



# Queensland Organics Action Plan 2022–2032

Prepared by: Office of Resource Recovery, Department of Environment and Science

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# Rationale

The *Queensland Organics Action Plan 2022–2032* (Organics Action Plan) specifies the approach, timeline, and responsibilities for the delivery of actions to achieve the objectives and outcomes of the *Queensland Organics Strategy 2022–2032* (Organics Strategy) that it supports.

Delivery of this Organics Action Plan will be monitored and evaluated in line with Queensland’s *Waste Management and Resource Recovery Strategy* (Waste Strategy) to ensure we are on track to meet the 2030 targets set out in the Organics Strategy.

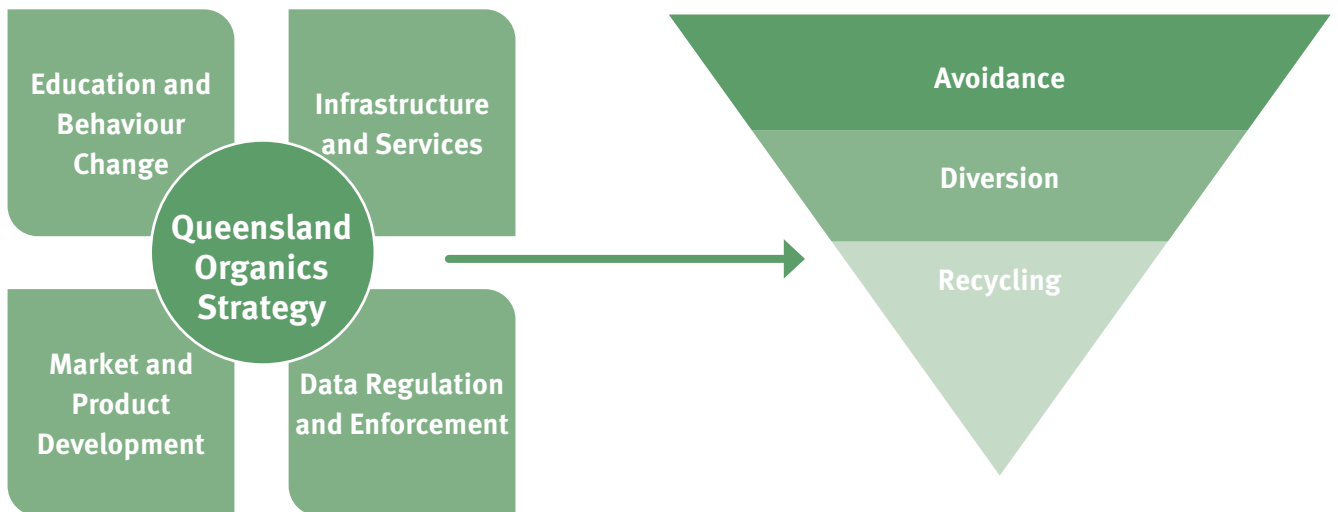
Future delivery phases will be developed following the first review of the Organics Action Plan and the progress made toward the set targets.

# Themes/strategies to achieve outcomes

Four themes of Education and Behaviour Change, Infrastructure and Services, Market and Product Development, and Data, Regulation and Enforcement were identified through targeted consultation and engagement with stakeholders during the development of the Draft Organics Strategy. Strong action under each theme is required for the Organics Strategy’s vision to be realised.

It is important to note that implementing this Action Plan is a shared responsibility across Commonwealth, State, Local Government, industry, and the community. Everyone has a part to play to support delivery on the targets set out in the Organics Strategy.

Through further extensive consultation in the development of the Organics Action Plan, actions have been grouped by the three key objectives of the Organics Strategy (Avoidance, Diversion or Recycling) providing clear identification of the outcome and aligning with the waste and resource management hierarchy rather than by theme.



# Performance measures

Performance measures have been identified for individual actions to enable effective monitoring of work in delivering against the stated targets and objectives. Monitoring of these will occur continually and adjustments made as required.

## Action for delivery—Avoidance

**Objective:** Halve the amount of food waste generated

**Scope:** Avoid the generation of food waste from households

**Strategy reference:** A1

**Responsibilities:** **Lead:** Queensland Government

**Support:** Local governments

**Action:**

**Develop and promote educational messaging based on this research**

The Queensland Government will develop and actively promote *Love Food Hate Waste* household education and awareness tools to empower Queenslanders to practice food waste avoidance behaviours.

These materials will be based on research, including findings from the Fight Food Waste Cooperative Research Centre (CRC).

Membership in the *Love Food Hate Waste* network will ensure that Queensland is supporting national action to align community education efforts to reduce food waste. This will maximise impact and reduce confusion. A range of digital mediums will be used to raise awareness of these education tools and support behaviour change.

The Queensland Government will also work with local governments to develop education and behaviour change toolkits that can be implemented by local governments across Queensland.

This will be staged to progressively work with those with capacity to adopt the materials early and lessons applied for others in the future.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Develop materials from the findings of the Fight Food Waste CRC and proven strategies implemented by the <i>Love Food Hate Waste</i> international network.</p> <p>Launch webpage with state-wide materials.</p> <p>Develop and actively promote multi-media resources to support general behaviour change across the state.</p> <p>Conduct baseline and follow-up audits to measure program efficacy.</p> <p>Provide <i>Love Food Hate Waste</i> materials to Queensland councils which have dedicated education officers working with councils to deliver the message.</p> <p>Queensland Government to work with industry and key agencies to ensure that materials are culturally and linguistically effective.</p>	<p>State-wide education materials on the website available by 30 March 2022.</p> <p>Conduct population awareness and kerbside bins audits in 2022 to gain a baseline and enable tracking of progress toward targets.</p> <p>50 per cent of the Queensland population is aware of avoidance messages by 30 June 2023.</p> <p>10 per cent reduction in household food waste in the kerbside red-lid bin by 2025.*</p> <p>* identified from audit data of participating councils</p>	✓	✓	✓

**Strategy reference:** A2

**Responsibilities:** **Lead:** Queensland Government and the Fight Food Waste CRC  
**Support:** Industry and commercial sector

**Action:** **Understand food waste behaviours and segments in Queensland**

The Queensland Government supports the Fight Food Waste CRC project to design effective interventions to reduce household food waste.

