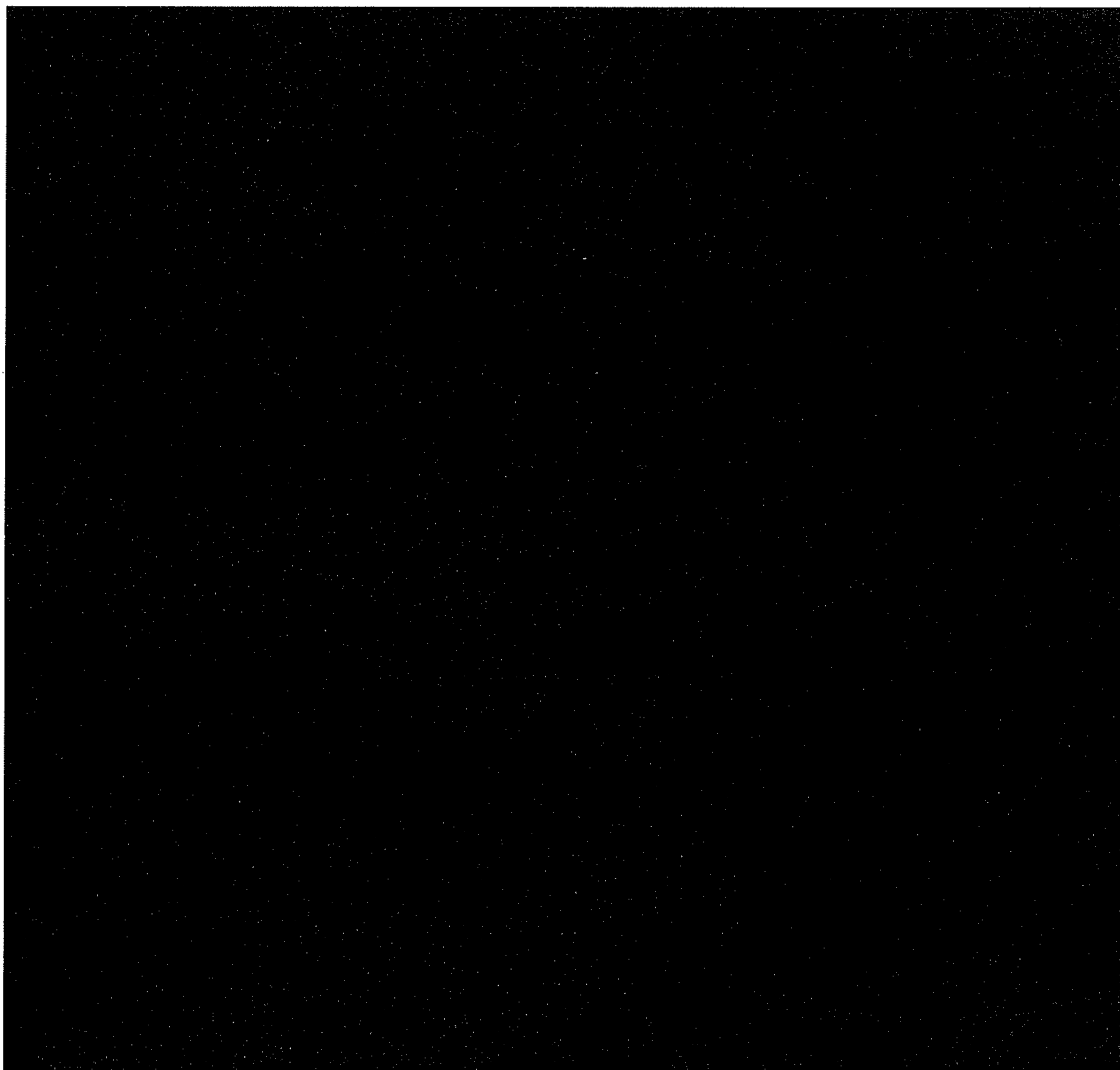


Table 32: Sensitivity Analysis (\$ Discounted, FY 2020)



5.1.4. Social Analysis

Studies regarding the social aspects of a circular economy, in this case employing a waste recovery strategy, have identified several social benefits. Employment being the primary impact on the community, followed by quality, wellbeing and willingness to pay for food composting.²²

Employment

Investment in the FOGO facility will create employment opportunities during construction and operations. Based on a 2009 NSW Treasury Paper, for every \$1m spent in Construction Trade

²² MDPI, *Addressing the Social Aspects of a Circular Economy: A Systematic Literature Review*, 24 September 2020

dwelling count forecast using EPSDD new dwelling occupancy projections 2018-2047. The WTP benefit would be realised on a per household basis, regardless of the number of occupants.

The number of households participating in the scheme is outlined in the table below.

Table 13: Number of households expected to be onboarded

Year	2024
MUD FOGO-onboarded Dwellings	6,063
MUD FOGO incremental onboarded Dwellings	3,832
SUD FOGO-onboarded dwellings	249,821
SUD FOGO incremental onboarded dwellings	116,490

5.1.5. Environmental Analysis

The implementation of this project positively impacts the environment through creating an activated waste sector. Benefits include:

Improved water quality

The primary method of waste disposal in ACT is landfill which has negative environmental impacts through leachate discharges, greenhouse gas emissions, loss of visual amenity, foul odours and harbouring of disease-carrying pests. The other alternative that is often used is incineration which can produce toxic emissions if not controlled properly. Preventing organic wastes going into landfill has the potential to reduce the potency of leachate infiltrating into the groundwater and impacting water quality.

