grows Certified Bio-dynamic vegetable seeds for supply to other growers. Over the last decade, the owners have also operated a fresh produce community supported agriculture enterprise, supplying 120 local families directly, harvesting up to 150 vegetable varieties from a one-hectare plot.

The Farm works to build the life of the soil as a closed loop system, using high quality Bio-Dynamic preparations in combination with the soil, climate and seasonal variations. Green manures are a central practice to sustain soil fertility. The resulting humus helps their crops to be more drought resistance and rebound quicker after extreme weather events.

Their growing practices are centred strongly around building soil life, using nutrients held within soil humus content, not through water soluble nutrient in the soil water. By incorporating integrated pest management and cover cropping, using intensive planting techniques and innovated market gardening tools, they grow large quantities without chemical use.

[14] NFF Australian Agricultural Sustainability Framework

Regenerative agriculture therefore represents an important step in an essential transition for Mornington Peninsula producers and the local food economy.

This position and challenge statement recognises the opportunities available to producers and processors on the Mornington Peninsula and the need to balance the economic and social benefits with substantially improved environmental stewardship and social wellbeing.

"Maintaining green and rural spaces to allow for sustainable production at scale, both environmentally and economically is important. The underlying health of the environment is strong and needs to remain so. Community driven agriculture should be self-sustaining and protected from the influence of larger companies."

OLIVIA BARRIE, CEO,
Mornington Peninsula WINE

Project Methodology

A key feature of this Strategy has been the extensive 15 months of its development and refinement. Starting in March 2020 and concluding in February 2021, the research and engagement timeframe has enabled over 150 people to directly voice their needs, concerns and plans for the future through online surveys, focus groups, workshops, interviews and conversations.

Instead of one round of consultation, there have been four. Instead of pre-set ideas, there have been debates, revisions and improvements. This approach established the foundation and opened the door for influencers for a sustainable food economy and regenerative agriculture on the Peninsula.

The purpose, outputs and phases of the methodology are depicted below in Figure 6. Strategy Project Plan, 2020-22.

Research

A breadth of documentation relevant to social, economic and environmental issues was reviewed to gain a deep understanding of Council's decision to invest in a Food Economy and Agroecology Strategy. The documents listed above and many others consistently articulate a desire to steward the region's natural capital while promoting sustainable development.

A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was undertaken to gain perspective on the Mornington Peninsula food economy and potential for widespread adoption of regenerative agriculture. A PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis was also completed. Details of these can be found in the appendices.

The SWOT and PESTEL provide a rich understanding of the operating environment into which a Food Economy and Agroecology Strategy sits. The perspective gained through completion of the SWOT and PESTEL ensures that the community consultation was conducted in a way that recognised the work that has gone before, and the policy and regulatory environment into which the Strategy must fit. The policy and regulatory environment and input from the various consultations was used to shape a strategic response as articulated in this Strategy.

Engagement

Formal methods of engagement were used to gain inputs from influential or potentially influential organisations, and local producers. Online surveys gathered data on land sizes and land ownership, principal activities, markets, revenue, investment plans, and constraints to business development. Stakeholder interviews and questionnaires were completed with industry and government. An extensive contact list of relevant stakeholder groups and agencies was developed.

Two focus group workshops were carried out through which the detail of community input from the earlier phases was worked over with a view to clarifying priorities and developing workable solutions. Through all consultation, the importance of community ownership of the Strategy was emphasised, so it was essential that the feelings and concerns of the whole industry be reflected in this document.

Instead of this being a Strategy solely reliant upon the efforts of the Shire Council, this is a Strategy owned by the community while linking many organisations with diverse interests and intersecting responsibilities for its success.

The Strategy was produced through research and extensive engagement with stakeholder groups. On-line surveys were sent to 387 primary producers, 65 businesses involved in value adding, 14 businesses involved in the supply chain, 39 community or voluntary organisations, and 59 government personnel. Almost 150 people responded to surveys and / or responded to questionnaires and / or attended focus groups. This represented a healthy response rate, additionally so given that respondents tended to represent larger constituencies of interest, i.e. farming organisations, government departments, industry representatives etc.

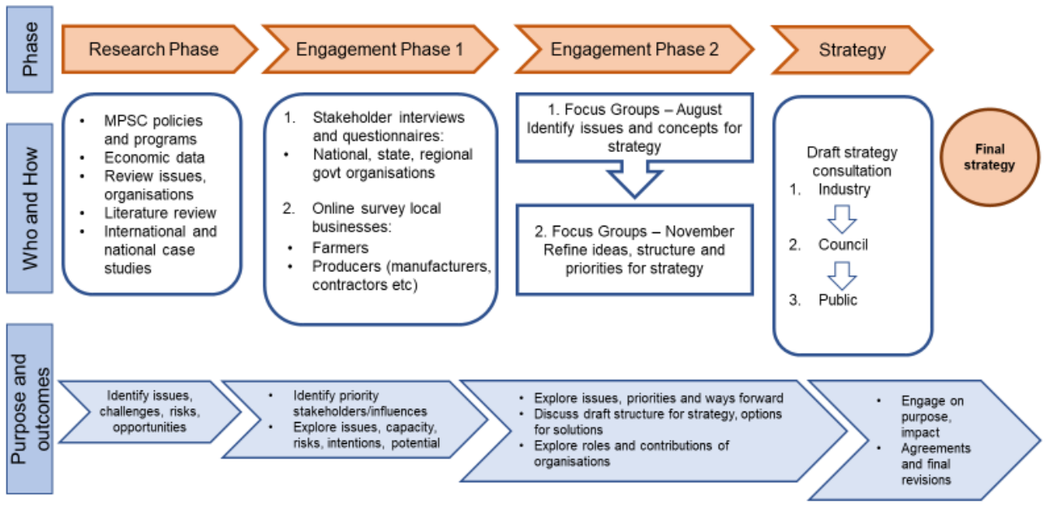


Figure 6. Strategy Project Plan, 2020-22

The Strategy

The Strategy is shaped by the following foundations:

Play to strengths

It is important to "play to the strengths" of the Mornington Peninsula – particularly the ability to produce high quality and high value products – and to capture this value through new connections with a range of consumers.

Protect natural resources

It is critical to protect the natural resource base of farming in the long term through the use of regenerative agriculture guided by the science of agroecology. Farming must be sustainable and must not erode natural capital.

Triple bottom line

Farming should not be considered in isolation from other social, economic and environmental goals. A resilient and sustainable primary production base provides a strong foundation for community function.

Champion regenerative agriculture

There is significant potential to grow a food economy based on regenerative practices. Council's championing of sustainable production must include the "social marketing" of regenerative agriculture.

Align interests

There is a wide range of producers, suppliers, agencies, consumers, and other interests involved in the food economy of the Mornington Peninsula (figure 7). Effective action will depend on achieving the greatest possible alignment of interests and levels of collaboration.

Facilitate collaboration

The Mornington Peninsula Shire Council can take on a critical role in facilitating collaboration through the Taskforce and a reinvigorated MPP.

These principles and the associated actions are discussed in more detail on the following pages.

Vision

"The Mornington Peninsula has a thriving and resilient farming, food and beverage economy which actively regenerates the soils and resources on which our community depends"

The overall vision for this Food Economy and Agroecology Strategy aims to encompass the intention of Council in commissioning this work and reflect the broad interests of the community as shared through the consultation process. It recognises the current strengths and weaknesses in the food economy and future threats to our natural environment and our collective wellbeing.

The Strategy takes a strongly assertive position informed by unequivocal scientific data on the state of our climate and the condition of our natural resources. There is no debate regarding the need for transformation in our food production systems yet there is acknowledgement of the difficulties that can accompany change. Charting a path to a new food economy underpinned by agroecological principles requires integration of social, environmental and economic factors to ensure strong foundations and meet future challenges.

Key goals to 2028

The challenge of living within the limits of the natural environment is what is meant by the use of the word sustainable. The frequency with which the word is used has blunted its full impact and consequences of current human behaviour. Many hope for technological rescue, but the natural world, and natural processes that have evolved over millions of years will not be so easily bypassed.

This Strategy repeatedly emphasises the essentiality of sustainability as it applies to relevant economic, social and environmental issues. The following key overarching goals of the Strategy aim to chart a course to 2028 and beyond and aim to balance the need for environmental, economic and social sustainability.

Key Overarching Goals to 2028

Environmental	Economic	Social
Principles and practices of agroecology, circular economies and regenerative agriculture are championed by the Sustainable Food Economy and Regenerative Agriculture Taskforce and its representatives to drive transformational change across industry.	Local food industries will be underpinned by agroecological production of diverse and high value goods that bestows a strong competitive advantage to Mornington Peninsula's food economy and recognises the Shire as an exemplar of sustainable production.	The community-wide embrace of Mornington Peninsula as a centre of excellence for regenerative practice builds local identity and improves accessibility of locally grown and made foods contributing to Council's Public Health and Wellbeing Plan .[15]

Table 1. Key overarching goals to 2028

[15] Our Health and Wellbeing 2021

The release of Council's *Ensuring our Future*[16] climate change response Strategy commits the community to a range of activities including:

- By 2030, sequester 1 million tonnes of atmospheric carbon in plants and soil, and
- By 2030, 20% of farms adopt regenerative practices.

This Strategy is closely aligned with Ensuring our Future in recognition of the vulnerability of unsustainable food production and the role agriculture can play to adapt to, and mitigate the effects of, climate change. Throughout the community consultation and discussion of themes (pillars), there also emerged a growing confidence in our collective capacity to rise to the challenges of transformation of food production systems. This sense of optimism is captured in the statements of intent that support the five pillars shown in opposite.

The diagram on opposite page

The diagram is intended to express a Strategy which connects the vision to specific actions. In other words, how do we get from where we are now to our desired future state?

The statements of intent contributed to the identification of pillars and the range of targets supporting each. These are shown again below from figure 1.

The following section details the five pillars, each with their own key challenges to be addressed, strategic solutions and outcomes and a summary of priority actions for each pillar.

[16] Mornington Peninsula Shire Council's Our Climate Emergency Response 2020 – 2030.

Vision:

The Mornington Peninsula has a thriving and resilient farming, food and beverage economy which actively regenerates the soils and resources on which our community depends.

1. Impact through collaboration

- Sustainable Food Economy and Regenerative Agriculture Taskforce
- Establish reporting systems to track progress with the Strategy
- Promote collaboration through revitalised MPP and associated groups

Statement of intent

Our community is strongly aligned to position Mornington Peninsula as a centre of excellence in agroecology

2. Securing markets and sales

- Reinvigorate and re-launch Mornington Peninsula Produce (MPP) brand
- Program criteria for MPP are expanded
- Annual MPP and Buyers Expo
- MPP Procurement Pledge

Statement of intent

Our food economy is united under the Mornington Peninsula Produce brand and its procurement pledge

3. Land use and regeneration

- Facilitate establishment of a Regenerative Agriculture Community of Practice
- Establish and develop a participatory certification scheme complementary to MPP
- Incentives for regenerative practices are investigated
- Resources developed to support leasing of regenerative land

Statement of intent

Our community protects and enhances our agricultural landscapes to sustain production, improve biodiversity, and sequester atmospheric carbon in soils

4. Skills and capacity development

- Training in Regenerative Agriculture
- Engage industry, schools and training organisations to encourage career pathways in regenerative agriculture and sustainable food production
- Facilitate development of farmer mentoring program

Statement of intent

Our community supports the capacity of producers and processors to transition to a regenerative model and encourages entry of young people into food production and processing industries

5. Infrastructure for a circular food economy

- Extension programs to support on-farm composting
- Promote organics recycling
- Advocate for and facilitate development of recycled water schemes
- Advocate for greater energy security through uptake of renewables

Statement of intent

Waste is eliminated through innovative reuse of all products including organic residues returned to farmland as compost, use of recycled water and renewable energy

The Plan

Pillar 1

Impact through collaboration

This strategic pillar is focused on Council bringing together key stakeholders to oversee this Strategy and collaborate on major investments and programs that accelerate the shift by farmers and food/beverage producers to more sustainable food production, thereby securing a more resilient and sustainable food economy on the Mornington Peninsula. It builds and expands upon current programs, trends and market drivers for change.

Key stakeholder groups in the success of this Strategy are identified in Figure 7. This diagram illustrates the interconnectedness of different contributors and their reliance upon Mornington Peninsula's natural environment as their foundation and future. This diagram also shows that Mornington Peninsula's food economy relies upon all of these groups actively supporting a change to more sustainable and regenerative production and processes.

Challenges to be addressed

The diversity of the Mornington Peninsula's food economy is both a strength and a weakness.

The diversity of Mornington Peninsula's food economy is both a strength and a weakness. Unlike in many other regions there is no one large farming sector, like beef or fruit, and no large food/beverage manufacturers to unite and focus attention.

Figures 8-10 show the diversity of producers on the Mornington Peninsula. There are hundreds of farmers and food/beverage producers operating as mixed businesses across horticulture, viticulture and grazing systems, making wine, beer, pies, meals, and offering contracting services and accommodation. There are also hundreds of retail and food outlets including frequent Farmer's Markets and Farm Gate sales. There are nurseries, freight companies and consultants in agronomy, marketing and events.

The lack of a dominant industry has meant that the sector has not been well supported by national or state governments, industry bodies, or business support networks. This is despite the fact that it is a highly productive region.