The Queensland Government will continue to monitor commonly wasted food groups and food waste behaviours in Queensland to ensure educational materials address key issues.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Review project findings addressing food types being wasted, behaviours contributing to food waste, and demographic segments.</p> <p>Continue surveys in Queensland in line with the Fight Food Waste CRC baseline to monitor changes to food waste behaviours and food groups.</p> <p>Design effective interventions for state-wide and targeted <i>Love Food Hate Waste</i> messaging.</p>	<p>Key food groups and food waste behaviours change over time due to <i>Love Food Hate Waste</i> messaging being recognised and adopted by the community.</p>	✓	✓	✓

**Strategy reference:** A3

**Responsibilities:** **Lead:** Queensland Government  
**Support:** Local government and industry

**Action:** **Commence education for future generations**

Sustainability is a cross curriculum priority in the Australian Curriculum and concepts of waste management are developed through key subjects. The Queensland Government will continue to apply research findings to the development of food waste education resources for use in Queensland schools.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Collaboration between the Department of Environment and Science and the Department of Education, key education organisations and professional education associations to ensure communications are customised to audiences. (e.g. professional associations, Health and Wellbeing Queensland, EcoMarines, COEX Wave of Change) to develop and deliver educational materials for schools.</p> <p>Work with the Department of Education, TAFE and industry education schemes, such as VET to identify where there may be opportunities in the educational curriculum to include actions for organic waste avoidance programs, such as horticulture and hospitality industries.</p> <p>Facilitate education programs, delivery and school sustainability plans and school curriculum.</p> <p>Provide <i>Love Food Hate Waste</i> materials for students to use at home to connect in parents.</p>	<p>Materials developed and delivery of these commenced to a minimum of 50 schools by the end of 2022, with an annual increase in participating schools observed.</p> <p>Conduct annual surveys and bin audits in participating schools to measure awareness, behaviour change and track improved performance.</p> <p>80 per cent of Queensland schools using food waste education resources by 2030.</p>	✓	✓	✓

**Objective:** Halve the amount of food waste generated

**Scope:** Avoid the generation of food waste from:

- primary production
- transportation
- manufacturing
- wholesaling
- retail
- hospitality and food services
- institutions

**Strategy reference:** A4

**Responsibilities:** **Lead:** Queensland Government, industry, Fight Food Waste CRC and other research bodies/jurisdictions

**Action:** **Research food waste hotspots and solutions**

Queensland Government to continue to work with research agencies, such as the Fight Food Waste CRC, to engage with industry and consumers to reduce food loss and waste across the supply chain.

The Queensland Government is supporting the Fight Food Waste CRC with:

- a project to undertake whole-of-supply chain mapping to identify and prioritise food waste hotspots in the meat value chain and support stakeholders across the chain to trial and embed solutions reducing food loss and waste.
- the SME Solutions Centre to identify valuable products in food and agricultural waste streams and transform them into new commercial opportunities.

The Queensland Government will continue to support research opportunities across the supply chain, including the role that retail and hospitality produce specifications have on the generation of food waste.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Continue supporting Fight Food Waste CRC projects and prioritise the projects with the greatest benefit to Queensland.</p> <p>Identify further research opportunities across broader organic waste streams.</p> <p>Understand lessons from other jurisdictions and map end-user needs to prioritise uses, identify streams (commercial/domestic), locations, and intervention points in line with the waste hierarchy.</p> <p>Prioritise valorisation opportunities.</p> <p>Test the authorising and regulatory environment is right to promote (facilitate) product and market development.</p> <p>Achieve highest beneficial reuse for current organics in line with the waste and resource recovery hierarchy.</p>	<p>Most financially valuable parts of the supply chain are prioritised first.</p> <p>Regular and consistent engagement mechanisms agreed between government and industry.</p> <p>Recovered organic materials being used for their highest value in line with the waste hierarchy by 2030.</p>	✓	✓	✓



**Strategy reference:** A5

**Responsibilities:** **Lead:** Stop Food Waste Australia and industry  
**Support:** Queensland Government

**Action:** **Collaborate directly with industry to create sector action plans**

The Queensland Government will support Stop Food Waste Australia to develop a sector action plan for horticulture.

Horticulture is Queensland’s second largest primary industry growing approximately one-third of the nation’s produce. This makes us well-placed to use this expertise to lead the development of this particular action plan.

This work will complement the work already being undertaken by Stop Food Waste Australia and other jurisdictions in developing action plans for other sectors and ensure that we are collaborating and using shared resources effectively.

Key steps and interdependencies	Performance measures	ST	MT	LT
Engage with Stop Food Waste Australia and horticulture peak bodies to commence development of the action plan.  Industry to own the action plan and be accountable for the delivery, monitoring and measuring performance against these.	Action plans developed and voluntary implementation commenced by industry by 2025.	✓	✓	✓

**Strategy reference:** A6

**Responsibilities:** **Lead:** Retail and hospitality industry and the agricultural sector  
**Support:** Queensland Government

**Action:** **Find solutions for produce of all shapes and sizes**

Build on existing work to explore options to update produce specifications and consumer acceptance of imperfect produce. Further identify and develop markets where product appearance is irrelevant.