5.2 Wider Economic Benefits

Wider economic benefits are the improvements in economic welfare that are not typically captured in a CBA. These benefits are generally difficult to quantify and have been presented qualitatively.

The FOGO processing facility along with the resultant recycled organics, should have a wide range of wider economic benefits that bring added value to the Territory, public and industry. These benefits are outlined in the sections below.

Improved agriculture productivity

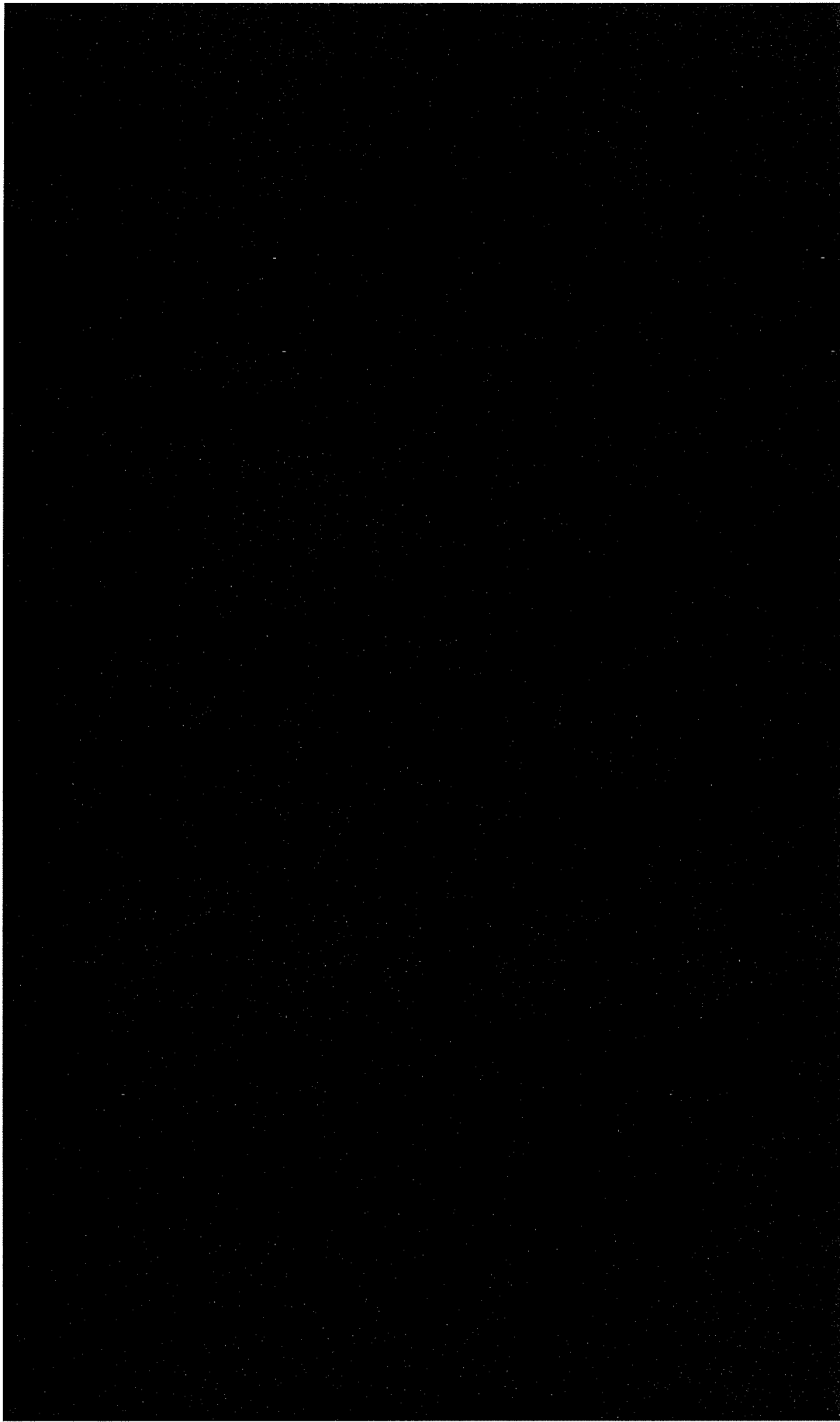
The benefits of organic compost for soils for agriculture crops and landscape maintenance far outweighs the use of synthetic fertilisers. Organic fertilisers have a greater capacity to hold and store nutrients, increasing soil fertility and as such soil organic carbon. Additionally, compost can aid in

Opportunity	Description	Real GDP (2047-48, present value \$million)	Employment (2047-48, FTE)
Food			
Nutrient recovery and recycling	Converting nutrients in organic waste into fertiliser	1,597	233
Biogas from organic waste	Converting organic waste to renewable energy	8,834	823
Water use efficiency	Improving the efficiency of water use	29,899	4,510
Food waste	Reducing waste in the consumption of food	37,141	-2,936