Foundations and influencers for a sustainable food economy

Inspiration and representation
Associations, teachers, mentors, neighbours, awards, scholarships, governments

Investors
Leaders, government rebates, grants, partners, philanthropy

Suppliers and contractors
Energy, water, soil, landowners, recyclers, waste managers, processors, packaging, storage, freight

Customers
Brand owners, manufacturers, restaurants and food outlets, wholesalers, retailers, locals, tourists

Food and beverage producers
Wine, beer, ciders, juices, sauces, preserves, sweets, pies, cheeses, meats

Farmers
Vegetables, fruit, beef, dairy, eggs, grapes, olives, herbs

Mornington Peninsula Environment: Soil, water, air, biodiversity, ecosystem services

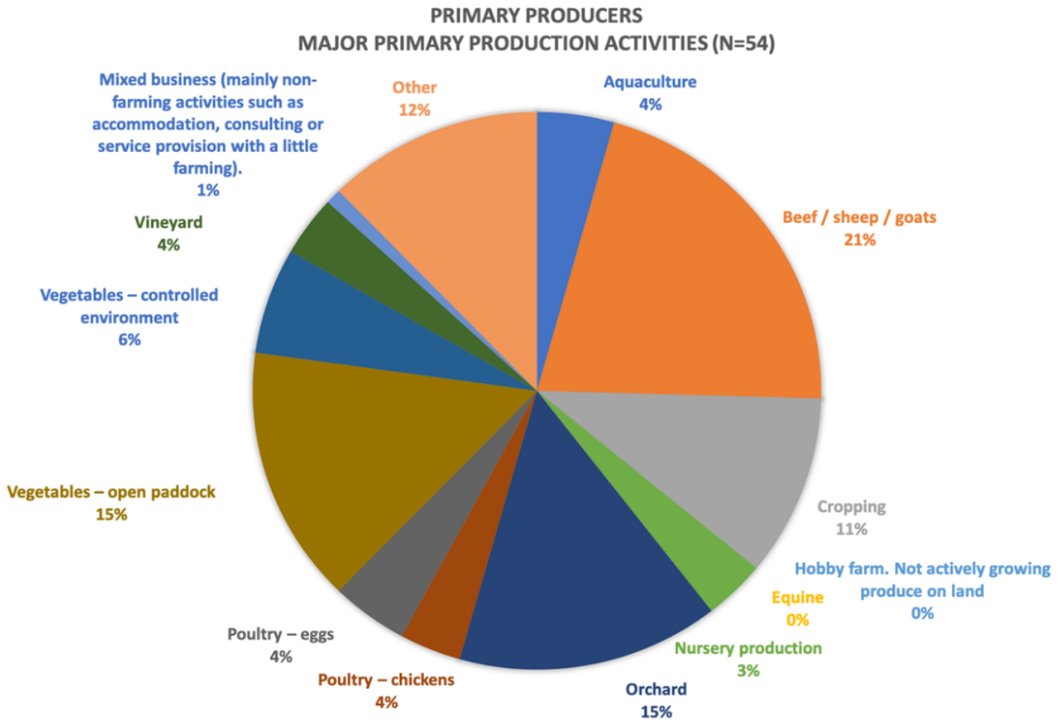


Figure 8 Primary Producers major primary production activities (Survey 2020, N:54 respondents)

While this diversity is what adds colour, resilience and depth to the Mornington Peninsula, it also means that there is currently no collective place, organisation or voice for the many parts of Mornington Peninsula's food economy. This fragmentation of the food economy limits coordinated planning and exchange between businesses and slows progress towards a more sustainable and resilient future. Strategic collaboration is not only necessary to grow the food economy, but also to avoid its erosion by market forces.

"While we have not done quantitative analyses of the MPSC food economy, a rough guide could be the estimates of the Foodprint Melbourne research, i.e. that in 2015 Melbourne's 'foodbowl' (including MPSC) could satisfy 41% of Melbourne's food requirements, whereas with current development dynamics and population growth, that will shrink to 18% by 2040, i.e. a decline of more than 50% in the next two decades."

Dr Nick Rose,
Sustain - The Australian Food Network.

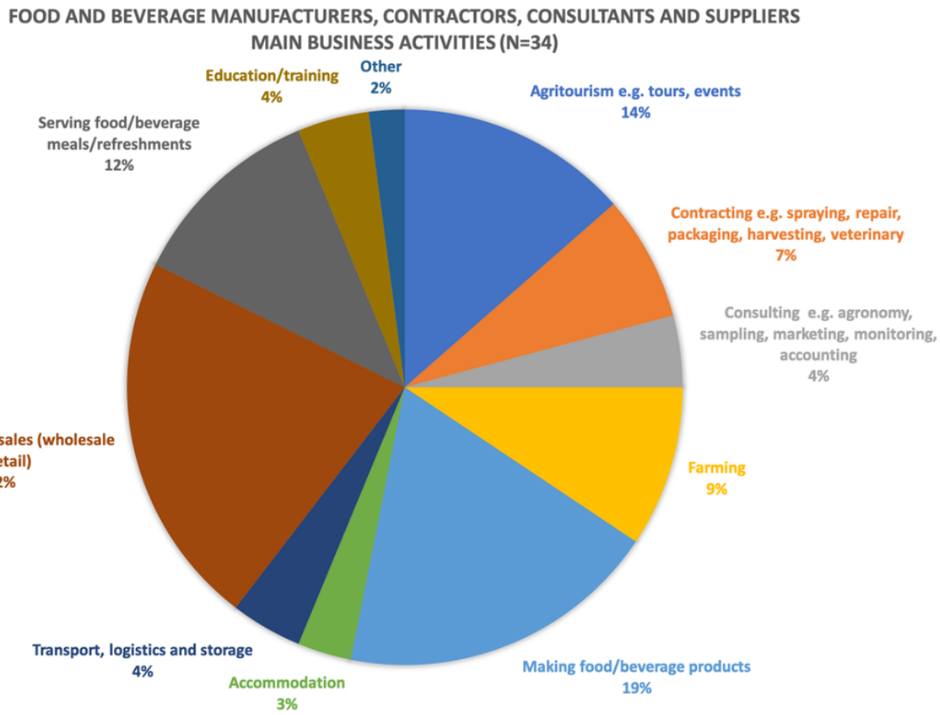


Figure 10 Secondary producers and related businesses activities (Survey 2020, n:34 respondents)

The capacity of Council and the sector to collaborate on projects and deliver on emission and regeneration targets to 2030 and pursue state and federal government and philanthropic grants will be greatly enhanced by this Strategy, particularly the formation of the Taskforce discussed further below.

Survey findings show that the majority of food business responding to the online survey are experienced and mature (Figure 11).

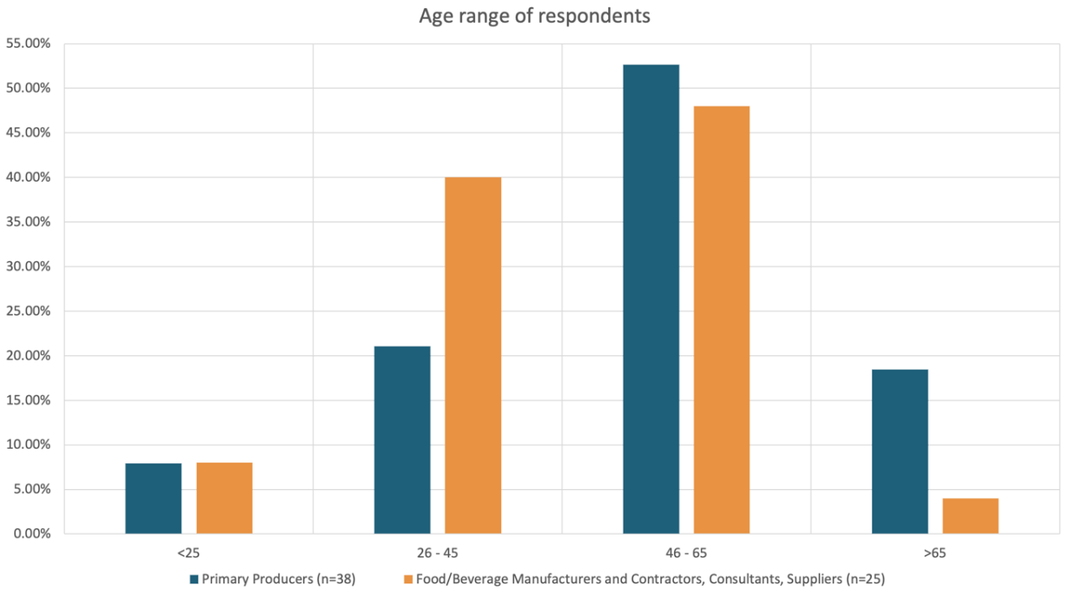


Figure 11. Age range of Primary producers (n:38) and food producer/related businesses (n:25)

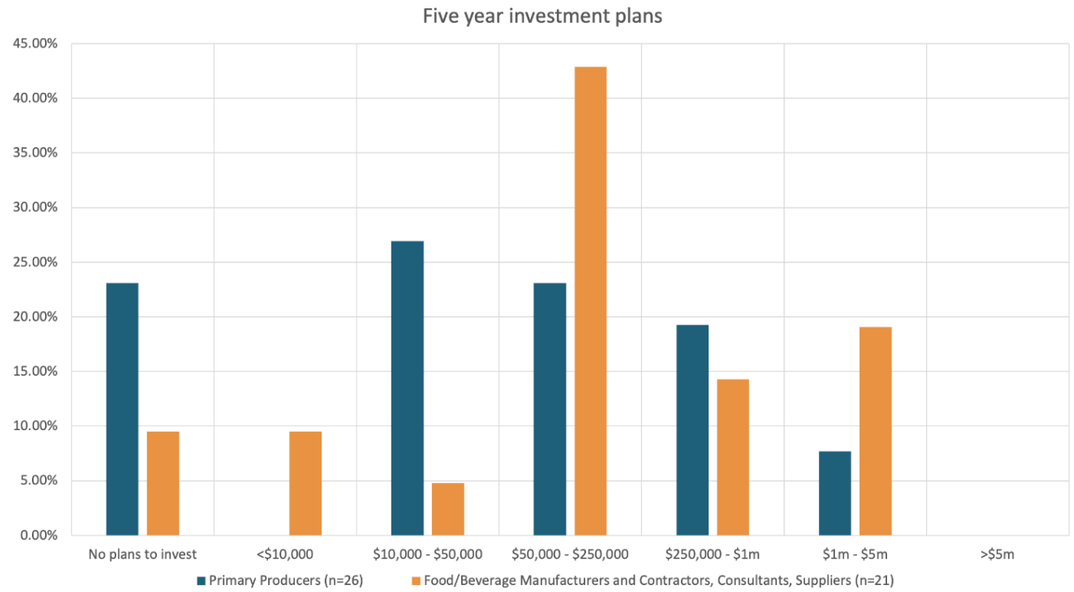


Figure 12: Five Year Investment Plans, Primary producers and Secondary producers and supply chain

Figure 12 shows a willingness to invest, and a keenness to embrace sustainability initiatives. It shows that 75% of farmers and 90% of food businesses and allied industries have plans to invest in the next five years. More than 50% farmers and 75% food/allied businesses plan to invest between $50,000 and $5M. These figures show a level of confidence and enterprise in these sectors on the Mornington Peninsula. This is positive information and indicates that there are good opportunities for investments to be orientated toward more sustainable outcomes if supported by commercial trends and high-level coordination between individuals and businesses.

Interviews with stakeholders found significant systemic constraints that need to be addressed to encourage collaboration. For example, there are current growth limitations across the Peninsula due to constrained electricity peak demand, lack of access to recycled water infrastructure, appropriate sewerage infrastructure and internet services. These are the sorts of systemic issues impacting food producers that will be addressed through high-level collaboration. Improving collaboration is the primary function of the Taskforce.

"These challenges have implications for the viability of farms which are otherwise successful, sustainable enterprises providing local, sustainable, fresh produce to the Peninsula and Melbourne communities, stewarding the landscape responsibly, and maintaining the resilience of Victoria's food bowl. Restrictions on sales channels also limit local communities' ability to access fresh produce from nearby producers."

Tammi Jonas, President,
Australian Food Sovereignty Alliance

Strategic solution – Collaborative Taskforce

The diversity within Mornington Peninsula must become a strength if the region's food businesses and economy are to grow or remain viable to 2030 and beyond. Stakeholder input showed that many Mornington Peninsula farmers and food businesses recognise the importance of transitioning to sustainable production and are keen to lead the way in Victoria. By working together with the Council to support its targets for reduced emissions, carbon sequestration and adoption of regenerative agriculture, Mornington Peninsula food producers will have new opportunities to grow the food economy.

The scale and urgency for change to more sustainable practices requires the involvement and commitment of many. This fact was recognised by many influential stakeholders and organisations involved in this Strategy via interviews, surveys and workshops. However, in spite of the fact that success is dependent on the efforts of many, there was strong agreement on the requirement for centralisation of responsibility to drive this Strategy. This leadership has to come from Council via this Strategy.

The need for a group to oversee this Strategy emerged out of the first focus group discussions. It was presented for discussion at the second focus group session in November 2020 where it was refined and developed as a Sustainable Food Economy and Regenerative Agriculture Taskforce. There was agreement that the establishment of a Taskforce, overseen by Council as the co-ordinating body, was an efficient and effective solution to many of the structural issues discussed above.

Funding of the Strategy was a specific topic for focus group discussions. A host of qualified representatives from local financial institutions, Sustainable Australia Fund, a national sustainability investment group, Shire Council representatives and other key stakeholders provided input to the discussion.

It was recognised that funding is an essential element to drive change. It is also recognised that Council continually balances funding requests from a huge number of competing priorities.

The Sustainable Food Economy and Regenerative Agriculture Taskforce

There was strong support for Mornington Peninsula Shire Council to establish a Sustainable Food Economy and Regenerative Agriculture Taskforce to drive this Strategy. The Shire Council will draft Terms of Reference, consider recruitment and appointment processes (such as by invitation and / or Expression of Interest), and appoint an independent Chairperson. Members should be appointed in 2023.

Council will oversee the management of the Taskforce, the funding of projects as appropriate and the implementation of the Strategy in collaboration with the Taskforce. It is proposed that the Terms of Reference include the following role and responsibilities:

- Oversee the implementation and biennial reviews of the Food Economy and Agroecology Strategy and its five pillars
- Set and review priorities for the pillars and make recommendations on projects
- Advocate and seek funding for priority projects which align with the pillars
- Facilitate on-going collaboration between organisations, associations, governments and businesses

It is proposed the Taskforce comprises representatives of such organisations that may invest in key projects or programs or otherwise contribute to the delivery of the Strategy. Membership should be drawn from, but not be limited to the following:

South-East Councils Climate Change Alliance
MP Climate Action Network
Farming and food businesses
Mornington Peninsula Tourism Board
Landcare
Victorian Farmers Federation – Mornington Peninsula
Local philanthropists
Bendigo Community Bank
Mornington Peninsula Wine
Mornington Peninsula Shire Council
TAFE
Young Farmers Connect
Peninsula Health
Water authorities

Additional groups and individuals may be represented on working groups specific to projects within each pillar.

It is recommended that the Taskforce carries equal representation from government, industry, and primary production to ensure a balanced perspective and real progress in shifting the base of production towards regenerative agriculture.

Business of the Taskforce

The Sustainable Food Economy and Regenerative Agriculture Taskforce will be the group implementing Council's Strategy. Central to this responsibility are the reinvigoration of the MPP brand and driving specific initiatives.