Key steps and interdependencies	Performance measures	ST	MT	LT
Explore the impact of retail and hospitality specifications through A4.  Identify and develop necessary markets where product appearance is irrelevant (e.g. canning, freezing, juicing, supplement and vitamin manufacturing).  Industry to help identify opportunities for alternative markets.  Clarify produce specification with retail industry and investigate the potential for alternative arrangements (e.g. whole crop purchase/update product specifications/ broadening varieties to increase the consumption of food produced).	Increased alternative arrangements exist by 2025 which decreases food loss.  Alternative markets are developed by 2030.	✓	✓	✓

**Strategy reference:** A7

**Responsibilities:** **Lead:** Food rescue organisations  
**Support:** Queensland Government

**Action:** **Increase food rescue capacity**

In 2021, the Queensland Government provided \$905,622 in grant funding to six food rescue organisations for infrastructure, equipment and operational costs to increase their collection and distribution capacity and divert additional high-quality surplus food from landfill and redistribute it to Queenslanders in need.

The Queensland Government will review the outcomes of the grant program to identify options and opportunities for further food waste avoidance.

Key steps and interdependencies	Performance measures	ST	MT	LT
The Queensland Government will review the outcomes of the grant program to assess future need.	Grant program outcomes are reviewed by 2023. Learnings from the program achieve further diversion of organics materials.	✓		

**Strategy reference:** A8

**Responsibilities:** **Lead:** Hospitality and retail sector and primary producers  
**Support:** Queensland Government, local governments, Fight Food Waste CRC and Stop Food Waste Australia

**Action:** **Increase connections between food rescue, businesses and recipients**

The Queensland Government will continue to explore opportunities to better connect businesses with food rescue organisations to continue to increase the diversion of surplus edible food.

This may include the promotion of platforms to better connect businesses with food rescue organisations and supporting the Fight Food Waste CRC and Stop Food Waste Australia to identify financial instruments that could encourage greater participation in food donation programs.

Key steps and interdependencies	Performance measures	ST	MT	LT
The Queensland Government will continue to explore opportunities to better connect businesses with food rescue organisations. Support the Fight Food Waste CRC and Stop Food Waste Australia projects to identify financial instruments that could encourage greater participation in food donation programs. Identify options to increase use of Y Waste and similar platforms to connect businesses with food rescue organisations and recipients.	Findings from the Fight Food Waste CRC Y Waste app pilot reviewed by the end of 2022 to assess how the learnings could be applied in Queensland.		✓	✓

**Strategy reference:** A9

**Responsibilities:** **Lead:** CCIQ, industry

**Support:** Queensland Government and Local governments

**Action:** **Provide advice to businesses of all sizes**

Small to medium businesses in Queensland can register with the free Chamber of Commerce and Industry Queensland ecoBiz program to help them save money and increase efficiencies with tailored advice on how to save on their waste, energy and water bills.

Businesses who grow, make, and sell food can sign up to the Australian Food Pact to make a multi-year commitment to develop solutions to make our food system more sustainable, resilient and circular. Stop Food Waste Australia will work with participating organisations to develop tailored plans which help them achieve their food waste goals.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Expand CCIQ waste reduction advice to include specific advice on organic waste avoidance.</p> <p>Investigate the program’s current reach.</p> <p>Identify key industries and businesses that send the highest quantities of organic waste to landfill in Queensland. Target engagement with these industries and businesses and work with them to review their processes.</p> <p>Engage with Stadiums Queensland on food waste avoidance education at major sporting events in preparation for the 2032 Olympic and Paralympic Games.</p> <p>Peak bodies to encourage members to commit to voluntary measures and identify promotional benefits to drive continued engagement and action.</p>	<p>EcoBiz performance measures mirrored.</p> <p>Following expansion of ecoBiz advice, have 10 per cent of relevant existing businesses already registered with ecoBiz to take up organics advice.</p> <p>Maintain an increase in the number of businesses engaged with ecoBiz organics advice each year.</p> <p>EcoBiz and similar programs engaging with businesses to measure and report on volumes of waste avoided to determine efficacy of engagement programs.</p> <p>The Australian Food Pact has been signed by up to:</p> <ul style="list-style-type: none"> <li>two of the four major supermarkets by 2023</li> <li>all four major supermarkets by 2025.</li> </ul> <p>Major supermarkets demonstrate a reduction of organic waste generated (tonnes).</p> <p>Peak bodies to report the number of businesses pledging voluntary commitments.</p>	✓	✓	✓



**Strategy reference:** A10

**Responsibilities:** **Lead:** Queensland Government and industry  
**Support:** Boomerang Alliance

**Action:** **Rollout food waste avoidance educational materials for businesses and institutions**

*Love Food Hate Waste* materials developed for businesses and institutions will allow for consistent messaging to be provided to Queenslanders in different settings, to maximise the overall effectiveness of these educational materials and enable these facilities to demonstrate food waste avoidance behaviours and encourage their customers to reduce food waste.

Key steps and interdependencies	Performance measures	ST	MT	LT
Develop materials from the findings of the Fight Food Waste CRC and proven strategies implemented by the <i>Love Food Hate Waste</i> International network. Launch webpage with state-wide materials. Develop a consistent system to measure progress. Industry and business peak bodies develop case studies relevant to their representative members to highlight food waste volumes that are avoided.	State-wide education materials on the website available by 30 June 2022. Annual uptake of businesses and institutions promoting these resources.	✓	✓	✓

**Strategy reference:** A11

**Responsibilities:** **Lead:** Queensland Government and Local governments  
**Support:** Industry

**Action:** **Lead by example at government events**

Queensland Government and local governments to promote *Love Food Hate Waste* avoidance messaging and implement these behaviours and actions at relevant government sponsored events.