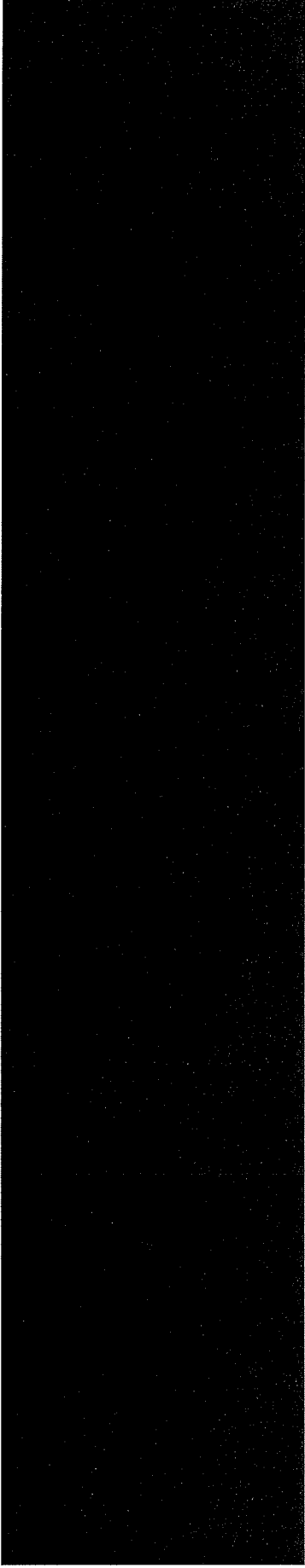
Figure 11: Circular opportunities in the food industry

Currently landfilling is used in the ACT is a linear approach in waste management. FOGO processing, managed effectively can be a part of the circular economy for food that helps rebuild soil health, recovers valuable resources, and provides feedstock for energy plants.

impacts and potential mitigations of the risks considered in the Risk Management Plan in Appendix E.



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These commercial principles have been used in a Multi-Criteria Analysis that was the basis of selecting the preferred delivery model, as outlined later in this chapter. A description of each of these principles based on the *ACT Government Capital Framework, Draft Delivery Model Analysis Guidelines* is summarised in Table 34 below.

Table 34: Definition of key commercial principles

Commercial Principle	Description
Time to deliver	The extent of time required to prepare and procure the project, and commence operations.
Flexibility	Operational flexibility: the extent to which the delivery model enables the Government to retain flexibility in terms of the project's operational profile. Future scope changes: the extent to which the delivery model assists the Government in managing and implementing changes to the functional requirements of the project over time (both during the design and construction stage and subsequently).
Level of integration / Bundled services	The level of integration between construction, ongoing maintenance, and facilities management.
Level of risk transfer	The extent to which the delivery model facilitates a transfer of project risks from the Government to the private sector contractor.
Innovation and incentive	The existence of opportunities and incentives within the delivery model to drive innovation.
Output specification	The Project Team clearly understands the output requirements from the project and can readily measure outputs. The easier this is to define, the more suitable to complex, integrated models.
Cost and level of complexity for Government	Level of cost and complexity of the procurement process, both for the public sector and for bidders. Additionally, the costs to establish and maintain relationships between the parties and level of ongoing Government involvement.
Price certainty	The importance of price certainty to the project, associated with the project risk profile and need for flexibility.

The relative importance of each criteria and level of consideration when selecting the most appropriate delivery model is outlined in the table below. Note that this relative importance is quantified later in this chapter.

Criteria	Description
Output Specification	The Output Specification would be limited to stipulating compliance with relevant environmental standards and the required waste feedstock level being pre-defined. This lends to a model which would not require detailed designs to be provided to bidders, particularly as there are options for bidders to deliver this project using various technology solutions or uses for produced compost.
Procurement cost and level of complexity for Government	This project requires balancing the need to leverage private sector know-how, capacity, and innovation potential, with minimising unnecessarily complex contractual arrangements. [REDACTED] [REDACTED] [REDACTED] This commercial principle is considered to have a medium level of importance given the project is small in scale and therefore less complex.
Price certainty	Price certainty is important for this project and is sought for most government projects. Given constraints in the ACT's current and future budgets, price certainty is of high importance for this project.