Allocation of funding by Council is dependent on the identification of key projects and the capacity to leverage funding through partnerships with state government, private organisations, local businesses and philanthropic organisations such as those listed above. The Taskforce and Council will work with stakeholders, principally though MPP to identify key projects aligned with the principal actions in this Strategy.

While implementing projects is an essential aspect of the work of the Taskforce, its main work involves developing and promoting mechanisms for coordination and communication necessary to integrate the diverse features of the food economy. The MPP (discussed further below in pillar 2) will be a sub-committee of the Taskforce and will have a strong commercial focus. The Taskforce will ensure the MPP's commercial mandate integrates with and actively drives transformation in how food is produced on the Peninsula.

The Taskforce will connect agencies and industries with Council to advance the transformations needed to change the paradigms of food production and processing on the Peninsula. As the consultation showed, there is a readiness among businesses to invest. The challenge of the Taskforce is to improve communication and coordination so that investment is focussed and strategic and contributes to the Peninsula's growing reputation for quality and sustainability.

Activities of the Taskforce may include:

Food economy

- Hold planning forums with restaurants, retailers and brand owners to integrate sustainably produced food and beverage and MPP into their contracts and promotions
- Work with the MPP sub-committee to make the Peninsula synonymous with healthy food and healthy environments
- Work with state government to demonstrate models of sustainability at local government levels
- Promote preferential purchase of primary or value-added produce grown under regenerative agriculture practices
- Support for a bulk buy scheme for food producers and processors
- Promote collaboration between different parts of the food economy (e.g., producers and processors)
- Promote circular organics including organics collection and treatment systems to return organic matter to productive land.

Agroecology

- Elevate the status of regenerative agriculture and provide incentives to adopt. Such incentives could include development of a peer-managed certification scheme (discussed under S.3 below) which would feed into a reinvigorated MPP
- Establish a network of climate resilient regenerative farming trial sites across the Peninsula
- Advise Council on incentives (e.g., planning or rate adjustments) to promote broader uptake of regenerative agriculture
- Facilitate development of skill and capacity development to meet the needs of primary producers or food processors
- Bring parties together to form a Mentor program for new, emerging and existing farmers on regenerative agriculture
- Establish annual school, community, farm and food sector activities to promote knowledge and awareness of regenerative agriculture and its future relevance to the food economy of the Mornington Peninsula.

The Taskforce shall facilitate collaborations that integrate or streamline industries to capitalise on the strengths of diversity in the region. Any collaboration needs to be determined on the basis of benefit to the Mornington Peninsula and support for rapid change to more sustainable outcomes across the food sector.

Finally, a key role of the Taskforce is to undertake a biennial review of activities, achievements and progress of the Strategy. This review shall be reported to Council biennially over the initial six years of this Strategy.

Summary of actions and expected outcomes

The following actions are proposed to address the challenges, build momentum and seize opportunities.

What	Who	When	Outcomes
Sustainable Food Economy and Regenerative Agriculture Taskforce established	MPSC	2023	Taskforce meets 4 times per year enabling cross industry collaboration
Establish priority setting, reporting system to track progress with the Strategy	MPSC EDU & Taskforce	2023	
Promote collaboration through revitalised MPP and associated groups	MPSC & subcommittee	On-going	Provenance promotion working group established with key stakeholders. Increased investment (financial and in-kind) into provenance promotion activities by stakeholders enables scaling up of activities

Table 3 – Key actions from Pillar 1

Pillar 2

Securing markets and sales

This strategic pillar is central to supporting farmers and food producers to transition to regenerative practices and reach the 2030 emissions and regenerative targets set by Mornington Peninsula Shire Council in 2020. It reinvigorates and builds upon the existing Mornington Peninsula Produce (MPP) provenance brand. It proposes a clear, strong and appealing program, with priority markets and sales as incentive and reward for those businesses that produce food and beverages under a local regenerative agriculture certification system.

Challenges to be addressed

Cost and uncertainty in changing to regenerative agriculture

A growing number of farmers and food producers, and their representative associations are aware of the need to adapt to climate change, reduce emissions and minimise impact and harm upon the environment. However, changing from well-established legacy systems, contracts, processes and equipment is difficult, potentially risky, time consuming and requires a considerable commitment of energy.

Although sustainability is part of many corporate plans, the sustainability of food production is still not sufficiently prioritised or required in current contracts, financial systems, insurances, association programs and organisational standards. As a result, there is little external incentive for food producers to embrace regenerative agriculture. This is evident in the responses to surveys and interviews.

There is broad acquiescence to industrial agriculture's unsustainable practices in return for cheap food. However, regenerative agriculture practitioners have shown that food production can be profitable with lower risk and stress.[17] In other words, the broad adoption of regenerative practices does not threaten food prices. Regenerative practices aim to reduce the need for purchased inputs by working more sympathetically with natural forces to sustain production.

Mornington Peninsula Shire Council is the first council in Australia to set a formal target for regenerative agriculture which is courageous and far-sighted. This Strategy aims to build on this courage and focus on the future. Our vision is that regenerative practices will become the standard for food production on the Peninsula and the Mornington Peninsula Shire will become synonymous with regenerative management.

Sustainability programs are not mainstream in the food economy

There is a range of excellent measures available to those wanting to transition to more sustainable food production and regenerative agriculture, and progressive farmers and food/beverage producers on the Mornington Peninsula have embraced these opportunities. These include rebates and easy repayment systems for PV solar systems and other quantifiable energy efficiency measures (heat pumps, double glazing, draft proofing etc) , grants for revegetation and fencing of waterways on farms , and low-cost participation in Landcare. The breadth of activities shown in figure 13 is representative of activities on the Peninsula and highlights the potential for high-value branding of products.

The trend towards regenerative practices is good, however there are currently no incentives to embrace sustainability on owned and leased land. The transitions to sustainability are too small, too slow, available to only a few and too fragmented. Sustainability has to become mainstream.

[17] Graziers with better profit, biodiversity and wellbeing
[18] Insert footnote to Sustainable Australia Fund.
[19] Melbourne Water, 2020 grant support for landholders
www.melbournewater.com.au/water-data-and-education/get-involved/apply-funding

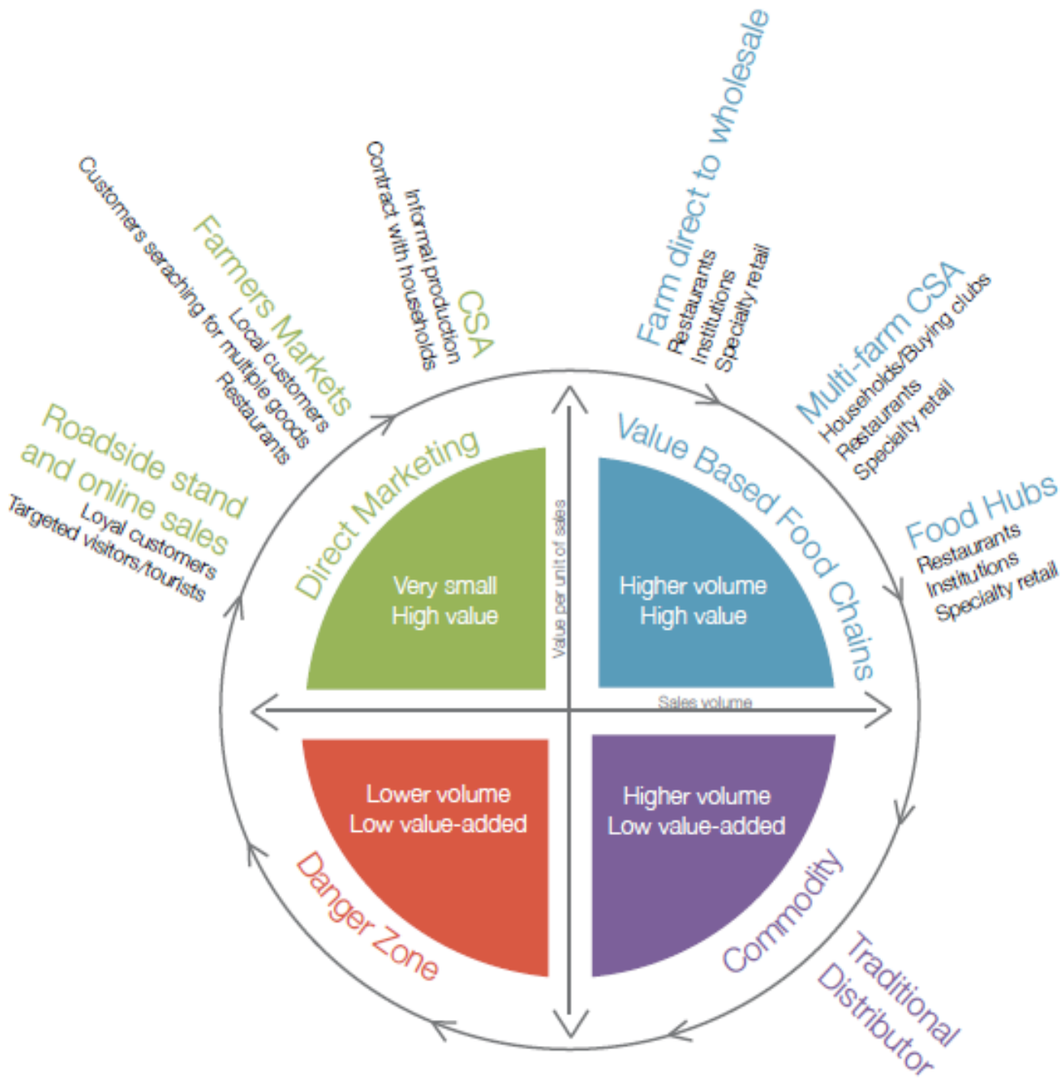


Figure 13: Diverse markets for food and varying value return (source: Foodprint Melbourne, 2016)

Regenerative agriculture provides a set of simple principles to guide sustainable outcomes and encourage broader uptake of sustainable practices.

The opportunity presented by adoption of sustainability initiatives, and the public celebration of quality foods of known provenance represents an important opportunity for primary producers and food processors on the Peninsula. The breadth of activities shown in figure 13 is representative of activities on the Peninsula and highlights the potential for high-value branding of products.

The relatively small and fragmented nature of the Peninsula's food economy is regarded as an opportunity to invest in the 'Very small – High value' and Higher volume – High value' market segments shown. Farm gates, Community Supported Agriculture (CSA), Farm direct to wholesale and Food Hubs and local distribution infrastructure are all examples that fit with current structures. The challenge is to grow these and complementary structures through coordination and collaboration.

Comparatively weak regional identity and brand

The development of the Mornington Peninsula Produce (MPP) brand in 2016 improved awareness of the breadth of produce coming from the Peninsula. However, the current MPP brand has not delivered to its potential. That potential was immediately acknowledged throughout the consultation process for this Strategy. The reinvigoration of the MPP will create a unique and compelling vision and image. Mornington Peninsula has rich diversity in produce and landscape features but awareness of the breadth of produce available on the Mornington Peninsula is low. There is a need for revitalised ambition, purpose and investment into the MPP brand as a central conduit for all that Mornington Peninsula has to offer.

Maximising the benefits of being on Melbourne's doorstep

Traditionally the challenge with many food regions on the fringe of cities is that their identity and brand can be overwhelmed by that of the city – the advantages of proximity to large markets can become a liability. A legacy of Covid-19 – which may prove enduring – is the trend towards local engagement in food production and consumption. The MPP must therefore be a strong brand, well adopted locally and well marketed externally, persistently used, and unique. It also needs to be based on a reliable certification process, to ensure that it is credible to consumers. Depending upon the food sector and brand, it can become part of the marketing of the region for tourists, business investment, international trade and delegations, research and innovation.

Minimising food miles

The modern consumer has grown accustomed to year-round availability of a great range of fresh foods. In contrast, proponents of sustainable food production advocate 'eating as peasants' which recognises that much of the world has access to only those foods grown in specific seasons. This Strategy prioritises consumption of seasonal foods. Eating locally also means eating seasonally.

To further promote seasonal consumption of fresh foods, we propose the development of seasonal calendars to highlight firstly, that food is seasonal, and secondly, which foods are currently available. This work should be supported by on-line communications and through events such as the Buyer's Expo. We also propose that farmers explore opportunities to expand the production of seasonal offerings including trialling new crops or crop varieties.

Increasing consumption of locally-produced in-season foods can heavily impact the carbon footprint of food transport by reducing the import or trans-continental movement of fresh foods.

Strategic solutions

Mornington Peninsula needs a clearer brand, identity and program bringing together the diversity of its farmers and food/beverage producers. It also needs a comprehensive incentive program that flows through the whole supply chain, from farmers to food/beverage producers, their contractors, suppliers, associations and investors to support the transformation necessary to meet Council's goals. Change must be broad scale across all relevant sectors. It has to be enticing, financially rewarding and supportive of innovation and continuous improvement.

A key plank in this Strategy and one of the most powerful opportunities to drive necessary change lies in Council, key associations and stakeholders committing to a singular message that communicates the intention to create an exemplar food bowl on Melbourne's doorstep. The food bowl will be characterised by regenerative agriculture underpinned by the science of Agroecology. Primary and processed produce will be certified as locally produced under systems of production that provide a guarantee of quality, safety and health. Farms will be able to demonstrate environmental credentials including improvement in natural capital. Improving natural capital delivers on the aspirations of many farmers to leave the land in better condition as a result of their management. Farmers will be recognised for this commitment through increased demand for quality produce and pricing that reflects their environmental stewardship.

A key task of the Taskforce is to promote widespread uptake of regenerative agriculture and to communicate this model of sustainability to markets. It will use special sales events, marketing and unique branding to feature businesses that offer food/beverage produced regeneratively and sustainably with low emissions, low food miles, local jobs and innovative investment.

This will position Mornington Peninsula food producers at the forefront of growing market interest in sustainability, particularly from corporate Australia and major brands who have their own targets, ranging from emission reductions, zero waste to environmental repair. This audience is growing, particularly in this climate change emergency decade of 2020-2030.

Case Study

Burlington, Vermont, US, Hospitals and organisations buying local sustainable food

This is an example of the power of affirmative procurement programs that support local food producers.