Key steps and interdependencies	Performance measures	ST	MT	LT
Incorporate requirements for food waste avoidance messaging in the Queensland Events Guide. Engage with Stadiums Queensland early in preparation for the 2032 Olympic and Paralympic Games	Queensland Events Guide reviewed to include content on food waste avoidance education by June 2022. Food waste avoidance messaging in place at all Queensland Government events and institutions in locations with existing processing capacity by July 2023, and for rest of Queensland by December 2025.	✓	✓	✓

## Action for delivery—Landfill diversion

**Objective:** Divert 80 per cent of the organic material generated from landfill

**Scope:** Diverting household organic material from landfill

**Strategy reference:** D1

**Responsibilities:** **Lead:** Local governments  
**Support:** Queensland Government

**Action:** **Review fit-for-purpose solutions**

Local governments to conduct a business case to identify the best fit-for-purpose option to improve household organic waste management in their local government area.

This may be an organics kerbside service for households for:

- Food Organics (FO)
- Vegetable Organics (VO)
- Garden Organics (GO)
- Food Organics and Garden Organics (FOGO)

Or small-scale solutions to process organics, for example:

- aggregating organics through mechanisms such as community composting hubs
- encouraging home-based approaches for organics processing, including composting, worm farms, bokashi etc.

The Queensland Government will provide support to inform this decision through:

- the Resource and Waste Collection Options Tool to compare potential household waste and recycling collections systems against current systems to develop options for detailed analysis
- the findings from the Queensland Government funded trials, including the \$770,000 FOGO Kerbside Collection Trials 2021–22 in Townsville, Rockhampton and Lockyer Valley local government areas, plus an extra \$90,000 allocated to ensure consistent auditing across the program
- the findings from Queensland Government-supported research into onsite processing and collection options for multi-unit dwellings (MUDs)
- development of case studies of organic waste management options for households.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Undertake research and trials for collection and processing household organic waste from a range of environments, (e.g. high rainfall, rural/metro, FO/VO/GO, MUDs) with funding support for Councils to deliver.</p> <p>Establish a representative council group and leverage existing groups to share outcomes and learnings, including business cases.</p> <p>Finalise FOGO grant program and assess outcomes to provide guidance and case studies for other local governments.</p> <p>Requirement for improved organics management across all of Queensland with Councils to determine most appropriate services for their needs.</p> <p>Organics services being delivered to be identified through regional waste management and resource recovery plans.</p> <p>Queensland and local governments to assess these initiatives and develop guidance material (including business cases and feasibility studies for other councils).</p> <p>Considerations required to ensure opportunities exist for smaller and remote local governments/regions, (e.g. community gardens, island communities and include other inputs (e.g. mining camps/defence facilities)).</p>	<p>Funding for additional council trials which build on and augment information from current trials in 2022.</p> <p>Regional Waste Management Plans to recommend improved organics management solutions and timing by 30 June 2023.</p> <p>75 per cent of councils within the levy zone have business cases for their solutions completed by 30 June 2023.</p>	✓		

**Strategy reference:** D2

**Responsibilities:** **Lead:** Local governments  
**Support:** Queensland Government and industry

**Action:** **Implement new household collection options which are consistent from the start**

Local governments to use the findings of their business case to implement solutions to improve household organic waste management in their local government areas.

Queensland Government will provide support throughout the life of the Organics Strategy to ensure that all councils are provided an opportunity to better manage this material in a way that is fit-for-purpose for their communities. Queensland Government support will require local governments to:

- implement education and behaviour change messaging to minimise contamination
- for consistency, implement bin lid colour harmonisation to avoid household and collection confusion where kerbside collections are provided
- understand and enforce contamination levels to provide confidence to end-markets
- incorporate sufficient data collection and auditing processes to monitor uptake and contamination.

Local governments are also encouraged to support longer-term supply contracts to provide the organics recycling industry with certainty for investment.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Explore funding options for local governments to commence planning in the coming years, including understanding the requirements to implement improved organics services.</p> <p>Link funding prioritisation and needs to the development of Regional Waste Management and Resource Recovery Plans.</p> <p>Commitment from 77 councils to identify and implement fit-for-purpose organics management systems to meet their needs.</p> <p>Conduct consultation with commercial providers to adopt Australian standard colours for new bin lids.</p> <p>Investigate requirements to align organics processing technology with policy and communication of accepted materials in collection services.</p>	<p>Improved organics management services in place across Queensland by 2026 in SEQ and major regional council areas.</p> <p>80 per cent household participation in services after three years of commencing.</p> <p>Positive satisfaction rating with their service.</p> <p>All councils that provide an organics collection service to adopt the Australian standard bin lid colour prior to education commencing.</p> <p>Demonstrated increase in the volume of organics captured and re-processed over time.</p>		✓	✓

**Strategy reference:** D3

**Responsibilities:** **Lead:** Queensland Government and local governments

**Action:** **Make the inputs clear**

Develop, implement, and align household education and behaviour change tools in partnership with local government and industry to minimise contamination across all household kerbside bins, to maximise organic material being captured in the organics bin and minimise contamination.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Develop consistent education materials (including initially focusing on contamination in the red and yellow bins) and prioritising key behaviours to change that can be delivered state-wide. Prioritising materials and messages on behaviours to change in line with the waste hierarchy.</p> <p>Develop/adopt consistent labelling and communication language/messages.</p> <p>Utilise research findings of contamination in organics collection services to agree on clear guidance on what can be put in green bins, to deliver consistent and clear information, regardless of services provided by individual local governments.</p>	<p>Survey of both population awareness and kerbside bins audits conducted in 2022 to gain a baseline and enable tracking of progress toward targets.</p> <p>By 2025:</p> <ul style="list-style-type: none"> <li>65 per cent of households have organics capture services.</li> </ul> <p>2030 targets of:</p> <ul style="list-style-type: none"> <li>80 per cent of households have organics capture services.</li> <li>90 per cent capture rates of organic material, with separate capture rates for Food and Garden Organics comprised of:               <ul style="list-style-type: none"> <li>50 per cent capture of food organics</li> <li>90 per cent of garden organics</li> <li>&lt;1 per cent contamination rate.</li> </ul> </li> </ul>	✓	✓	✓