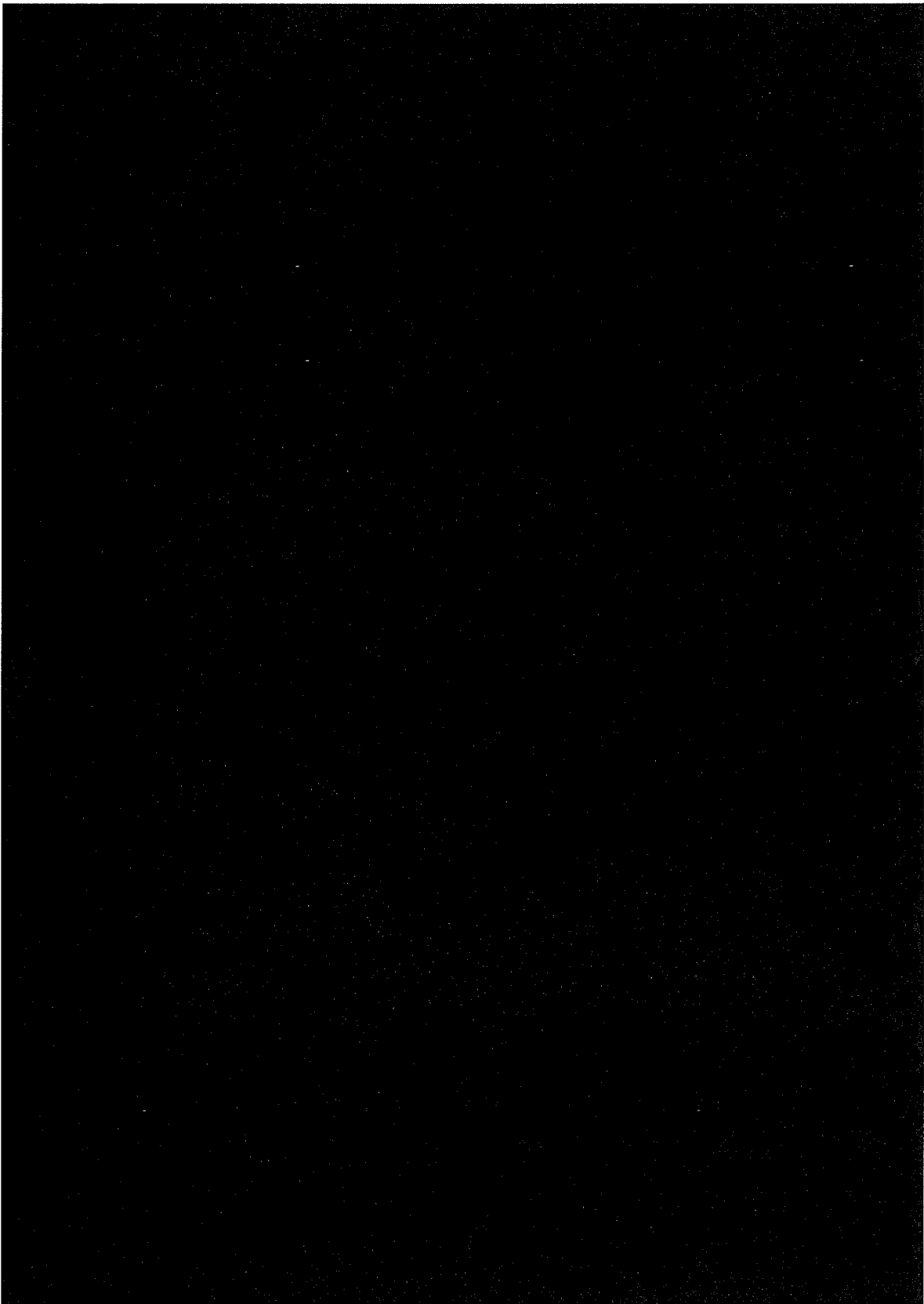
Data area	Key observations
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
Market Sounding - 2020	Soft Market Sounding was completed as part of the Feasibility Study with various established and reputable players in the FOGO market. Please see the section below for a summary of the findings of the market sounding.
Market Sounding to inform FOGO facility delivery model November-December 2021	The ACT undertook a market sounding in order to gain insights from the market before commencing the procurement process, specifically feedback on potential opportunities and constraints that should be considered in structuring the proposed procurement and associated delivery model. The market sounding process provided an opportunity for the market to input into the design of the project's commercial structure.

6.3.2. Market Soundings

Arup conducted a soft market sounding with various established and reputable players in the FOGO market. This included technology providers and facility operators with experience across a range of contractual models. Key findings have been anonymised to protect commercial-in-confidence information and are summarised in Table 38.

Table 38: Summary of soft market sounding findings





6.4 Recommended Delivery Model

From the outcomes of the MCA process, a **DCMO** and a **User Charge PPP** are the preferred Delivery Models for the FOGO facility. A qualitative assessment of both models has been undertaken, taking into consideration the benefits of each model, the outcomes of the soft market sounding and preliminary consultation with stakeholders. This included stakeholders within ACT NoWaste, ACT Treasury and Major Projects Canberra, and Arup/Sphere's knowledge of the organics and waste infrastructure market.

Delivery Model	Benefits	Disadvantages
DCMO	• Significant level of risk can be transferred to contractor. • Attracts a larger number of bidders who do not need to bring their own financing (maximises competitive tension). • There are significant potential interface risks between design and operation for FOGO processing and the ACT government is not well placed to manage these risks. The DCMO delivery model places responsibility with the contractor for managing this interface to achieve good long-term operational performance. Good operational performance substantially controls potential environmental and amenity risks, which are of high importance to the ACT. • Allows realisation of efficiency and reduced interface risks by dealing with a single contractor; incentivises for whole-of-life cost savings for maintenance and operations • There are significant commercial risks involved in establishing market outlets for the recovered compost product and the ACT government has limited ability	• ACT has limited input into design, build and long-term operations once contractual arrangements are finalised with contractor. • ACT funds the project (may be a benefit or a risk depending on competing capital commitments) • Can take longer to structure, document (i.e. contracts, RFP documents, etc.), negotiate and procure than traditional models, but generally less time than a PPP given private debt and equity finance would not need to be raised and associated diligence and contracting activities would not need to be undertaken.

From this, both models were identified as suitable for this project. Given the similarity in the MCA analysis outcomes between both models, we included an analysis of both in the Business Case

A further market sounding was conducted in November – December 2021 in partnership with ACT Treasury (Infrastructure Finance & Reform unit) to help with the selection of an appropriate delivery model. The outcomes of this are contained in Appendix K – Delivery Model Market Sounding Report.

Following the conclusion of the further market sounding, a DCMO delivery model was recommended and confirmed by the Infrastructure Finance & Reform unit as being appropriate for the subject project.

Service and quality standards for the operations of the facility will be agreed as part of the procurement process.

6.4.1. Food Waste for Healthy Soils Fund

As part of the 2021-22 federal budget, the Australian Government has committed \$67 million to a new Food Waste for Healthy Soils Fund. Out of this \$67 million, \$57 million will be allocated for infrastructure to support new and improved organic waste recycling infrastructure to divert FOGO waste from landfill over the next four years. The application for funding closes in March 2022.