A small local hospital buys food sustainably produced from local farmers. They are 'invested' in their local community and food system and keeping viable farms in the region. According to the hospital, their commitment to purchase local food was supporting up to 22 jobs. This purchasing commitment meant jobs, money, viable farming, preservation of landscape, lower emissions, rebuilding soil. They were immensely proud and connected with their local food businesses and community and pleased to be supporting preservation of their local environment, wildlife and low carbon emissions.

Source: Dr Jorja Collins, Churchill Trust Report on environmental sustainability of hospital foodservices, 2020.

Reinvigorate Mornington Peninsula Produce

At the second Strategy workshop in November 2020, participants in the marketing sub group rated as top priority the reinvigoration of the Mornington Peninsula Produce (MPP) brand to include a program for sustainably produced food and beverage from across the Peninsula. The popularity of the MPP Producers' Paddock at the annual Red Hill Show has demonstrated a natural gravitation towards the brand. The MPP will become the primary vehicle through which this exemplar region and its achievements will be communicated to markets.

The Mornington Peninsula Produce (MPP) brand, and its associated promotions, sales and events (see below) will be expanded to be open to a wider variety of agricultural, food and beverage products. It is currently only open to food & beverage that is wholly grown, bred or raised on the Peninsula. Support networks will be developed for those that have adopted and/or are changing to recognised sustainable, agroecological and regenerative production methods.

Focus Group participants proposed a Sustainability / Certification Label within the MPP brand to recognise the diverse businesses and the environmentally sustainable measures that they adopt. The model of accreditation is described below and is intended to be participant-driven with low complexity and low cost. Businesses could be certified in a number of different ways:

- Certified regenerative agriculture producer
- Certified processor of regeneratively produced product
- Certified user of recycled organics sourced from the Peninsula
- Certified contributor to a carbon insetting scheme to drawdown carbon on local farms
- Zero organics to landfill by directing organic materials to beneficial on-farm composting
- Fit for purpose water use, including recycled water for wash-down and irrigation
- Renewable energy generation and battery storage
- Electric equipment and zero or low emission transport
- Maximising use of reusable or 100% recyclable packaging rather than single use packaging
- And other similar actions.

The group considered different models of certification, formal and informal, used by other organisations such as Green Building Council Australia and other organisations that award and reward outstanding performance. Participants from Mossy Willow Farm have commenced drafting a set of such criteria and measures, and organisations such as Wine Associations have adopted sustainability measures for their members. International examples demonstrate the potential for self-regulation thereby avoiding complex or costly certification systems. Detail of a self-regulating participatory certification system is discussed in more detail in S.3 below.

It was acknowledged that a certification system should be flexible and fair to all types of businesses, reputable in its management and systems, and provide food businesses, community and buyers with confidence. The finalisation of a recommended certification system (for endorsement and implementation by Council) will be undertaken by a working group within the newly established Taskforce.

It was agreed that by providing access to a Sustainability / Certification Label within the MPP brand, substantial incentive and support will be provided to producers to make the difficult but necessary changes and overcome financial and uncertainty hurdles. Additional incentives will be provided through special events, connections and sales to drive demand for sustainably produced product.

In this way the Sustainability / Certification Labelling program within the MPP also unites the disparate producers and many contractors and suppliers in this diverse region under one progressive brand. The MPP brand will be increasingly valued and supported by retailers, restaurants, caterers and brand owners keen to associate with leaders in support of a sustainable future. It will also attract investors and funding from governments and philanthropists. It will change the conversations, rebalance the priorities and create real momentum towards a more sustainable food economy and regenerative agriculture.

The MPP and regenerative practices are mutually dependent in that the MPP will champion regenerative practices and regeneratively produced goods, while regenerative land management will underpin the MPP and its branding. The MPP shall function to connect like-minded producers and promote peer learning.

MPP and Buyers' Expo

A key feature for businesses that qualify for the Sustainability / Certification Label within the MPP provenance brand is the proposed MPP and Buyers' Expo.

This showcase would be styled along the lines of the Victorian Government's highly successful 'Buying Recycled Expo' which brings together manufacturers using recycled materials with buyers in civil and building construction companies. Another model is the Plastics Recyclers Europe annual Expo which presents leaders and innovative companies to over 2,000 EU and international industry and trade delegates each year.

Sustainable food producers within MPP will present their produce, story and achievements. Invitees and attendees could be many, ranging from primary producers, retailers, restaurants, caterers and brand owners, through to local councils, healthcare facilities, and institutions that procure food and beverages.

The event requires marketing and coordination, with the support of the Victorian government and state industry groups as part of the low carbon, sustainable production future for agriculture and food industry. It must set Mornington Peninsula as a vital and sustainable food bowl for Victoria.

> "Our Council is impressed by Mornington Peninsula's trademarking system with its Mornington Peninsula brand. It has potential to be a very defining factor in localised food production. 'Sustainable farming' and 'sustainable food production' are generally universally acceptable terms with minimal opposition."
>
> **Interviewed stakeholder.**

MPP Procurement Pledge

The MPP Procurement Pledge is a program whereby procurers and suppliers make non-binding pledges to buy/sell Sustainable / Certified MPP produce. This is simply a 'buy local' campaign to be run in conjunction with the annual MPP Buyers' Expo and will complement the ongoing Support Local campaign currently being run by Council

The MPP Procurement Pledge program is designed to enable suppliers and customers to forge relationships, make investments, plan improvements, trial innovations etc for more sustainable food production and promote their sustainability credentials. The program can be launched alongside Councils successful Best Bites program with champions such as local food entrepreneurs, regional restaurants, aged care or health care facilities, or major food brands pledging to support certified MPP producers using regenerative agriculture practices or carbon-neutral options, for example.

It is important that MPP Procurement Pledgers and suppliers be publicly celebrated to build recognition of the brand and support local leaders. Such publicity will build momentum and investment in sustainability actions, further promote the MPP brand and its Sustainability / Certification Label, and drive progress towards carbon sequestration and agroecology targets.

Integrating and uniting around MPP and sustainability leadership

MPP produce branding needs to become locally mainstream and lead change across various sectors. This will happen with organisations such as the Regional Tourism Board, Chambers of Commerce, Council's Best Bites and Business Excellence Awards and various industry and regional groups promoting the region's sustainable practices and sustainable food/beverage production amongst their members and more broadly.

It is important that within the next few years all organisations integrate MPP and sustainability / regenerative practices and achievements into their own awards, membership criteria and promotions. Concerted action by these organisations around MPP will create the momentum for unity and recognition for the reinvigorated brand and sustainability programs. It will amplify the credibility of the MPP provenance brand as an exemplar to other regions.

Without collective action toward sustainability improvements reinforced by customers, investors, contractors and associations, the MPP will not reach the necessary brand recognition that is essential to the success of this Strategy. Without collective action on a broad scale, Mornington Peninsula farmers and food/beverage producers will be no different to any other region, will not be able to leverage recognition into the capture of value and may struggle to achieve a more sustainable and resilient food economy by 2030. To this end, a dedicated project officer and operating budget is proposed for the provenance branding activities to give the MPP reach and impact.

Unity around a Sustainability / Certification Label within the MPP will assist the Mornington Peninsula food producers, community and council achieve the 2030 climate emissions targets for a safe future.

Summary of actions – Securing markets and sales

The following actions are proposed to address the challenges and seize the momentum and opportunities.

What	Who	When	Outcomes
Establish sub-committee to reinvigorate and expand Mornington Peninsula Produce (MPP) brand	MPSC EDU, Tourism, teams and existing MPP networks	Commence 2023	Aim to have 100 businesses accredited under brand by end of year three, 200 by year six
Program criteria for MPP participation are established and tested	MPSC EDU, sub-committee, and representative growers	2024	
Create framework for and promote the MPP Procurement Pledge	MPP sub-committee EDU, Procurement team	From 2023	Engage with 20 potential procurers per annum Incorporate MPP into Councils procurement policy
Host MPP and Buyers' Expo	MPP sub-committee, MPSC EDU, Tourism and Events teams	First one by 2024	
Identify optimal sites for farmers markets and food hubs across the Peninsula and develop streamlined internal process for approval and management	EDU, property and Strategic and Statutory planning teams	Commence 2024	

Table 4 – Key actions from pillar 2

Pillar 3
Land use and regeneration

The target of 20% of farms employing regenerative farming practices by 2030 in Council's Climate Emergency Plan: Ensuring our Future was intended to be ambitious, and this section sets out strategies and targets to support this aim. Central to this is understanding the current levels of regenerative activities being undertaken in the farming community, the development of models of best practice, and incentives to participate in regenerative agriculture and horticulture.

The effects of conventional agriculture are often measured in environmental and social costs. Modern agriculture currently produces enough food for 7 billion people but is largely responsible for over six million hectares of desert being added each year, over 500 insect pests resistant to the pesticides used against them (Hill, 1995) and the decline of rural communities (Productivity Commission, 2005).

This system depends largely on non-renewable resource inputs. Industrial agriculture is subsidised by fossil fuels (diesel, fertiliser and biocide manufacture, transport etc.) thereby contributing significantly to climate change. It impacts the environment by depleting soil and polluting surface and groundwater. It impacts humans by replacing them with technology and by exposing them to novel chemicals and foods of declining nutritional quality (Hill, 1995).

These issues are present to varying degrees on the Mornington Peninsula. Many local businesses are already responding to societal and market pressures by reducing their reliance on fossil fuels, trialling mixed species pastures and minimizing tillage. In view of this, Council has recognised agroecology as a model for sustaining primary production and developing new markets for foods grown and made on the Mornington Peninsula.

Challenges to be addressed

Agroecological approaches have gained prominence in scientific, agricultural and political discourse in recent years, outlining pathways to transform agricultural and food systems and addressing issues of land degradation, biodiversity loss, and climate change.

Whilst strong support for shifts towards sustainable production was clearly voiced through community consultation, the paucity of formal training opportunities or codification of agroecology by government and industry has resulted in confusion around principles and practices. Such confusion is a significant impediment to uptake.

Issues impacting on faster uptake of regenerative practices raised through community consultation included:

- The lack of standards to guide agroecology / regenerative agriculture
- Skill development
- Lack of institutional drivers to facilitate change
- Land use planning
- Lack of standards for agroecology / regenerative agriculture

There are currently no formal standards nor standard operating procedures for the adoption or integration of agroecology / regenerative agriculture principles and practices in Australia. A 2017 report from the UN Committee on World Food Security recommended 13 principles of agroecology that encompassed resource use efficiency, system resilience, and social equity (HLPE, 2019). Gliessman (2007) proposed five phases in transitioning to agroecology which similarly focus on input management, aligning production with ecological processes, and social equity.

Pilot training provided to Mornington Peninsula farmers in 2020, and again in 2021, utilised recognised principles of regenerative agriculture as shown in figure 14. Application of agroecological / regenerative principles on the Mornington Peninsula focuses on resource use efficiency (fertilisers, energy inputs, waste management), system resilience (biodiversity, responding to climate change, carbon sequestration), and social equity (access to quality food, skill development, and land). These principles provide an operating framework, but actual practices, and their influence on desired outcomes, require more development.

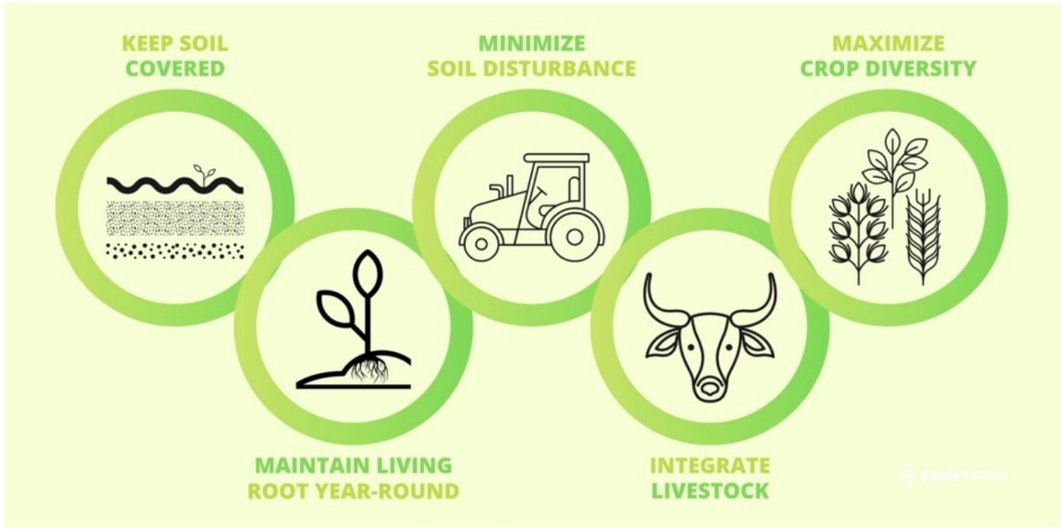


Figure 14: Principles of regenerative agriculture (Lower Blackwood Catchment).

These principles have a strong focus on soil management but recognise the importance of biodiversity and the need for integration of all parts of the production system. The issues of social equity and resource use are addressed more comprehensively in pillars 4 and 5 of this document which deal with skills and capacity development, and the circular economy respectively.

To enable progress on individual farms on the Mornington Peninsula, a focus on on-farm transformation to regenerative agriculture is appropriate, particularly given Council's commitment under its Climate Emergency Response: Ensuring our Future, to sequester 1 million tonnes of atmospheric carbon and to support 20% of farms to adopt regenerative practices by 2030 (MPSC, 2020). Such transformation requires detailed understanding of management practices that have the potential to cause harm, together with alternative practices that increase natural capital.

Need for knowledge and skills in agroecology

Pillar 4 explores the issues of skills and capacity development in some detail. Feedback from community consultation noted the confusion commonly encountered with regard to understanding of agroecology / regenerative agriculture and required changes in management practices. It also voiced concern regarding challenges for entry of newcomers, and re-skilling of more experienced farmers.

For the past 70 years, universities and research institutions have promoted a single model of productive agriculture.[20] It has become increasingly refined to a point where recipes of fertilisers, herbicides and biocides are used to grow crops and in the majority of cases, grow them efficiently and profitably. The downside is a gradual loss of growers' understanding of how nature designed soil processes and soil-plant interactions and how to manage soil fertility sustainably.[21] The result is an ever-increasing reliance on agronomic advice and the energy intensive inputs necessary to grow crops.

This approach depletes the capacity of natural systems to produce and, as discussed above, undermines the essential elements of sustainable production, principally organic matter and the myriad organisms that draw on organic matter as their principal energy source.