**Scope:** Avoid and divert remaining organic material from landfill

**Strategy reference:** D4

**Responsibilities:** **Lead:** Queensland Government and local governments

**Support:** Industry

**Action:** **Lead by example at government events**

Where processing facilities enable, Queensland Government and local government to provide a segregated organics collection system at government events.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Incorporate requirements for improved organics management as a requirement in the Queensland Events Guide.</p> <p>Implement source segregation at government events and facilities, with suppliers required to address these requirements.</p>	<p>Queensland Events Guide reviewed to include content on improved organics management by 30 June 2022.</p> <p>Organics collection systems in place at all government events in locations with existing processing capacity by July 2023, and for rest of Queensland by December 2025.</p>	✓	✓	✓

**Strategy reference:** D5

**Responsibilities:** **Lead:** Industry  
**Support:** Queensland Government and local governments

**Action:** **Implement new collection options**

Business and institutions to explore options to divert their remaining organics from landfill. This may include:

- collecting source separated organic waste through a separate service
- contributing to local composting hubs depending on the quantity and composition of their waste streams
- facilitating onsite organic waste processing.

The Queensland Government will continue to explore options to support sectors to collect and process their waste. In 2021, the Queensland Government provided grants of up to \$2,500 for Queensland schools to purchase equipment, (such as new or additional organic waste processing systems, including compost bins, tumblers, compost bays, in ground and above ground worm farms and also chickens and goats) to deliver organics avoidance and resource recovery projects.

Key steps and interdependencies	Performance measures	ST	MT	LT
Investigate options for grant programs for small scale infrastructure for the commercial sector and institutions. Develop case studies from funded trials. Publish case studies on a central hub when developed. Provide access to education materials and existing programs (e.g. ecoBiz and Compost Connect Program).	Case studies documented by 2023. Businesses utilise materials and programs. Data available to identify businesses with organics management services.	✓	✓	✓

**Strategy reference:** D6

**Responsibilities:** **Lead:** Queensland Government  
**Support:** Industry and Local governments

**Action:** **Set a clear end goal**

As part of a broader project assessing options and the feasibility of landfill disposal bans, include an assessment of options for banning organics from landfill.

If appropriate, following consultation the Queensland Government to implement a staged organics landfill disposal ban through regulation to drive increased organics diversion rates.

Key steps and interdependencies	Performance measures	ST	MT	LT
Commence consultation with industry and local government to inform a feasibility study and options analysis, focusing on specific organic waste streams. Align proposed bans with ERA and EoW code review. Consider as part of the Waste Strategy review by 30 June 2022. Support the planning and development of appropriate collection systems, infrastructure, processing capacities and options, including a focus on clean and viable feedstock supply. Identify incentivisation options prior to ban implementation.	Feasibility assessment completed by 31 December 2022. If feasible and subject to Cabinet consideration and parliamentary processes commence landfill ban specified (targeted) organics streams in South East Queensland by the middle of the decade.	✓	✓	✓



# Action for delivery—Recycling

**Objective:** Achieve a minimum 70% recycling rate for organics

**Scope:** Develop partnerships to understand end-market needs

**Strategy reference:** R1

**Responsibilities:** **Lead:** Queensland Government, industry and local governments

**Action:** **Understand consumer needs**

Develop key partnerships between the organics recycling industry and end users that enable feedstock production to create products that meet specifications and market demand.

Key markets identified are:

- Agriculture
- Government (state and local)
- Urban amenity (excluding government procurement)
- Mine rehabilitation

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Deliver workshops to identify requirements and education and broaden target audience to all key end-users.</p> <p>Product specifications to address feedstock contamination, establishing these from experience of other jurisdictions.</p> <p>Establish discussions and workshops between the organics recycling industry and government procurement officers, and other businesses to promote procurement of recycled organic waste products.</p> <p>Update the appropriate policy processes following the findings of the workshop and endorsement of the Queensland Government Procurement Committee.</p>	<p>By end of 2022 working groups held with AORA and key end markets to identify potential demand, product specifications and identify increased demand targets required to support recycling targets.</p> <p>Queensland requirements advocated nationally for end-user product specification and certification system for priority end products.</p>	✓	✓	✓



**Scope:** Inform new investment

**Strategy reference:** R2

**Responsibilities:** **Lead:** Queensland Government  
**Support:** Researchers, industry and Local governments

**Action:** **Share current data to inform investment needs**

Support the development and use of a central knowledge hub for organic material resources for Queensland.

This hub should house not only static guidance on organic waste recycling and use, but interactive elements to help inform business and investment decisions by:

- displaying flows of organic and timber waste across Queensland
- display current infrastructure capacity across Queensland regions
- quantify the benefit of using compost on land
- promote opportunities to connect stakeholders to allow for material exchange to match supply and demand.

The Queensland Government will explore options to support research and development opportunities through this hub to test novel and innovative recycled products.