Considering the opportunity to secure Commonwealth fund, this business case proposes a DCMO delivery model. This involves a portion of funding from the Commonwealth (up to 1/3), with matched funding by the ACT Government and the remaining balance either funded by the DCMO contractor or by the ACT Government. There should be an assurance of the balance of funding from the ACT Government before an application is lodged for the fund by March 2022. Failing to secure a contribution from the Fund, or via the DCMO contractor, will require the ACT Government to finance the entire delivery of the FOGO facility through a DCMO model. As such, the mid-year business case requests funding for the entire facility with a confirmation of final funding required following the Fund application process and DCMO tender.

6.5 Review 3 (IFCW): Delivery Model Selection

IFCW directorate to sign off that the delivery model selected is appropriate for the project risk profile and value.

Review 3 (IFCW) Officer Name: _____

Signature: _____

Date: _____

- *This is the second review point for IFCW and is an assessment of the delivery model analysis.*

7. Financial Analysis

This section outlines the financial analysis undertaken on delivering the project through a DCMO model, as well as via traditional procurement.

While PPP and DCMO have both been identified as suitable delivery models, at this stage of analysis it is not possible to comment in more granular detail on the relative impact to risk quantification under each model, and therefore a quantitative analysis that compares the two options is likely to be misleading. To demonstrate the potential cost of a private sector delivery model vs. traditional government procurement, the analysis in this chapter focuses on how the outcomes under DCMO procurement contrast with those under traditional government procurement only.

The following chapter outlines:

- General model assumptions
- Proposed risk allocation under DCMO
- DCMO payments to contractor and project revenues received from the sale of compost, in present value terms
- Net present costs to government if delivered through a traditional procurement method (the Public Sector Comparator, or PSC), and
- Cost to Government.

The aim of the financial analysis is to (1) determine the relative cost to ACT of different delivery models and (2) for each model determine the impact on government budgets by analysing the net cashflow of the project.

7.1 Delivery Model Structure

It is expected that the most likely structure of a DCMO would involve Government paying a Contractor to construct and operate the site, and the

[REDACTED]

This model is outlined in the diagram below.

seeking to reduce costs in other areas (without impacting service quality or breaching contractual obligations) or by accepting a lower profit margin.

Discount rate

Two separate discount rates have been applied in this business case:

- Financial discount rate – In accordance with the *National PPP Guidelines Volume 5 Discount Rate Methodology*, separate discount rates have been determined for (a) the DCMO model, and (b) traditional government procurement. The traditional government procurement model uses the 10-year ACT Government bond rate (the Territory's risk free rate, with duration aligned as close as possible to the average life of the project), whilst the DCMO model uses a discount rate equivalent to the risk free rate plus the portion of the systematic risk premium transferred to the private sector.
- Economic discount rate – This discount rate is applied in the cost benefit analysis and is often referred to as the 'social discount rate'. This rate seeks to adjust for social time preference, defined as the value that society attaches to the present rather than future consumption. In the ACT, this rate is set at 7%. This discount rate is applied to real cashflows.

In the financial analysis, analysis of the DCMO model and traditional procurement sees the application of different discount rates to project cashflows to determine the project's net present value. Under the traditional government procurement model, the risk-free rate, the 10-year ACT Government bond rate (currently 1.97%), is used as the discount rate given that predominately all the systematic risks are borne by the public sector. Under the DCMO model, where systematic risks are shared between the public and private sectors, the systematic risk premium transferred to private sector needs to be determined to calculate the discount rate.

To enable the identification of the proportion of systematic risk borne by the parties under a DCMO model, and allocate the systematic risk premium, a two-stage process was undertaken:

- Assessment of the relative importance of each of the systematic risks which included demand, inflation, asset residual value and downturn in broader market; and
- Assessment of how the risk would be allocated between the parties.

In line with the *National PPP Guidelines*, Table 39 shows the weightings and allocation of risk applied to each systematic risk in order to determine the premium transferred to the private sector. In relation to the weighting scale, a '1' represents low importance based on impact upon project cash flow and '5' being of high importance. For the allocation of risk, '0' means the risk is with public sector, '1' is with private sector and '0.5' means it is shared between the two parties.

premium is derived by multiplying the market risk premium with asset beta. The market risk premium is assumed at █% per the National PPP guidelines. In terms of the asset beta, research was undertaken on observable betas for listed waste management corporations on the Australian Stock Exchange with comparable expertise and services. Unlevered beta values for the identified comparable companies are shown in Table 42 and the average beta of █ was used in forming the total systematic risk premium. Therefore, the systematic risk premium as applied was █%.

Table 43: Comparable betas



As shown in Table 43, to determine the systematic risk premium transferred to the private sector, the allocation of risk is multiplied to the estimated portion of systematic risk premium. Ultimately, the discount rate for DCMO is the sum of the systematic risk premium transferred to private sector (█%) and the 10yr ACT Government bond rate (█%), resulting in a discount rate to be applied to Government cash flows under the DCMO model of █%.

The following table outlines general model assumptions such as timeline, inflation, discount rate and revenue assumptions. Detailed assumptions for preliminary costs and contingencies are outlined in Section 4.

Table 44: General model assumptions

Item	Parameter	Source
Timeline	Development period: 01 Jan 2022 to 31 July 2023	Assumption
	Construction period: 01 Aug 2023 to 30 Jul 2024	
	Operational period: 01 Aug 2024 to 30 Jul 2044 (20-year operational period)	
CPI	█% p.a.	Average of June 2021, 2022 and 2023 CPI forecast: Reserve

7.3 Pre risk adjusted financial outcomes

This section outlines the financial outcomes of the project, where forecast cash flows (excluding risk adjustment, depending on delivery model) is estimated for each project option. The project cash flow consists of the estimated capital and recurrent costs.