There is a huge knowledge gap between conventional production models and models of regenerative practice. Conventional agriculture is regarded as input intensive while regenerative agriculture is regarded as knowledge intensive. A small number of leading growers and advisors are working to bridge gaps in skills and knowledge but are dealing with institutional, regulatory and societal challenges.

The lack of institutional drivers to facilitate change

The long extension history of the Victorian Department of Agriculture has shown that farmers require close support to negotiate change. Social research has confirmed that some farmers are reluctant to independently employ changed practices for fear of failure or social isolation. This results in a substantial bind – even though primary producers may be willing and eager to change, the lack of institutional sanction, sound research or peer support can stifle innovation. Institutional support, principally from state and university researchers, but also from their respective associations (e.g. Meat and Livestock Australia, Horticulture Innovation Australia) is essential to allow messages to permeate the mainstream.

A recurrent issue throughout the consultation related to Council's role in supporting farms to transition to agroecology. Council's role as an enabler of change was discussed above and already, Council has demonstrated major commitment to climate change adaptation and now, to a sustainable food economy. The public commitment to regenerative agriculture by the West Australian Minister for Agriculture mentioned in the PESTEL provides official sanction in that state for the embrace of regenerative agriculture. While most state and federal agriculture policies promote sustainable production, most are agnostic on how that is to be achieved. Council's position clearly sanctions a regenerative approach to production, but the intent must be followed up with actions described elsewhere in this document to ensure coordination of effort and development of momentum for change.

Land use planning

Most farming activities in the Green Wedge Zone, which applies to much of the rural land on the Mornington Peninsula, are "as of right" – that is, they do not require any town planning approval. However, a number of more intensive and animal-based industries are subject to planning control, as are many of the land development activities associated with agriculture, including vegetation removal, the construction of dams and farm buildings and earthworks which may change the flow of water.

Equally, "on farm" commercial activities, such as farm gates (primary produce sales) and farm stay accommodation, as well as the production of value-added products (rural industry) which may provide important diversification opportunities, are also subject to tight planning controls. Gaining Council and relevant government authorities' planning approvals for some forms of farming, food production and related activities such as farm-gate sales can be time consuming, complicated and uncertain.

There is also ongoing concern regarding the impact of rural living, and other potentially conflicting land uses, on the ability of farms to operate without undue constraints on their methods and practices. In this regard, while current policies and zones give some priority to agricultural use, they arguably need to be further strengthened with some landowners simply running a few cattle to keep pastures in check without any productivity aspirations.

Meanwhile, new entrants to farming are impeded by high land prices. Mechanisms are required to bring much of this fertile land back into some form of production. Rural living, that is, the occupation of rural land primarily for its amenity value rather than for farming, is not listed as a purpose of the Green Wedge zone. It is recognised that rural living, in various forms and to varying degrees, is already a wide spread use on the Peninsula, however, it is important to avoid further pressure on agricultural land use. In this context, Council does not support the further occupation of rural land without a strong connection to a substantial agricultural or conservation-based use, and which can be distinguished from rural living per se. The development of new dwellings is therefore considered to be a conditional use, that may be considered, but should be subject to a proposed policy outlined in later sections of this Plan.[22]

Council's Green Wedge Management Plan provides direction regarding land use planning, whilst recognising that much of the Green Wedge land is privately owned and successful land management will involve the commitment and support of private landowners. While there are many landowners with a strong land management ethic and the necessary knowledge and resources to manage their land sustainably, others will require active engagement and support through measures such as education, information, training, and financial incentives.

Strategic solutions

Transformational change from conventional farming to a regenerative model must start with the soil. For agriculture to be sustainable, farmers must be confident that the natural capital of their soils is increasing year on year. Standard operating procedures must therefore allow for changes to grazing management, or cyclic maintenance activities such as growing green manure crops or importation of composts to sustain the ultimate source of energy in soils, organic matter.

The principles of regenerative agriculture outlined in figure 14 align with management of farms as agroecosystems. Over-reliance on chemical inputs runs counter to maximising biodiversity; monocropping disturbs soil and reduces groundcover; seasonal fallows limit living roots to the 'growing season' only. Awareness-raising, training, capacity building and incentives are all necessary to achieve the target of 20% of farmers adopting regenerative practices by 2030.

The figure of 20% of farmers adopting regenerative practices may be difficult to monitor or evaluate. It is proposed that a business plan is developed, together with case studies, that highlights the level of involvement of local farmers

[20] Food Security in Australia
[21] Agriculture, environment and society: contemporary issues for Australia
[22] Green Wedge Management Plan 2019, pg 10

under a certification scheme and the financial sustainability of agroecological practices. the business plan will be developed by the Task Force and will be used as a measure of the success of the Strategy in shifting consumer preferences and behaviours.

Similarly, it is difficult to predict gross and net financial returns from a Strategy which takes a circular economy approach because in addition to the financial drivers we also need to consider the environmental and social benefits of the Strategy. The Strategy does not take a typical economic development approach – and should not be considered as such. The certification process will define the parameters for measuring output and effects over the six years of the Strategy which will in turn create a baseline for comparison in the following six years. Research has shown that output from the use of regenerative practices (in the short term) remains stable with a decrease in expenditure and an increase in sustainability. Council's Climate Emergency Plan provides a target of 20% of farmers using regenerative practices by 2030, and this is what the target will be – to be reviewed biennially.

A parallel process is required to not only assist farmers to transition, but to also confirm that changes are truly regenerative and are contributing to the larger goal of 1m tonnes of sequestered carbon by 2030. Standards are therefore required to guide change and provide feedback to all stakeholders through a monitoring and evaluation framework. The example from Rede Ecovida below references participatory certification which is well-suited to the Mornington Peninsula in view of the size of the farming community.

Incentives are central for engagement of producers and working with them to promote adoption of regenerative management practices. A suite of incentives was canvassed through the community consultation and the preferred options are presented below.

Regenerative Agriculture Community of Practice

Primary producers and value-adding processors must also seek better coordination and collaboration. The establishment of a Regenerative Agriculture Community of Practice provides growers, processors and retailers the opportunity to communicate and collaborate on a range of fronts. Growers can share information, bulk buy inputs such as compost, run trials and share outcomes with others, support new entrants through formal mentorship or informal association, and assist with supply issues to meet contract commitments. Processors and retailers may signal demand or supply issues with growers, promote new initiatives such as new products or services, or commission specific supply lines from growers. A Community of Practice provides a strong basis for communication and collaboration. It will emphasise the fact that participants are not in competition with each other, and that the success of each will contribute to the success of the group.

Participatory certification

Regenerative branding is essential to product differentiation in a crowded marketplace. Aligned with a revitalised Mornington Peninsula Produce brand, a participatory certification system based on compliance with the stated principles of regenerative agriculture should be developed. It is intended that a certification scheme is voluntary with relatively simple compliance requirements. A certification scheme may also inform the assessment of rating discounts for farms and land management plans which are required as part of planning applications for new dwellings in the Green Wedge.

The participatory certification scheme runs parallel to but is integrated with the MPP. The certification scheme provides confidence for MPP branding that the primary produce has indeed been produced through a recognised agroecological process. Regenerative agriculture principles and practices will guide interpretation of compliance with agroecological processes.

A method to monitor natural capital has been developed by Landcare and adoption of this method will be part of an evidence base to show that food is produced regeneratively. Certification and use of the Landcare method provide feedback to the farmer regarding the effectiveness of management practices, and MPP receives assurance that the food or products are produced sustainably, thereby enhancing and protecting the brand.

The Landcare method is the most simple, yet accurate and reliable, method currently available. It provides the cornerstones for baselining soil condition. Farmers can go above and beyond by adding more properties to their test packages as they see fit. Baseline costs are likely to be less than $60 for the Landcare package.

While participatory certification is central to the success of this scheme, additional third-party certification may be necessary to assist with establishment of certification criteria, and to ensure compliance with the intent of the scheme. The latter may be given effect through annual audits by independent third parties of a selected 10% of regenerative growers registered under the MPP brand. The proposed annual budget aims to audit between 10-15 growers each year for the next six years. Routine auditing will not only provide credibility to the scheme but will also ensure that any rate incentives provided by Council to promote regenerative practices are achieving real gains.

Case Study

Rede Ecovida in Southern Brazil

The Rede Ecovida or "Ecolife Network" is a decentralized system of cooperatives, farmer groups and non-profit organizations that practise agroecology in 150 municipalities in three southern Brazilian states. The network developed in the 1970s as part of broader social movements mobilising around issues of environmental damage from agriculture, of high social inequalities and uneven land distribution.

Ecovida currently comprises 29 farmers' organisations, 2,700 farming households, 10 cooperatives, 25 associations, 180 farmers' markets and 30 agrifood private companies. Beyond profit, this network promotes a solidarity economy between producers and consumers in local markets (including door-to-door sales, community canteens, farmers' markets and restaurants). It uses participatory certification to ensure that farming practices are rooted in agroecology and strengthen the relationships / links / trust among farmers and with urban consumers. Overall, this network promotes horizontal learning methods, solidarity, justice and care for nature (HLPE, 2019).

www.accountingfornature.org/soil-methods

Incentives

Certification will be incentivised through a scaled rating structure to support attainment of the goal of 20% of farms adopting regenerative practices by 2030. At this stage it is envisaged that the existing farm rate concession criteria could be revised to place greater emphasis on the use of regenerative practices. In turn, a process of reporting/audit and assessment of activities to ensure regenerative outcomes, such as improvement in critical measures of natural capital, should be used to confirm access to incentives.

Figure 15 below shows preferred assistance via the community survey. These were further refined through the workshops which concluded that incentives for people to participate in, and transition to, agroecological and sustainable food/beverage production systems must have real effect in terms of contributing to the target of 20% of farmers adopting regenerative practices. This is particularly relevant for peri-urban areas and to bring new people into farming and the food/beverage economy.

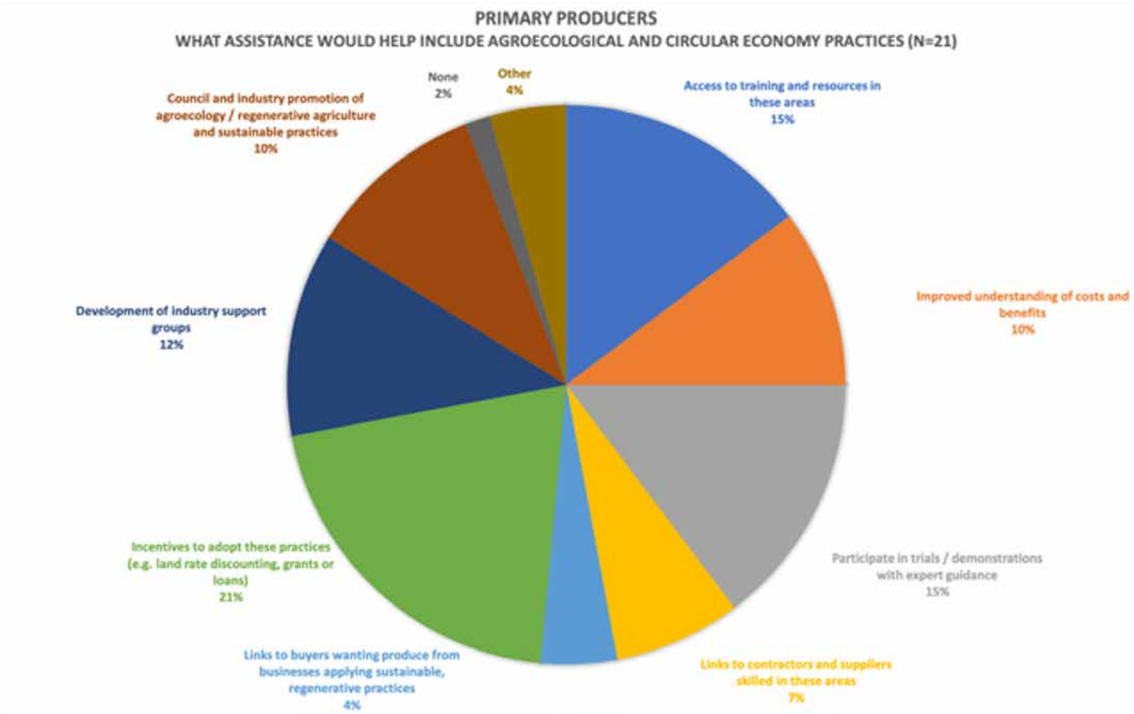


Figure 15. Types of assistance to support agroecological practices.

Areas suited to incentives include:

- Review rating structure to incentivise verifiable agroecological practices
- Support for transitioning farmers and new entrants to regenerative agriculture potentially through encouragement of land leasing for agroecological production or sponsorship of internships / apprenticeships
- Sponsorship of on-farm and sustainable food / beverage production trials and demonstrations;
- Reward for public benefits such as enhancing biodiversity or ecosystem service provision.

Institutional support

As discussed above, high-level and public championing of regenerative agriculture is essential to legitimise the practices, remove any risk of grower stigmatisation, and emphasise this path as the future of agriculture on the Peninsula. Council's sponsorship of Agroecology is a powerful statement.

Council's role in maintaining a determined push to transform agriculture and broad rural land use will continue to be extremely important in the years to come. This Strategy recommends establishment of the Sustainable Food Economy and Regenerative Agriculture Taskforce to reinvigorate the MPP. Detail of the roles of the Taskforce and reinvigoration of the MPP are provided under Pillars 1 & 2 above.

A significant role of both the Taskforce and MPP will be to take on the role of champions of regenerative agriculture. Council's Taskforce will work at a high level to engage governments, industry and academia to guide policy and direct funding for both the Sustainable Innovation and Growth Fund and for academic research. The MPP will work at a commercial level with producers and markets. While MPP will provide primary producers with support in the form of certification and connection to markets, its focus is on branding of produce and high-level engagement with commercial markets.

Institutional support is growing at the level of local government, Landcare and Catchment Management Authorities (CMAs). Both Landcare and CMAs have rich histories of landscape repair and encouraging landholders to employ management practices that enhance natural capital. Landcare has recently completed an Accounting for Nature-certified method for benchmarking and monitoring trends in soil condition over time (referenced above). CMAs actively promote regenerative practices, working closely with Landcare groups and industry partners. These are logical partners for Council to engage with or to continue associations with to connect regenerative practitioners, organise training, and promote the benefits and opportunities of regenerative agriculture.