Key steps and interdependencies	Performance measures	ST	MT	LT
Facilitate identification of collaboration options across the organic waste research groups, with a potential to build on previous projects (e.g. Australian Biomass Bioenergy Assessment (ABBA) or the Organics Material Flow Analysis (MFA) projects).  Assess the requirements for determining the timeframes and process for regularly updating the material flow analyses and infrastructure report.	Development of a hub by 30 March 2023, with content provided by, and maintained by users approximately biannually.	✓	✓	✓

**Strategy reference:** R3

**Responsibilities:** **Lead:** Local governments  
**Support:** Queensland Government

**Action:** **Build for the future**

Local governments review planning instruments against Regional Waste Management Plans to ensure that they support solutions that help increase their region's current and future capacity to process organics waste.

Key steps and interdependencies	Performance measures	ST	MT	LT
Undertake consultation to identify issues and solutions to planning and infrastructure plans.	Local government planning instruments reviewed within two years of Regional Waste Management Plans being developed.	✓		

**Scope:** Develop and support new infrastructure

**Strategy reference:** R4

**Responsibilities:** **Lead:** Industry

**Support:** Queensland Government and Local governments

**Action:** **Increase processing capacity**

Queensland Government, local governments, Federal Government and industry to coordinate investment to support new and upgraded integrated infrastructure solutions to increase processing capacity and improve the quality, safety, and consistency of recycled organic material.

This infrastructure should be strategically coordinated to:

- leverage existing opportunities under the national Food Waste for Healthy Soils fund
- collaborate across councils to create economies of scale and meet multiple infrastructure needs, including mobile infrastructure to suit location and feedstock composition
- co-locate organics recovery with other industries such as food processing or agriculture to combine organics streams and produce higher-value products
- be in regions identified as having insufficient processing capacity in the Queensland Waste and Resource Recovery Infrastructure Report
- support the expansion of valorisation infrastructure to collect and transform inedible by-products into valuable new products
- support the bioenergy and biochemical industries to increase their processing capacity in Queensland, including putrescible organic waste streams, while ensuring environmental and social impacts are mitigated appropriately
- ensure it is suited to the location, based on considerations around feedstock and proximity to markets and sensitive receiving environments.

The planning for this infrastructure should commence in the short-term to allow larger-scale infrastructure to be built in the medium-term. All infrastructure plans that use food waste as a feedstock should be developed against the target of halving the generation of food waste by 2030.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Undertake consultation and utilise existing data to identify needs and locations for infrastructure.</p> <p>Planning considerations identifies site location appropriate for use/zoning and distance from markets.</p> <p>Conduct trials to understand requirements from different pathways.</p> <p>Develop case studies to demonstrate good practices and develop guidelines for other businesses, utilising other jurisdictions.</p> <p>Identify funding opportunities for building medium-term infrastructure.</p> <p>Infrastructure established enabling aggregation opportunities and processing points.</p> <p>All tiers of government and industry conduct analysis and commit to funding pathways and partnerships to strategically establish infrastructure.</p> <p>Local and Queensland Government commit to using products from these facilities through procurement contracts.</p> <p>Investigate biohub infrastructure development to maximise agricultural and industrial feedstocks.</p>	<p>Regional plans identify infrastructure needs, locations and benefits delivered and demonstrate learnings from trials/ representative groups.</p> <p>Processing infrastructure within reasonable proximity to markets to offset transport emissions.</p> <p>Diversion rates from landfill increase.</p> <p>Councils have uptake through procurement contracts.</p> <p>Increasing volume (as a percentage) of material purchased by local and state governments.</p> <p>Trials completed on a range of C&amp;I businesses, with a focus on institutions by 30 March 2023.</p>		✓	✓

**Scope:** Increase market demand

**Strategy reference:** R5

**Responsibilities:** **Lead:** Queensland Government and Local governments

**Action:** **Buy back products**

Use government purchasing power at state and local levels to increase the uptake of high-quality, recycled organic waste content in government projects to help transform the supply market.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Following the workshops with industry (R1), explore opportunities to increase the uptake of recycled organic waste content.</p> <p>Consultation with the Queensland Government Procurement Committee to determine the investigation scope, timeframes and process, acknowledging the 2032 Olympics and Paralympic Games as a driver for procurement enhancement.</p> <p>Consultation with local governments through LGAQ and Region of Councils (ROCs) on procurement and other identified policy mechanisms (e.g. as part of regional waste management and resource recovery plan development, to enhance alignment between state and local policies).</p>	<p>Where endorsed by the Queensland Government Procurement Committee, identified procurement or other policy mechanisms are implemented by 31 December 2024 to improve recycled organics content and pursue other innovative business models.</p>		✓	✓

**Strategy reference:** R6

**Responsibilities:** **Lead:** Industry and Queensland Government

**Action:** **Support local businesses**

Encourage Queensland businesses to adopt and publish sustainable procurement policies that include the use of recycled organic waste content.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Following workshops/discussions (R1), encourage businesses to publish sustainable procurement policies which educate consumers on their buying choices.</p> <p>Identify target audiences and promote benefits to businesses, prioritising larger business then medium businesses.</p> <p>Work with other Queensland Government departments to build capacity within Government to support and drive this action.</p>	<p>10 per cent of businesses adopt and promote sustainable procurement policies with an annual increase in the number of businesses participating.</p> <p>Publish case studies of business practices and benefits.</p>		✓	✓

**Strategy reference:** R7

**Responsibilities:** **Lead:** Federal Government, Queensland Government and industry

**Action:** **Leverage the carbon market**

Monitor the implementation and uptake of emissions reduction fund methodologies in Queensland to help inform the prioritisation and development of new methodologies nationally.