Assuming a discount rate of [REDACTED] % (10-year ACT government bond rate), the net present value (NPV) of project cash flow is shown in Table 45. The cash flow in present value terms for the first full year of operations (FY2026) is summarised in Table 46.

Table 45: NPV Project cash flows

NPV Project cash flows	Value (\$, Discounted)
Capital Costs	
Development and construction CAPEX	[REDACTED]
Major maintenance CAPEX	[REDACTED]
Recurrent Costs	[REDACTED]
NPV	[REDACTED]

Table 46: NPV cash flow for first full year of operations

NPV Cash flows for first full year of operations FY 2026	Value (\$, Discounted)
NPV	[REDACTED]

The following graph shows the net cashflow in nominal terms during the development and construction phase, and the operational period of 20 years. The development and construction phase occurs from FY2023 to FY2025. The increase in cash outflows in FY2033 results from major maintenance costs being incurred in that year.

Sensitivity	NPV Project cash flows
Operating costs -20%	██████████
Revenue +20%	██████████
Revenue -20%	██████████

7.3.1. Compost revenue

Compost products encompass a wide variety of applications, with different material blends, quality and price-points being acceptable in different applications. Compost itself can be produced to a variety of particle sizes, biological maturities and chemical and physical contamination levels. It can also be blended with inert materials such as sands and soils to vary the texture, and natural or synthetic fertilisers to change the nutrient content and chemical properties. Compost producers vary the quality and blending of their products to suit market demand. Product selection, finishing and marketing will remain at the discretion of the contractor, and will not be prescribed or controlled through the DCMO contracting arrangements. Market dynamics for compost-based products are characterised by:

- Non-linear elasticity between price and demand: Producers cannot necessarily generate significant additional demand by lowering prices.
- Trust-based supply chains: Given potential for variability between compost products, establishing reputation and trust within the supply chains is important for individual producers, particularly those targeting premium quality outlets. This has been done very successfully by some composters, including incumbent operators in the ACT.
- Immature potential markets in potential agricultural applications: It can be challenging to develop a new customer base in market segments where there is limited understanding of the expected compost benefits and the product characteristics needed to deliver them, or which have past experience with compost products which were not fit for purpose.

This combination of market dynamics and operator discretion means that there is uncertainty in the likely price-point and target markets for the recovered organic products based on household FOGO material. The approach within the business case is to adopt a highly conservative, but non-zero, value of ██████████ for compost revenue.

Table 49 summarises three distinct market segments for compost-based products, and the primary uses for compost products within each one. The volume, price, quality and physical specifications differ between specific uses, and composters typically produce multiple product grades targeting different outlets. Product which are sold in low volumes, such as bagged landscaping products for domestic gardens, command a higher price point per-tonne than bulk sales outlets, but provide a potentially more constrained volume outlet.

Canberra green waste composters and CRJO FOGO composting.	Self-haul retail price \$/m ³	\$/tonne based on an approximate compost density of 0.4 tonnes/m ³
Corkhill Bros organic compost/super compost	\$ 44	\$110
Canberra sand and gravel compost soil	\$ 46	\$115
Canberra sand and gravel Compost No. 5	\$ 48	\$120
Weilwun veggie mix	\$ 45	\$113
Weilwun organic fine compost	\$ 35	\$88
Weilwun organic coarse compost	\$ 25	\$ 63

As can be seen from Table 50, the [REDACTED]/tonne value adopted for compost revenue is highly conservative when compared to the incumbent operators in the urban amenity market in ACT and CRJO region. The market price achieved has the potential to be considerably more than [REDACTED]/tonne based on sales figures from other projects, but the ACT FOGO product would need to compete with established suppliers in the existing ACT urban amenity market, and it cannot be guaranteed that the full volume of FOGO compost product will be sold within that market and price range. The potential need to diversify into less urban amenity applications or agricultural markets, when specific local information is unavailable creates some uncertainty, and the revenue estimate has been reduced accordingly.

Tender proposals including an incumbent operator may be able to base their offer on a higher expected revenue due to existing supply chains and relationships which help to mitigate risk in this space. However, this has been discounted at the business case stage to provide a conservative overall assessment of project funding requirements.

Figure 15 shows the risk-adjusted cash flows in nominal terms.



Figure 15: DCMO Nominal risk-adjusted cash flows

The first full year of operations in the financial model is in FY2026. The following table shows the nominal cash inflows and outflows for that year. The nominal cost to government in the first full year of operations is \$ [REDACTED]

Table 52: Nominal costs in the first full year of operations

Nominal costs in first full year of operations (FY2026)	Value (\$, Nominal)
Risk-adjusted recurrent costs to government	[REDACTED]

7.5 Incremental Procurement/Transaction Costs

The illustrative private sector delivery model for this project, DCMO, requires significant government effort during the procurement period. Given that the terms of the awarded contract will be relatively fixed for the entire operational period under DCMO, it is important that the Government fully understands the risks and potential costs, and associated contract structure. To do so, it is likely that legal, technical, and commercial advisors will be required during procurement. The procurement and transaction costs included in the project costs are detailed in Section 4.2.1.

7.6 Public Sector Comparator vs. DCMO



Figure 16: Financial Analysis

7.7 Review 4 (Treasury): Financial (PPP/DCMO only)

☐ Not applicable

Treasury to sign off that the financial analysis has been prepared by an appropriately skilled advisor (IFCW Panel) and that there are no unacceptable assumptions in the analysis (only applicable for PPP/DCMO delivery models).