There are substantial interdependencies between all parties. These create great risks and great opportunities and emphasise the need for strong collaboration at all levels. Landcare and CMAs have worked tirelessly to promote improved land management outcomes but connection with industry or research institutions remains a challenge. Mornington Peninsula Shire Council has a strong record of collaboration with Landcare and CMAs, and this must continue to develop as a model for other peri-urban councils across the Melbourne food bowl.

Leasing of land and cooperative farming models

An item of concern raised through the consultation was the amount of 'unused' land on the Peninsula. There are many reasons why so much land is not being actively farmed but workshop discussions recommended promotion of leasing to bring much of this land into productive use.

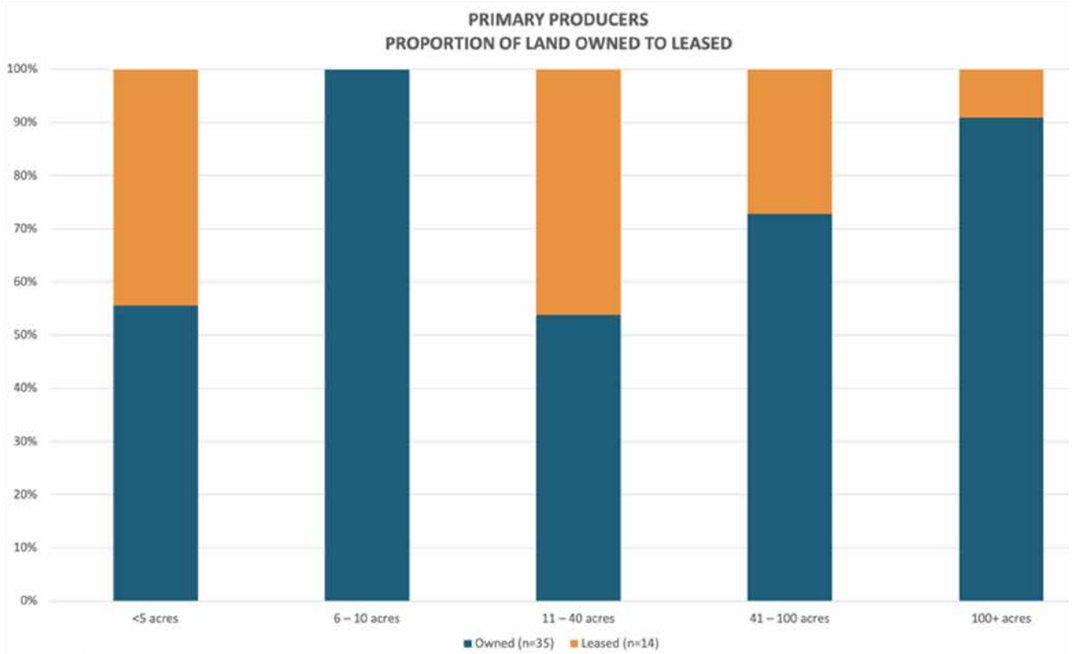


Figure 16 shows that land leasing is common practice on the Peninsula.

In Australia, some lease agreements stipulate that the fertility of the land must be maintained. Without such agreements, tenant farmers often have little or no incentive to improve the health of the soil and it is not uncommon for leased land to be mined of its nutrients and soil carbon before moving on.

A model of land leasing is required that provides some level of confidence that the leased land will be used for purposes that align with the interests of the landowner, and that the land will not be damaged but will benefit from the practices employed.

In reality, leased land that is managed regeneratively will accrue benefits to the lessor and lessee. In the United States, the Land Core [23] model has developed whereby agreements are reached between the lessor and lessee regarding land use, land management, and anticipated changes in natural capital. A modification of the Land Core model is shown below.

[23] Land Core land leasing

Case Study

Land Leasing

1. Lessors and Lessees agree to a long term lease (>5 years) which specifies agreed improvements over time for key indicators of soil health
2. An agreement is signed detailing management practices and planned improvement in natural capital. Favourable lease arrangements are agreed based on the interests and commitments of both parties and Council.
3. The leased land attracts a rate rebate if natural capital targets as agreed with council are met after a defined period.
4. An independent soil scientist will assist with determining target changes in soil condition using the methods of 'Accounting for Nature'. At the end of the lease period, the independent soil scientist will undertake 3rd party verification again, using the Accounting for Nature methods.
5. If the 3rd part verification confirms improvement in natural capital at the end of the lease period, Council will issue a rate rebate and the lessee will receive a lease rebate. If the 3rd party verification shows that improvement in natural capital has not occurred, no rebate will be issued.

Any agreement should provide for clear communication and periodic review to ensure progress towards goals. Detail of such arrangement must be the subject of negotiation between parties and include contingencies for influences outside the control of parties such as drought or bushfire. Properly negotiated, the benefits of this approach to both the lessor and lessee are clear. Costs of the third-party assessment may be borne by the landowner and Council will consider the value of any rebate based on its interests in vegetation management, soil improvement, and / or biodiversity enhancement. Philanthropic sponsorship of early leases may provide evidence of the relative simplicity of this arrangement to encourage greater uptake of this innovative approach. Negotiation of early leases would benefit from the guidance of the Taskforce and facilitation by the Taskforce project officer.

Land Use Planning

The pressure on agricultural use from the increasing occupation of land by owners seeking a 'rural living' lifestyle has been previously highlighted. In this context, planning controls should seek to reinforce the connection between the ability to occupy land and a commitment to either sustainable agricultural use and/or environmental restoration.

Council's Green Wedge Management Plan provides an approach to dwellings in the Green Wedge and the use of agricultural land:

> *Dwellings will be subject to a policy requiring a commitment to a substantial, sustainable and productive use of the balance of the land for an agricultural or conservation based purpose, having regard to the capability of the site. This will be implemented through the approval of a Land Management Plan.* [24]

Equally, the prevalence of farm gates and their actual and potential popularity with locals and tourists represent an opportunity to promote change in how food is produced, driven by consumer preferences for low food mileage, local provenance, freshness and quality. There is also the potential to develop cooperatives or markets where different producers come together to extend their product offerings and attract a wider customer base (see Rede Ecovida case study above). This approach is consistent with the generally small farm sizes on the Peninsula and encourages development of niche or 'boutique' offerings thereby enhancing local and visitor experiences.

The Victorian Government's current review of planning for the Green Wedges and agricultural land signals an ongoing shift to greater concern for the protection of agriculture as part of the planning system and provides an important opportunity to address key policy issues, including the need to be more targeted in the form of agriculture that is appropriate and sustainable in different areas.

It is also important to recognise that the Green Wedge Management Plan (and Council policy) is not limited to consideration of planning scheme provisions as it can consider a wide range of complementary actions and advocacy priorities. The employment of an Agribusiness & Food Industry Facilitation Officer by the Shire and the extensive advocacy and facilitation undertaken through this position is a key example of support for agriculture outside of the planning system.

The Victorian Government's extensive review of Green Wedges and peri-urban agricultural land identifies the immense contribution of farmers and the potential of Melbourne's food bowl. It also recognises the importance of healthy biodiversity and water, soil and air quality to the Victorian economy and Victorians[25], issues which are at the heart of regenerative agriculture. Whilst the Agribusiness and Food Industry Officer already provides some ad-hoc support to agribusinesses who are navigating the planning process it is proposed that this service be formalised and routinely offered. For businesses, having a dedicated officer for all liaison will give confidence and encourage businesses to grow and invest. This will also ensure planners, many of whom have little to no understanding of agriculture and food production, properly understand and evaluate the benefits and risks of any proposal. Early interception of issues will save time, money and reputation for all parties. Where proponents can identify clear alignment with this Strategy, approval mechanisms could be streamlined.

[24] Green Wedge Management Plan 2019, pg 10
[25] Victorian Government, DELWP, Consultation Paper, Planning for Melbourne Green Wedges and Agricultural Land, May 2020

Summary of actions & outcomes

The following actions are proposed to address the challenges and seize the momentum and opportunities.

What	Who	When	Outcomes
Facilitate establishment of a Regenerative Agriculture Community of Practice	MPSC EDU, Climate Change team, Landcare networks	2023	50 members by year 3, 100 by year 6
Establish and develop a participatory certification scheme to complement MPP	MPSC EDU,	2023	50% of MPP certified businesses are baselined for regenerative certification by yr3 100% by year 6
Develop rating incentives for certified agroecological practices and biodiversity conservation including on leased land	MPSC Finance, EDU, and Planning teams	2025	20% of farms on farm rate have been assessed as regenerative by year 6
Resources and promotion for regenerative leasing and cooperative land sharing developed and tested	MPSC, Young Farmers Connect, GrowCorp	2024	
Drive education and adoption of agroecology through the Taskforce, MPP and the CoP	Taskforce	On-going	
Partner with aboriginal associations and land council to increase knowledge and application of traditional land management practices	Willum Wurrain, Bunurong LC, Firesticks	Ongoing	
Continue to advocate for agroecological outcomes and on behalf of agricultural businesses in the planning scheme	Existing resources (Planning and Economic Development)	Ongoing	
Explore ways to further support the sale of local produce in the Green Wedge through farm gates, farm markets, and other options	Existing resources (Planning and Economic Development)	Ongoing	

Pillar 4

Skills and Capacity

This strategic pillar aims to encourage individuals and key organisations to improve skills and capacity across Mornington Peninsula for transformative change to a more sustainable, resilient and innovative food economy. This pillar is focused on those organisations with responsibility, networks and capacity to facilitate and enable people to improve their skills, knowledge and experience. This includes TAFE, schools, associations, employment groups and business advisors who together will support the transformation of the food economy on the Mornington Peninsula.

Challenges to be addressed

Most farming and food production businesses on the Mornington Peninsula want to thrive, expand and diversify. Many want to adapt to be more sustainable and resilient. However, consultation with food businesses and stakeholders via questionnaire surveys, workshops and discussions has identified some key constraints. These were broad ranging and include:

- Impediments to new entrants including the high cost of land
- The relatively high costs of employing staff or trainees
- Transport & logistics issues getting produce to market
- Lack of relevant skills-based training
- Insufficient skills and knowledge in regional labour market
- Limited understanding of regenerative practices
- Limited awareness of why or how to change management practices

The constraints are discussed under two broad headings below, business challenges and skills-based challenges.

Business challenges

The high cost of land in Mornington Peninsula compared to other peri-urban areas within 100km of Melbourne impacts the capacity of the region to respond to market opportunities for start-up businesses or the expansion of existing businesses. House prices in townships like McCrae and Blairgowrie along the Mornington Peninsula rose by nearly 25% in 2020 as people sought lifestyle changes during the Covid pandemic. [26] This pattern has been repeated in many rural and peri-urban areas creating demand for rural living within commuting distance from Melbourne. Rural land values on the Mornington Peninsula have been strongly inflated in view of proximity to Melbourne and good transport links. High land values add challenges in securing finance to buy or lease land, buildings, equipment, vehicles or start up new food-related ventures. This adds to the challenges for people to enter agriculture and food related activities.

Survey results report a high proportion of farmers leasing land. This indicates a market response to land access, but traditional leasing behaviours tend to leave land with depleted natural capital. Alternative arrangements are necessary if leasing land is to contribute to capacity constraints. This issue was discussed in more detail in pillar 3.

To achieve a step change in knowledge and capacity, all parts of Mornington Peninsula's food economy must become conversant with sustainability and what that means for their respective industries. Business leaders and managers in food/beverage production need sustainability training, in the same way as managers in energy companies, chemical manufacturing and logistics. Industry leaders and senior managers are to be encouraged to access training on process efficiencies, stock and inventory management, contract and joint ventures, best practice packaging and retail, but with a sustainability lens.

[26] Domain, 2021, Melbourne suburbs with biggest rises and falls in house prices (accessed 30 Jan 2021) www.domain.com.au/news/the-melbourne-suburbs-with-the-biggest-rises-and-falls-in-house-prices-1021240/

Staff costs and skills shortages are a serious issue and not confined to the Mornington Peninsula or agriculture. Through industry transformation to a regenerative base, this Strategy aims to increase the value of agricultural production on the Peninsula while reducing the cost of production. Increased profitability is a concurrent aim, and this will allow employers greater scope to take on quality staff and pay appropriate wages.

> "Low profit margins for those farmers doing the right thing environmentally will drive them out of the market unless supported. Labour costs increase mechanisation, reducing jobs and increasing waste."
> **Lisa Remato – Second Nature Consulting**

Challenges with transport and logistics were raised as issues impacting capacity to get fresh produce to market. While these challenges are beyond the scope of this Strategy, it may be expected that as the food economy grows and the value of the produce increases, the market will become more responsive to meet the needs of food producers and processors.

Skills-based challenges

2020-2021 was a benchmark year for upheaval and uncertainty. Starting with record-shattering bushfires followed by Covid-19, our working world has been upended. Farmers and many in the food sector who have long relied upon backpackers and contract labourers on special visas struggled without the customary flood of foreign workers.

> "Labour access has been an ongoing issue for the food production sector, requiring importation of labour such as backpackers and use of 457 visas. COVID-19 is disrupting this labour supply but may free up labour from other industries"
>
> **Ben Rowbottom, Policy Analyst, Department of Jobs, Precincts and Regions (DJPR)**

Australians are unaccustomed to transient, seasonal work, lower wages and moving home regularly following crops. As a result, primary producers have struggled to get crops harvested. The federal government is taking this matter very seriously, but history may show it to be a short-term problem as vaccines and improved quarantine arrangements allow re-entry of casual workforces.

The issue of skilled labour is not confined to fruit pickers alone. Farm workers possess a range of practical skills from machinery maintenance to animal husbandry and crop or pasture management. Higher level skills in soils, crop agronomy, and precision agriculture are also in short supply. As agriculture has become more industrialised, the attractiveness of the industry has fallen. School leavers are turning away from science and technology. Agriculture undergraduate intakes are at low levels and the study of soil science is increasing limited to post-graduate levels.

The decline in funding for TAFE and university, and recent public failings of many private training providers has impacted the confidence of business and young people commencing their careers. The consultation process confirmed strong latent demand for training. The market must respond to this need through qualified individuals working alone or through the TAFE system to bring new curricula to the challenges of industry re-design, the re-skilling of existing workers, and creating opportunities for new entrants to the industry.

Strategic solutions

Mornington Peninsula's food economy will thrive, innovate and become resilient and sustainable when it has good access to people appropriately trained, are enterprising and innovative, and who understand sustainability and systems-based solutions for the food sector.