Key steps and interdependencies	Performance measures	ST	MT	LT
Queensland Government to monitor the implementation and uptake of existing emissions reduction fund methodologies in Queensland. Participate in the yearly prioritisation and development of new methodologies nationally.	Increase in uptake of the methodologies.	✓	✓	✓

**Scope:** Ensure clear quality controls

**Strategy reference:** R8

**Responsibilities:** **Lead:** Queensland Government  
**Support:** Local governments and industry

**Action:** **Manage risks with market expansion**

Queensland Government to review the policy and regulatory frameworks to reduce regulatory barriers and ensure they:

- provide for the use of emerging technology for processing organics
- provide clear guidance to inform the expansion of organics collection services in Queensland
- support the expansion of viable and sustainable markets for products and outputs arising from the recovery of organics streams
- facilitate the development of biomanufacturing, bioenergy and biochemical processing.

The outcome of this review will need to provide clear guidance to the community and industry while ensuring adequate risk management and high-quality end products.

Key steps and interdependencies	Performance measures	ST	MT	LT
Commence a review to: <ul style="list-style-type: none"> <li>• understand the barriers to implementation</li> <li>• regulatory requirements and economics required to establish and operate</li> <li>• feedstock source and market outputs.</li> </ul> As part of broader review processes of the Queensland Waste Strategy and legislation, explore required regulatory amendments to provide safe, appropriate guidance for all other activities. Framework to consider building waste, and appropriateness and economically viable for regions. Organics stakeholder groups continue to receive updates/consultation opportunities through the Department of Environment and Science.	Reviews to commence in early 2022 with timing linked to education actions. Frameworks are adopted, accepted and enacted (e.g. council and commercial contracts). Regulatory environment enables investment in new and emerging technology. Economic and technological measures for success are identified and agreed. Investment in biotech processing results in processes established and operating in Queensland and less organics sent to landfill. Sufficient volume and quality of feedstocks exist to operate processes.	✓	✓	

**Strategy reference:** R9

**Responsibilities:** **Lead:** Queensland Government and local governments  
**Support:** Industry

**Action:** **Align data collection and reporting**

Queensland Government, local governments, and industry to explore how to better align data collection and reporting systems across state and local government to national classifications and definitions to improve sharing of information.

This will not only ensure effective compliance operations but can be used to evaluate program effectiveness and inform future decision making.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Complete an analysis into current data capture and potential amendments, including lessons from other jurisdictions.</p> <p>Establish data baselines to measure improved data collection and reporting.</p> <p>Link data requirements back to regulatory requirements to ensure improved data standards.</p> <p>Investigate data requirements and standards being linked to contracts and contract management requirements.</p> <p>Identify sectors with effective systems and apply these lessons where appropriate.</p>	<p>Data collection and reporting is published in accordance with the Queensland Government Open Data Policy.</p> <p>Through the open data portal, measure data use.</p> <p>Data sets aligned and consistent by 2023, and report standards established by 2024.</p>	✓	✓	✓

**Strategy reference:** R10

**Responsibilities:** **Lead:** Federal Government, Queensland Government and industry  
**Support:** Local governments

**Action:** **Provide clarity and confidence to end-markets**

Support the national review of the Australian Standard for Composting (AS4454) in 2022 to ensure thresholds and contaminant testing is current and helps improve processing to provide fit-for-purpose outputs.

Support consideration of updated national and industry specifications for organic waste products to improve industry and customer certainty.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Queensland Government to continue supporting the national review through collaboration with local governments and industry.</p> <p>Standards and specifications to provide options for regional needs and localised solutions and tools.</p> <p>Product certification to address purpose and product variations.</p> <p>Standards clearly communicated to drive markets.</p>	<p>Market needs are reflected in national standards and specifications.</p> <p>Standards and specifications are accepted by industry and end-users utilise these as part of their purchasing decisions.</p> <p>Specifications developed for a range of common purposes, (e.g. roads, industrial landscaping, gardens, parks, agriculture) which identify acceptable contamination rates.</p>	✓	✓	

**Strategy reference:** R11

**Responsibilities:** **Lead:** Queensland Government, local governments and industry

**Action:** **Ensure we are delivering best practice that is fit for purpose**

Queensland Government to implement best practice environmental management guidelines and model operating conditions for composting to ensure transparency and consistency for industry.

Key steps and interdependencies	Performance measures	ST	MT	LT
<p>Ongoing review of the guidelines to ensure they are meeting evolving needs.</p> <p>Continue implementation with local governments and industry and address regional needs for investment and development.</p> <p>Encourage businesses to adopt the guidelines.</p> <p>Review Environmentally Relevant Activities (ERAs) and environmental authorities for current requirements.</p>	<p>Guidelines are adopted in 2022.</p> <p>Guidelines achieve objectives and high-quality organics materials are produced.</p> <p>Queensland guidelines are consistent with other jurisdictions and Queensland products are competitive nationally.</p> <p>Organic products meet standards.</p> <p>Composting processes are efficient.</p>	✓	✓	✓



**Scope:** Monitor implementation

**Strategy reference:** M1

**Responsibilities:** **Lead:** Queensland Government

**Action:** **Continue engagement throughout the Organics Strategy**

Develop a stakeholder engagement and communications plan to define stakeholders, strategies, and mechanisms to deliver the Organics Strategy actions.

Key steps and interdependencies	Performance measures	ST	MT	LT
Engage with key stakeholders in the development of the plan to ensure it delivers the requirements and is achievable.	Develop an engagement and communications plan by 30 June 2022 to address all strategies to maintain focus and efficacy of each.	✓	✓	✓
Continue to review and refine the plan as behaviour change occurs along the delivery of the Organics Action Plan.	Bi-annual review of the currency of the engagement and communications plan.			