Review 4 (Treasury) Officer Name: _____

Signature: _____

Date: _____

- *This is the second review point for Treasury and is an assessment of the financial estimate calculations for PPP and DCMO models.*

Disclaimer: *This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

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Stakeholder	Interest and Role	
	Provides input to the Steering Committee where required.	
Advisors	Engaged on an as required basis.	Relevant advisors –
	Provide specialised/technical input to the Steering Committee where required.	ACT NoWaste External consultancy – Arup Australia Pty Ltd Current Green Waste processor for Trial Data WorkSafe, ACT ESA and ACT EPA and EPSDD MPC / TCCS ID Any other External SMEs identified and required to deliver the project.
Project Control Group		
Project team	Made up of officers from both the Requesting Directorate and PCW. Team members will ideally have subject matter, project management and contracts management experience.	Project Director – ACT NoWaste, TCCS
	Responsible for: - Develop positions on a range of policy, commercial and administrative matters to be considered by the steering committee. - Manage the advisors to ensure satisfactory performance, deliverables are achieved. - Manage the competitive bid process. - Manage stakeholder relations and community consultation. - Provide advice and assistance to the evaluation committee on its assessment of expressions of interest and binding bids. - Manage contract administration - Monitor project programme - Progress invoices & maintain budgets	Project Manager, Infrastructure Delivery, TCCS Senior Project Officer, MPC

Figure 17: FOGO Governance Structure

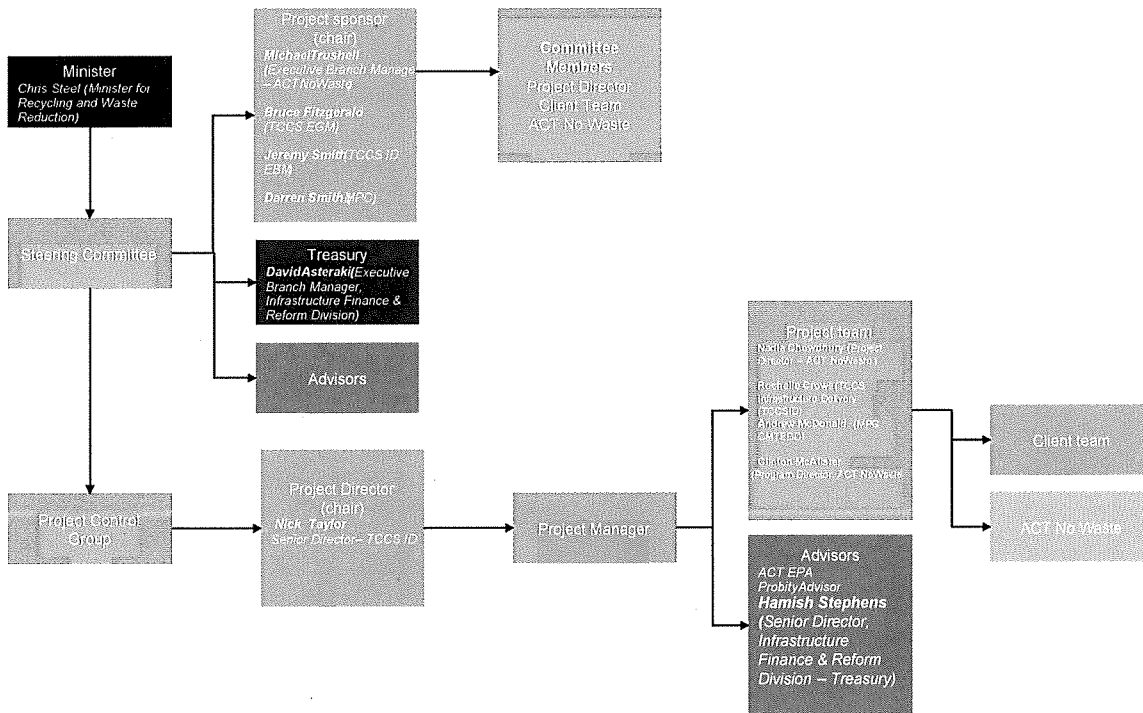


Table 55: Stakeholder identification and consultation

Stakeholder	Impact and interest on the project	Consultation to date	Planned consultation
ACT NoWaste	Project Sponsor	-	-
ACT Treasury	Manages the process through which of capital works funding proposals in the ACT are assessed.	Engagement in each of the Directions Paper, Feasibility Study and Business Case stages of the project, particularly in respect of delivery model selection. Treasury has had a key role in the development of the funding and delivery model selection, attending the risk and delivery model workshop.	Ongoing engagement and consultation throughout the business case process, and final approval of the budget for project delivery. Treasury will also review and approve the business case for the consolidated waste collection services contract, including FOGO collection. This is a separate contract and business case, but both the collection and processing of FOGO material are interdependent and essential to the overall resource recovery objective.
Major Projects Canberra (MPC)	Leads the procurement and delivery of the Territory's infrastructure program in partnership with	Participation in various workshops during the Directions Paper, Feasibility Study and Business Case stages of the project.	MPC will lead the procurement and delivery of the FOGO infrastructure project, including development of tender and contract document, tender evaluation and project oversight during the design and construction phases.