The stakeholder focus groups identified and refined a number of solutions to the challenges faced in attracting, retaining and training a

skilled workforce. There was much enthusiasm for working together on solutions including school programs, worker placements, training, scholarships, mentoring, and business advice and collaborations. Bringing together the many players in this space through the Taskforce will ensure a strategic and targeted approach.

The Mornington Peninsula has a unique opportunity to become a leading region in regenerative agriculture and sustainable food production education. Collaborating with the locally based TAFE in Rosebud and Frankston, local schools as well as Melbourne based tertiary education organisations to develop a Centre of Excellence will attract new entrants into the industry, allow the demonstration of regenerative land management practices, recycled water use, cutting edge technologies and experimental tools and equipment. The Council's own farm, The Briars, is well placed to house such a facility and it is soon to be connected to a supply of recycled water.

Professional expertise integrating sustainability and regenerative practices

Training in regenerative practice is required to support established farmers and new entrants to farming. Subsidised training courses are appropriate, at least in the early implementation of this Strategy, to equip farmers with the skills to manage a regenerative system. An output of the workshops was recognition that changing practices requires practical knowledge, and an understanding of people and their motivations or impediments to change.

While agroecology aims to work with natural processes, the demands of production schedules or crop rotations can result in elevated levels of complexity on-farm. To help bridge this learning deficit, standard operating procedures (SoPs) shall be developed for grazing, and annual and perennial horticulture to best align production practices with the principles of regenerative agriculture. SoPs should be developed in conjunction with growers and their advisors to ensure relevance and practicality. Developing new procedures is highly appropriate for many growers who do not necessarily want to engage with the technical aspects of regenerative agriculture. Standardising practices can fast-track beneficial outcomes including carbon sequestration using a suite of activities that enhance soil quality and promote on-farm biodiversity.

For those who seek a deeper understanding of sustainability, the new post-graduate studies in regenerative agriculture recently commenced at Southern Cross University are recommended. The development of such courses suggests a growing market for graduates of regenerative agriculture. All 2021 courses were fully subscribed. Recent regenerative agriculture courses offered by the Western Port Catchment Landcare Network were over-subscribed. A recent seven-part webinar series delivered by Regen Soils had an average of 250 views per webinar and a 2020 YouTube series delivered by the same trainer has attracted over 34,000 views.

These data reveal a latent demand for quality information on regenerative practice. As discussed in s.3 above, Landcare and CMAs are actively facilitating information delivery to meet this demand. Unfortunately, research in the area of regenerative agriculture by governments and universities is at a low level. This is in part due to slow funding cycles on which academics depend. In spite of this, there is an abundance of quality research into soil function which is readily applied to regenerative agriculture. Sound scientific knowledge is therefore not limiting. What is limiting is the number of qualified people available to deliver training and to work closely with landholders to guide them through the challenges of adoption and improved land management.

Teaching, training and advice provided by schools, TAFE, universities, associations and experts needs to pivot away from conventional practices used in pre-climate change and pre-pandemic periods to future-focused, climate ready practices. It is incumbent on organisations and institutions to become pro-active and engage in future-focused practices in line with changing consumer preferences and societal expectations.

The same applies to clean energy, energy efficiency, nutrient and chemical use on farms. Experts, contractors and consultants, trainers and educators must have appropriate qualifications, experience and confidence in such measures. Sustainability and regenerative agriculture have to be at the heart of training, education and continuous improvement in the sector.

Encouraging new entrants into the food sector, particularly farming

A number of suggestions were made during the Focus Group sessions to encourage new entrants into farming and into the food sector more broadly. Mornington Peninsula appears to have a good spread of ages amongst farmers in comparison to other regions in Australia, and this may be due to proximity to Melbourne. Nevertheless, it is important that young people and new experienced people come into the sector bringing ideas, knowledge from other sectors such as renewable energy, food science or permaculture, as well as innovation and investments and that they feel supported to stay. Many people commented on the need to promote the farming and food sectors as innovative, secure, and viable for career employment and business development.

Associations, farmers and businesses in the farming sector, including consultants and contactors should take pro-active roles to set up coordinated programs with schools' regional administrations and local food groups (i.e., Community Gardens) for work experience, to organise field trips, immersion activities, or school-to-work transitions. Access to farms to understand food provenance and the importance of agroecosystem management is an important element in the education of all children.

In 2021 the Port Phillip Westernport Catchment Management Authority developed a Farms2Schools program. It introduced the fundamentals of primary production to years 7-10 children and includes innovative graphics and video to explain the complexities and excitement of the science underpinning regenerative agriculture. The program targeted over 5,500 students through a host of events and on-line training but is not funded to continue.

Young Leaders Programs provide the opportunity for aspiring farmers or food / beverage entrepreneurs to explore prospects across industry. The Barossa Valley Young Ambassadors program opens the door to the next generation of future leaders in the local wine industry.

> "The highly successful program, run as part of the Barossa Vintage Festival, identifies and raises the profile of future community leaders, while acknowledging that young people play an important role in the community and are essential for the future of the Barossa's vibrant wine, food, cultural and tourism industries.
>
> The ambassadors will spend nine months working on their own individual projects, participating in training and networking activities and be involved in key planning and promotional of the Barossa Vintage Festival"[27]

Apprenticeships, hosting and career advice

Addressing the current and possibly ongoing shortfalls in the agricultural labour market is a key challenge. Given this applies to farming regions across Australia, governments and industry groups are seeking long term solutions. Farmers and regional groups are adapting through increasing automation, and engaging labourers to provide certainty and improved conditions.

[27] Barossa Valley Young Ambassadors
[38] www.ppwcma.vic.gov.au/priorities-projects/past-projects/farms2schools

Focus group participants suggested a local scheme run by a local provider coordinating labour/work placements as a central point where farmers/food producers and workers are connected. Industry has a key role to connect opportunities with aspiring trainees. SuniTAFE in Mildura is a well-coordinated training institution working closely with industry to attract young people into the industry and provide appropriate training for career development.[28]

"You can't be 'work-ready' without having an opportunity to gain practical experience"

Focus Group participant

The Frankston Mornington Peninsula Local Learning & Employment Network (FMPLLEN) are keen to contribute to the success of the region. They run activities that can address the skills shortage on the Peninsula including:

- Educating and supporting farmers and food production businesses in hosting students or apprentices
- Supporting placement of students on farms
- Bringing industry, schools and parents together at career exhibitions and association meetings where vcal, vet, career education and pathways hear from farming industry across the region.

Mentoring Programs and Succession Planning for food producers

Mornington Peninsula has capacity to draw upon a wealth of experienced people across the food and other sectors as ambassadors and mentors for existing practitioners, new entrants and/or young people. The challenges facing Mornington Peninsula's food sector require access to innovators and bold thinkers in other sectors and locations as well as locals. Mentors can impart expertise and confidence.

A mentoring program such as the United States Department of Agriculture 'SCORE' program should be established with the support of local lending banks and mentors so existing farmers can confidently plan for their retirement and the longevity of their farm. The case study shows formal arrangements where farmers can take control of their retirement and new entrants are supported, both technically and financially, to launch their own careers.

Agriculture Victoria has recently launched a facilitated mentor program[29] for young farmers or new entrants to the industry. The program partners a young farmer with an experienced farmer. The arrangement is facilitated by an external consultant who will pair the young farmer or 'mentee' with a mentor whose experience aligns with the mentee's enterprise and personal development goals. The program is financed for 12 months but it is likely that the relationship that develops between mentor and mentee continues.

Young Farmers Connect[30] is a national organisation dedicated to changing the face of farming by facilitating the entry of more women into farming. Farmer Incubator[31] is a partner organisation of Young Farmers Connect and has a specific focus on promoting entry of new farmers into regenerative agriculture.

Opportunities to partner with such organisations and build on their existing networks and research should be explored.

The development of mentor programs such as these demonstrate concern for new entries into agriculture but also show a positive response from industry to address this challenge.

[28] SuniTAFE
[29] Young Farmer Mentoring

Case Study

USDA mentorship program

There is a number of formal farm mentor programs in the USA where retirement-aged farmers mentor young farmers for two years. At the end of two years the young farmer can access a grant or loan to purchase the land and continue their farming career. The farmer gains a 'succession plan' partner, who has benefited from a solid 'induction program' into the land, its climate, soils, and community. newfarmers.usda.gov/mentorship

[30] Young Farmers Connect
[31] Farmer Incubator

Summary of actions & outcomes

The following actions are proposed to address the challenges, build momentum and seize opportunities.

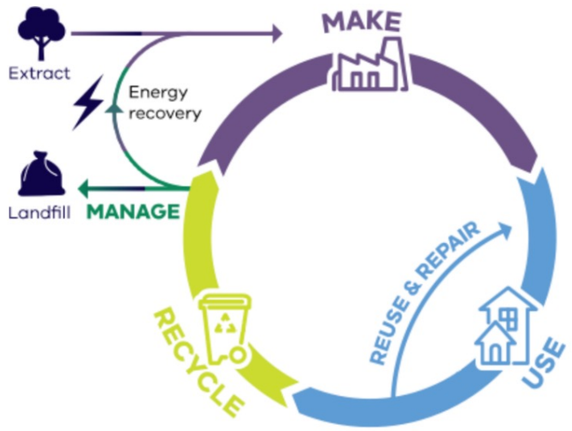
What	Who	When	Outcomes
Investigate capacity to develop sustainable food production and regenerative agriculture centre of excellence	MPSC, neighbouring councils, universities	Commence 2025	Mornington Peninsula is recognised as a leading region for Agroecology
Develop Business Plan, case studies to highlight the financial sustainability of agroecological practices	MPSC EDU & partners	2023	
Partner with industry, schools and training providers to develop education & training in regenerative agriculture	MPSC EDU & climate change teams, VFF, Industry groups (MP Wine, AusVeg), TAFE & FMPLLEN	For 2024 academic year	
	MPSC CCEW budget plus seek funding		
Facilitate development of farmer mentoring program	MPSC EDU, MPWine, Farmer Incubator, & Agriculture Victoria	Commence by July 2025	20 new farmers are partnered with mentors over course of Strategy

Pillar 5
Infrastructure for a Circular Food Economy

A circular economy is a systems-based approach to economic development designed to benefit businesses, society, and the environment. In contrast to the 'take-make-waste' linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources .

While it is outside the scope of this Strategy to detail a comprehensive plan for the Mornington Peninsula to move to a completely circular economy, this Strategy aims to apply the principles of a circular economy to food production and resource re-use and in doing so drives the Mornington Peninsula closer towards this paradigm shift. Council has already taken one step towards the shift by employing a Circular Economy Coordinator to develop and deliver high quality and effective waste and litter programs through the delivery of the Shire's Beyond Zero Waste Strategy, Single-use Plastic Policy and Waste Contamination Policy.

The Victorian government also launched its Recycling Victoria policy in February 2020 which has at its heart, a commitment to the circular economy (figure 17).



What is a circular economy?

A circular economy continually seeks to reduce the environmental impacts of production and consumption, while enabling economic growth through more productive use of natural resources.

It allows us to avoid waste with good design and effective recovery of materials that can be reused.

It promotes more efficient business models that encourage intense and efficient product use, such as sharing products between multiple users, or supplying a product as a service that includes maintenance, repair and disposal.

The value people obtain from the resources used to create goods and services increases.

It transforms our linear economy mindset—take, use and throw away—and fosters innovation and productivity that invigorates existing businesses and creates new ones, delivering more jobs and more growth for local, regional, state and global economies.

Figure 17. What is a circular economy? (DELWP, 2020)

Issues of reuse – recycle were repeated through the community consultation and are regarded as central to a sustainable food economy on the Mornington Peninsula. The Shire adopted its Beyond Zero Waste Strategy in 2020 with the ambitious aim to send zero waste directly to landfill by 2030.

Challenges to be addressed

Organic and other farming 'wastes'

There are many waste streams for which circular solutions remain to be found. Food waste is both a challenge and an opportunity. There are substantial nutrient loads in food waste and increasingly, councils are combining food waste with garden organics and sending both to commercial composting facilities with a view to returning their nutrient and carbon resources to land. Similarly, chicken farm waste is a valuable input to commercial composts and increases the appeal of such composts to growers.

Grape marc and olive pumice are valuable 'waste' resources as are prunings from vineyards and other perennial horticultural crops. Ideally all should be processed via aerobic composting before being applied to productive land. There are opportunities for on-farm composting under existing EPA regulations and these should be promoted as an integral element of the local circular economy.

Currently Mornington Peninsula operates a kerbside collection for greenwastes. The material is transferred to a commercial composter outside the Mornington Peninsula for pasteurization from where it is taken to east Gippsland for maturation and sale to farmers. The transport and handling of this material represents high embedded emissions. It also represents a net loss of recyclable carbon to the Mornington Peninsula.

The inclusion of food waste into this collection has recently been adopted. If this material is not processed on the Peninsula, it will represent a further loss of valuable nutrients and carbon and increase dependence on imported fertilisers. Soil carbon is a focus of regenerative agriculture and opportunities to recycle organics back to land is essential to maintain soil carbon levels. Recycling of organic matter represents a central plank in the circular economy.

Ideally, the Mornington Peninsula would establish a food and organics recycling facility in the Shire, but the substantial cost of modern in-vessel systems is recognised.

The range of wastes from primary production also includes substantial quantities of silage wrap and vineyard netting. Silage wrap is single use and is often burned. Vineyard netting may receive more than one use, but it is non-biodegradable and is usually disposed of to landfill. Clearly, improved re-use options are required to divert such materials from landfill and seek beneficial reuses.

Community education

The general concept of recycling is well established throughout the community. The need for greater community 'buy-in' is recognised in Beyond Zero Waste's strategic objective 4 – Maintain a Clean and Healthy Peninsula. The need to effect behaviour change regarding litter and illegal dumping is highlighted. While community education is generally beyond the scope of this Strategy, the issue of contamination of recycled organics is of great importance to the reuse potential of these valuable materials. For organic recycling to be effective in terms of encouraging reuse of organics on prime agricultural and horticultural land, it must be completely free of contamination.

Regrettably, most organic recycling operations are plagued by contamination in the form of plastics, glass and other rubbish which not only increases cost, but also reduces market acceptance of the finished product. Farmers are reluctant to use composts with high levels of visual contaminants.