# Actions summary

## 2025 interim targets

10% reduction in household waste  
65% diverted from landfill  
60% recycling rate

## 2030 targets

15% reduction in household waste  
80% diverted from landfill  
70% recycling rate  
Halve the amount of food waste generated

## Timeline: Action delivery

Short-term (two years)		Medium-term (three years)	Long-term (five years)
2022	2023	2024–26	2027–32
Establish a stakeholder engagement and communication plan. (M1)	Ongoing monitoring of implementation. (M1, R9)	Ongoing monitoring of implementation. (M1, R9)	Ongoing monitoring of implementation and adjustment where required. (M1, R9)
Obtain baseline data and align data collection and reporting. (A2, R9)	Share data to inform investment needs. (R2)	Share data to inform investment needs. (A2,R2)	Continue to update and share data to inform investment needs. (A2,R2)
Conduct research and develop action plans with solutions for key sectors. (A4, A5, A6)		Monitor action plan delivery. (A4, A5, A6)	Monitor action plan delivery and shift focus from waste going to landfill to all organic material. (A4, A5, A6)
Assess and increase food rescue capacity. (A7)		Increase connections with food rescue organisations and recipients. (A8)	Continue to increase connections with food rescue organisations and recipients. (A8)
Develop and commence waste avoidance education. (A1, A3, A10, A11)		Continue broader roll-out of waste avoidance education. (A1, A3, A10, A11)	Continue broader roll-out of waste avoidance education. (A1, A3, A10, A11)
Assess the feasibility of a landfill disposal ban. (D6)	Regulatory amendments and industry engagement. (D6, R8, R11)	Commence a staged roll-out of a landfill disposal ban. (D6, R8, R11)	Continue staged roll-out of a landfill disposal ban. (D6, R11)
Conduct trials and provide advice and resources to businesses and events. (A9, D4, D5)		Broader roll-out of commercial organic waste collection. (A9, D4, D5)	Continue broader roll-out of commercial organic waste collection. (A9, D4, D5)
Develop regional waste management plans for infrastructure upgrades and development. (R3)		Increase infrastructure processing capacity. (R4)	Continue to increase infrastructure processing capacity. (R4)
Conduct trials and share resources across councils to inform the development of businesses cases for household organic waste solutions. (D1)	Prepare for new household organics waste solutions. (D3)	Broader roll-out of new household organic waste solutions. (D2, D3)	Continue broader roll-out of new household organic waste solutions. (D2, D3)
Understand end-market needs. (R1, R7, R10)		Increase market demand. (R1, R5, R6, R7, R10)	Continue to increase market demand. (R1, R5, R6, R7)

# Glossary

**Bagasse**—fibrous waste remaining when sugarcane stalks are crushed to extract juice.

**Biosolids**—organic solids derived from biological wastewater treatment processes that are in a state where they can be used as nutrients and soil conditioning agents, a source of energy or for some other use. Sewage treatment plants are the main source of biosolids in Queensland.

**Circular economy**—an alternative to the traditional ‘linear’ economy based on the ‘take-make-use-dispose system’, in which products and materials keep circulating within the economy at their highest value for as long as possible, through reuse, recycling, remanufacturing, delivering products as services and sharing.

**Commercial and industrial waste (C&I)**—produced by business and commerce, and includes waste from schools, restaurants, offices, retail and wholesale businesses, and manufacturing industries.

**Construction and demolition waste (C&D)**—includes waste generated from building, repairing, altering or demolishing infrastructure for roads, bridges, tunnels, sewerage, water, electricity, telecommunications, airports, docks or rail.

**Compost**—a product created by the breakdown of organic matter by bacteria and other microorganisms into a nutrient-rich natural fertiliser.

**Compost hub**—a central location where community members can compost their waste, for example, a community garden.

**Compostable products**—products that meet Australian Standard 4736 or Australian Standard 5810, or products made entirely out of materials that will disintegrate into natural elements within a home or commercial composting environment as specified by the relevant Australian Standard.

**Contamination**—any material found in a bin that is not accepted by an organic processing facility.

**Core waste**—waste generally managed by the waste and resource recovery sector, comprising solid non-hazardous waste and hazardous waste including liquids. It is generated in the municipal, construction and demolition, and commercial and industrial sectors, and includes biosolids but generally excludes primary production.

**Cotton gin trash**—a by-product created in the cotton ginning process.

**Disposal**—the process of getting rid of wastes by landfilling or incineration without energy recovery. It is the least acceptable option under the waste management and resource recovery hierarchy.

**Energy recovery**—involves the conversion of waste materials into useable heat, electricity or fuel through processes such as combustion, gasification, pyrolysis and anaerobic digestion.

**FO**—food organics collection.

**Food hub**—food producers or another organisation which aggregates, distributes and markets food products directly to the consumer.

**FOGO**—food organics and garden organics collection.

**Food loss**—food that is lost along the production and supply chain before reaching the retail stage.

**Food waste**—edible food and inedible food parts at the point of retail or consumer use that is not eaten.

**Garden waste**—includes grass clippings, tree, bush and shrub trimmings, branches and other similar material resulting from domestic or commercial gardening, landscaping or maintenance activities.

**GO**—garden organics collection.

**Kerbside collection**—the collection of household waste left at the kerbside for collection by local government collection services.

**Municipal solid waste (MSW)**—waste generated by households and waste collected by or for a local government. It includes waste generated from street sweepings, public rubbish bins, maintaining a public place and collection of large items from domestic premises by a kerbside collection service.

**Organic processing**—involves the recovery of putrescible wastes through activities such as anaerobic digestion, mulching, composting or vermiculture.

**Putrescible**—solid waste which contains organic matter capable of being decomposed micro-organisms.

**Recycling**—the process of extracting materials found in waste and converting them into useful products.

**Recovered material**—waste that has been diverted from landfill, including material that has been recycled, reprocessed or stockpiled for future use.

**Recovery rate**—the proportion of a waste stream that is recovered.

**VO**—vegetable organics collection.