Recycled water infrastructure

Water is a key issue in Mornington Peninsula for the expansion and development of farming operations. Large volumes of class A water are currently being piped to Boags rocks to be discharged into the ocean. Access to this water resource is regarded by many as critical to the security and potential expansion of agriculture on the Peninsula, not to mention the role it could play in food security, employment, tourism, fire prevention and climate change policies.

Renewable energy

The case for renewable energy is well made and well understood in view of the role of carbon dioxide in global warming. The immense capacity of Australia to capture solar, wind and other renewables is essential to the future of the country and failure to do so represents the most serious existent threat.

Strategic solutions

Council's Zero Waste Strategy sets out the principal strategic directions to achieving its aims. Alignment of the Food Economy and Agroecology Strategy with Council's Zero Waste Strategy should aim to:

- capture all organic resource streams and divert to on-farm or commercial composting;
- promote community education to reject non-compostable packaging from food outlets including take away;
- promote community education to eliminate contamination of recycled organics from kerbside collection;
- return uncontaminated composted materials to productive land on the Peninsula to enhance production and sequester carbon.

Additional issues identified as important to a circular economy include development of the recycled water scheme and uptake of renewable energy systems. Community consultation identified the following as priorities that should be assessed:

Irrigation water insecurity;

Agricultural waste streams (e.g., silage wrap and vineyard netting) need recycling options; and,

Renewable energy.

Organics recycling

Mildura City Council recently received approval from the EPA for a GORE system with a MAF floor which represents a lower-cost composting operation suited to small to medium sized facilities. This system uses static pile composting over a mobile aerated floor (MAF). The compost is covered by a special fabric (GORE Cover) which maintains heat and function, controls moisture content, and excludes vermin. There is adequate space for such a facility at the Tyabb transfer station – an option which was previously considered. Stage one pasteurisation of food and green organics in a GORE / MAF system allows second stage maturation of the pasteurised product on farm thereby reducing costs to the processor and ensuring value for the receiving farm.

Given the increasing threats from climate change and vulnerability to external shocks, maintaining capacity for an organics recycling facility on the Peninsula provides addition security for growers and ensures the area benefits from access to quality recycled resources. The truly circular nature of organic production and reuse on farms demonstrates sustainable management and is an elegant fit with development of the food and tourism economy and the MPP brand on the Peninsula. The Strategy proposes that the development of small-scale composting facilities on council land is revisited. Responsibility for such an investigation lies with Council's waste team but the costs – both financial and environmental – of current transport and disposal creates some imperative to investigate more sustainable arrangements.

On-farm composting of farm-generated organic wastes is not widely adopted among farmers on the Peninsula. Promotion of organics composting on-farm reduces waste of potentially valuable resources and supports Council's aim of sequestering 1m tonnes of atmospheric carbon by 2030. It is likely that farmers will need support to integrate on-farm composting at large scales. On-farm composting has grown substantially across Victoria since the 2014 floods. A three-year trial by the Port Phillip Westernport Catchment Management Authority examining the potential of compost under grapevines demonstrated improved vine quality, reduced water use, and improvements in soil quality.[33]

Community education

It is recognised that the current kerbside greenwaste system on the Mornington Peninsula is an 'opt-in' system. This may mean that residents who do opt-in have higher awareness of the importance of maintaining this stream contaminant-free. If kerbside greenwaste recycling is to be extended to an 'opt-out' system, it should be accompanied by a strong education campaign to address the risk of contamination.

This latter point is relevant to all recycling operations on the Peninsula such as glass and paper/cardboard recycling.

Research carried out by the international packaging company *Stora Enso*[34] reported that UK consumers perceive that recycling is a government issue rather than a personal responsibility. In contrast, German consumers see their country as a role model for recycling and recognise an inter-generational responsibility. This latter perception is slowly gaining ground in Australia with both perceptions on display. The commitment shown by Mornington Peninsula Shire Council to zero waste clearly puts it in the latter camp. There is an opportunity to increase pressure on food outlets to use only compostable wrapping or containers. This applies particularly to take away outlets. Community education is recommended to drive this change but should fall under the scope of the Beyond Zero Waste Strategy.

Case Study

German Packaging

The German Packaging Ordinance creates an obligation for retailers and producers to take back a fixed and yearly increasing percentage of packaging materials. From 1993, all distributors must take back sales packaging. The take-back system places the onus of recycling on the producers / retailers and removes the waste from the public waste disposal system (OECD, ENV/EPOC/PPC(97)21/REV2).

Recycled water infrastructure

Council is currently advocating, alongside industry and key stakeholders, that the utilisation of Class A Recycled Water from the Eastern Treatment Plant on the Mornington Peninsula is a project of State Significance which requires a commitment of funding as part of the State's key infrastructure.

"Proximity to Melbourne, easy access to labour, tourists and day trippers, access to major freight distribution (e.g., Dandenong), a temperate climate, and diverse soil types are all very positive attributes for the food economy on the Mornington Peninsula. The capping achievement that will secure its future would be gaining access to recycled water from the South Eastern Outfall that currently extends the full length of the Peninsula. This major capital investment is under investigation to determine if the benefits outweigh the costs."
Interviewed stakeholder

[33] Compost under vines
[34] www.storaenso.com/en/newsroom/news/2017/4/attitudes-towards-recycling-in-different-countries

Council is working with partner organisations to investigate and progress potential recycled water schemes. The Hinterland Environmental Water Scheme is a collaboration between Council, the Department of Environment, Water and Planning (DELWP), South East Water (SEW), and Hinterland Environmental Water Scheme Inc (HEWS Inc.). The group is investigating the feasibility of supplying high quality water to parts of the Mornington Peninsula between Balnarring, Arthur's Seat and Flinders. Community consultation demonstrated high levels of interest in the outcome of the investigation. A business case has also been developed to supply class A water to an area of horticultural significance near the townships of Tyabb and Somerville but for this to progress further government investment in infrastructure is needed. A smaller project to deliver class A water to the Council's own farm 'The Briars' in Mt Martha is progressing.

The issue has been addressed through several reports including Mornington Peninsula's Agriculture Audit (2014) and the Footprint Melbourne report (2019). There is broad consensus on the opportunities that more reliable water brings to grow the agriculture and food processing industries above its current $1b worth, not to mention complementary benefits to firefighting capabilities and environmental water flows.

Renewable energy

Renewable energy is not normally associated with the circular economy. However, as one of Australia's biggest sources of carbon dioxide, coal generated power must be considered a major contributor to waste streams.

Elegant models of renewable energy integrated with primary production are developing nationally and internationally including on the Mornington Peninsula.

Examples include the proposal by Volt Farmer to incorporate farming activities in conjunction with solar arrays on the Mornington Peninsula and the state government has funded a trial in northern Victoria to evaluate the effect of installing solar panels above a pear orchard. The panels provide some shade during the day reducing stress on trees during hot weather.[35] Strategically placed wind turbines can co-exist with perennial agriculture or horticulture. Multi-dimensional agriculture is shown to have a place in the new circular economy by innovative use of space and seeking complementarities between different land uses.

Incentives may be used to promote uptake of in-field 'stacked' renewable energy systems through rate rebates to the value of the feed-in tariff. Current incentives in the form of Council's free energy consultation[36] and environmental upgrade finance [37] are respectively designed to assist households to reduce energy requirements and assist businesses in the form of low interest loans to upgrade energy, water or waste efficiencies in their buildings. To date this initiative has seen the installation of over 1mW of solar capacity on rate payers' facilities and has attracted significant interest from the Agricultural and Food sector.

The Taskforce will be ideally placed to research, facilitate and promote such schemes.

[35] www.premier.vic.gov.au/orchard-futures-bright-smartfarm-solar-shade
[36] Free energy advice
[37] Environmental upgrade finance

Summary of actions & outcomes

The following actions are proposed to address the challenges, build momentum and seize opportunities.

What	Who	When	Outcomes
Develop extension programs to support on-farm composting of farm-generated organic wastes	MPSC, Melbourne Water, WPCLN, AORA, consultant	2024	20 businesses /yr trained in composting
Train agricultural businesses to measure their carbon emissions and promote practical emissions reduction actions	MPSC Circular Economy and Waste team, EDU, Agriculture Victoria	Run pilot training 2023	20 businesses / yr trained in carbon accounting
Promote organics recycling to manage locally produced food and garden organics and return compost to farms	MPSC Circular Economy and Waste team, EDU	2023	
Continue to investigate and advocate for State government assistance for recycled water schemes	MPSC, SEW, GSEM	On-going	
Advocate for greater energy security on the Peninsula through the uptake of renewable options, reducing reliance on GHG-producing energy production streams	MPSC Circular Economy and Waste team, EDU	On-going	
Facilitate development of farmer mentoring program	MPSC EDU, MPWine, Farmer Incubator, & Agriculture Victoria	Commence by July 2025	20 new farmers are partnered with mentors over course of Strategy

Table 7 – Key actions from pillar 5

Conclusion

This Strategy aims to position Mornington Peninsula at the forefront of change by transforming the way food is produced on the Peninsula, and as a result, significantly changing the way food and beverages are processed and marketed. It is informed by scientific research, Council's own policies and engagement with producers, industry stakeholders and the community.

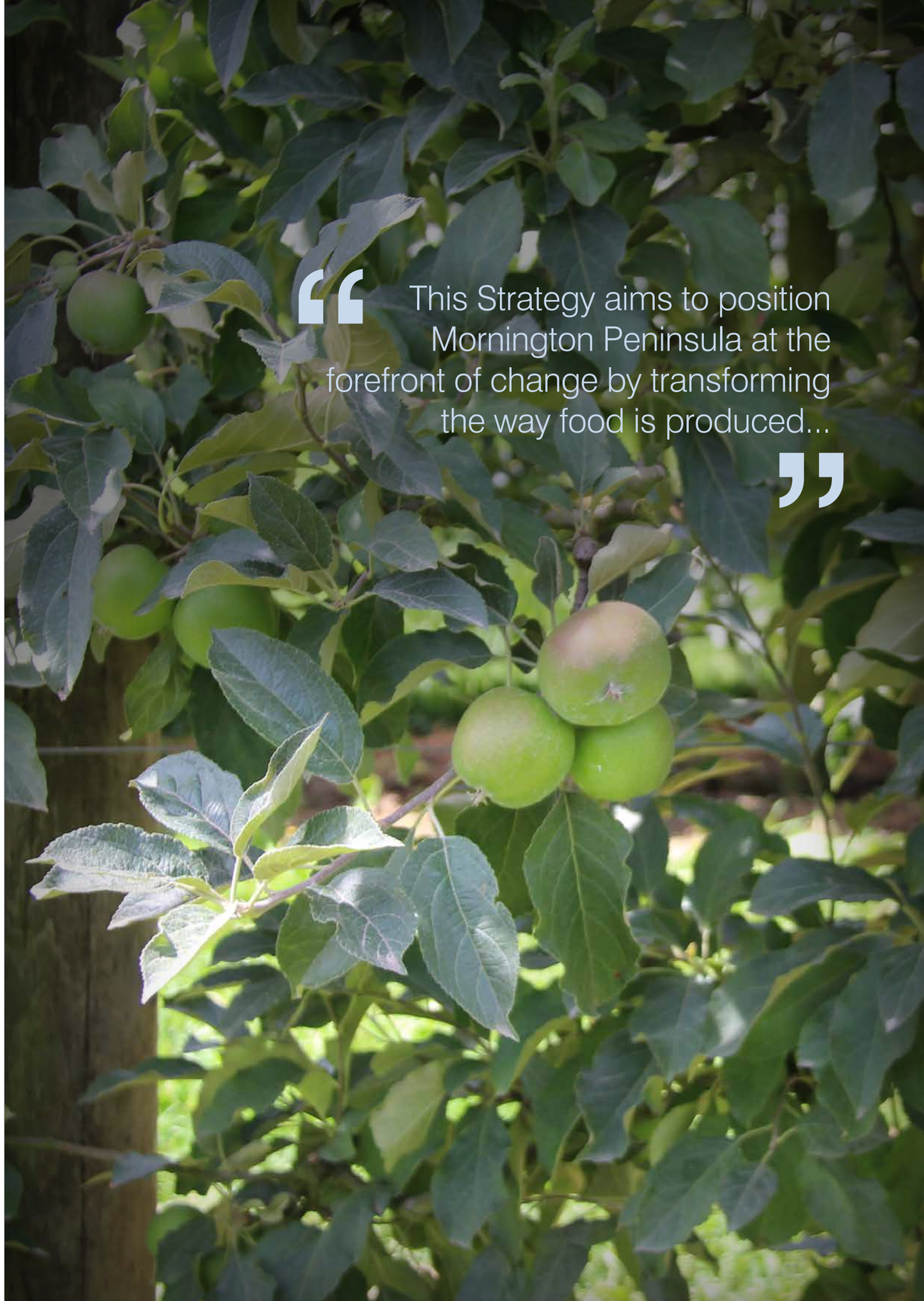
Contributing stakeholders represented a breadth of interests ranging from primary producers, vignerons, food processors, industry leaders, government and community groups. The engagement revealed a strong consensus for change and broad recognition of the unique opportunities afforded by Mornington Peninsula's soils, climate, social structure and proximity to Melbourne.

The Strategy recognises the huge importance of the food economy on the Peninsula but also recognises the immense opportunity for Mornington Peninsula to develop a reputation for verifiable clean, green production systems that guarantee product quality, ensure food safety and build natural capital on farms. The burgeoning demand for clean, safe food of local provenance creates a unique opportunity for producers on the Peninsula to position their businesses to service this need.

The targets and actions provided though the five pillars of the strategy aim to provide mechanisms and pathways to shift the Mornington Peninsula food economy to one that is environmentally, economically and socially sustainable.

Across the 5 pillars of this Strategy the work that Council and our stakeholders will collectively undertake will:

- Lead collective investment and collaboration with the creation of a Sustainable Food Economy and Agroecology Taskforce
- Drive accelerated transformation to Regenerative Agriculture by pursuing a goal of 20% regenerative farms by 2028
- Position the Mornington Peninsula as an exemplar of sustainable food production by training over 200 businesses in Regenerative Agriculture, carbon accounting and composting
- Build on the region's reputation for premium and sustainable produce through the revamp and expansion of MPP to 300+ businesses and their consumers
- Contribute to the Councils zero emissions 2030 Strategy through education, upskilling and advocacy



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MORNINGTON
2 Queen Street, 3931

HASTINGS
21 Marine Parade, 3915

SOMERVILLE
1085 Frankston-Flinders Road, within Somerville Library, 3912

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