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Stakeholder	Impact and interest on the project	Consultation to date	Planned consultation
Potential bidders	Potential delivery partners to the Territory	Informal / soft market sounding to ascertain market appetite; available technology; risks; preferred delivery models. Findings were anonymised and incorporated into the FOGO Feasibility Study.	Invitation to bid in accordance with the procurement guidelines.
Local community	Key stakeholders in the success of the FOGO facility. Community education and engagement is essential to ensure volumes and quality of feedstock.	Market surveys and engagement to understand broader level of food waste and interest in composting.	Education and engagement prior to rolling out the FOGO facility. Education and engagement are included in the waste collection business case and will be delivered using a combination of in-house ACT resource and contractor resources under the waste collection contract. Education engagement will take place at the end of 2021 prior the FOGO trial and will be refined and expanded prior to full rollout of the service across the ACT, including incorporation of specific advice or requirements from the selected FOGO processing provider.
Special interest groups	These are the community groups that will be included in the community reference group. They are likely to be	None.	Community consultation workshops to understand community views towards the delivery of the facility.

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Stakeholder	Impact and interest on the project	Consultation to date	Planned consultation
	have a directed working relationship. However, these services will be provided under separate contracts with the ACT Government, and the ACT Government remains responsible for managing the interface between waste collections and waste processing.		FOGO service provision will be explored and the interface between collections and processing will be established.
Indigenous communities	Recognition that the currently proposed site may have cultural significance.	None. The EIS scoping process did not identify any aboriginal cultural heritage values associated with the preferred site.	General community consultation and education materials and distribution will be developed to ensure they are inclusive and accessible across demographics and cultural groups in the ACT, including indigenous communities.
Procurement ACT	Procurement ACT supports the delivery of many capital works projects in the ACT.	Not engaged. ACT NoWaste has engaged with Major Projects Canberra (MPC), as MPC will be the agency supporting delivery of the FOGO infrastructure project.	None. MPC will be the agency supporting delivery of the FOGO infrastructure project.

10. Advisor Engagement Plan

10.1 Proposed Advisors Roles

10.1.1. Legal

Given the complexity of a DCMO, it will be critical that the ACT receives robust legal representation.

Subject to the final selected delivery and procurement model, the ACT will require a legal adviser to review, draft and advise the Territory in relation to the following documentation and process:

1. commercial DCMO term sheet to accompany Request for Proposal ("RFP") documents;
2. Project-specific DCMO Contract, including the functional specification requirements for the Project to accompany Request for Tender ("RFT") documents. Note the functional specification will be created by the technical advisors;
3. Any related side deeds relating to the Project and/or DCMO Contract;
4. summary sheets for all contracts.
5. invitation letter and instructions to Bidders, to be prepared in conjunction with the ACT and its advisors.
6. discussion with the ACT and its financial/commercial and technical advisers to incorporate comments on the documents prior to release to the Bidders.

It is beneficial if advisors with experience in both complex infrastructure delivery and the waste market are utilised.

The legal adviser will need to ensure it is familiar with, complies with and incorporates into its advice all Territory probity requirements, as well as Treasury and budgetary cycle requirements and processes.

10.1.2. Commercial Procurement

As the recommended Delivery Model is a DCMO, a Commercial Procurement Advisor will be required. Arup will be the Commercial Procurement Advisor alongside Sphere Infrastructure Partners. Additionally, Major Projects Canberra will be a key advisor to ACT NoWaste.

10.1.3. Commercial Financial

As the recommended Delivery Model is a DCMO, a Commercial Financial Advisor will be required. Arup will be the Commercial Procurement Advisor alongside Sphere Infrastructure Partners.

10.1.4. Technical Design & Engineering

A Technical Design and Engineering Advisor will be required for the detailed design stage of this project. Arup are the confirmed and appointed specialist technical advisors.

11. Timeline

11.1 Project Timetable

11.1.1. Outline

The project timeline is broken down into seven key steps, summarised in the table below for the delivery of the FOGO facility through a DCMO Delivery Model. A detailed Project Programme is included in Appendix F.

The proposed timeline is tight and requires the timely completion of key activities and careful and efficient management of various interfacing work streams, such as internal ACT Government approvals of the business case and budget. The timeline proposes the shortest possible timeline for delivery of the facility, with little to no float for resolving any issues around design and construction.

Table 56: Project Timeline (DCMO)

Stage	Key Activities	Timeframe	Notes
Business Case Finalisation	Business Case Finalisation Internal Review of Business Case (ACT NoWaste and Treasury) Cabinet Review Process Approvals - Budget estimates, including allocation for FOGO procurement Further assessment and approvals on delivery model decision based on market sounding outcomes	Q2 2021 – Q3 2023 (9 months)	
Procurement Process	Engage Legal Advisors Preparing RFP request and evaluation criteria RFP application preparation time for bidders(s) RFP Response Period	Q1 2022 – Q1 2023 (13 months)	

	EIS Preparation and submission to EPSDD Public Consultation Response to submission & Update EIS Approval from EPSDD		
Development Application	Approved EIS to be submitted with DA	Q2 2023 – Q3 2023 (2 months)	As above.
Design (by selected bidder)	Detailed Design Approvals (Planning, Environmental etc.)	Q1 2023 – Q3 2023 (6 months)	6 months has been allocated to detailed design, which must be reviewed at tender assessment stage.
Community Education	Community Education prior to operations	Q3 2023 – Q3 2024 (11 months)	
Construction and Commissioning (by selected bidder)	Construction Testing, commissioning, and handover	Q3 2023 – Q3 2024 (11 months)	11 months is allowed for construction, which may require early procurement of key plant and equipment to realise. No allowance has been made for delays to delivery or international supply constraints.

11.1.2. Proposed float

There has been no float allowed for in the development of the timeline to achieve operations by end of 2024. As such, the following issues will need to be addressed:

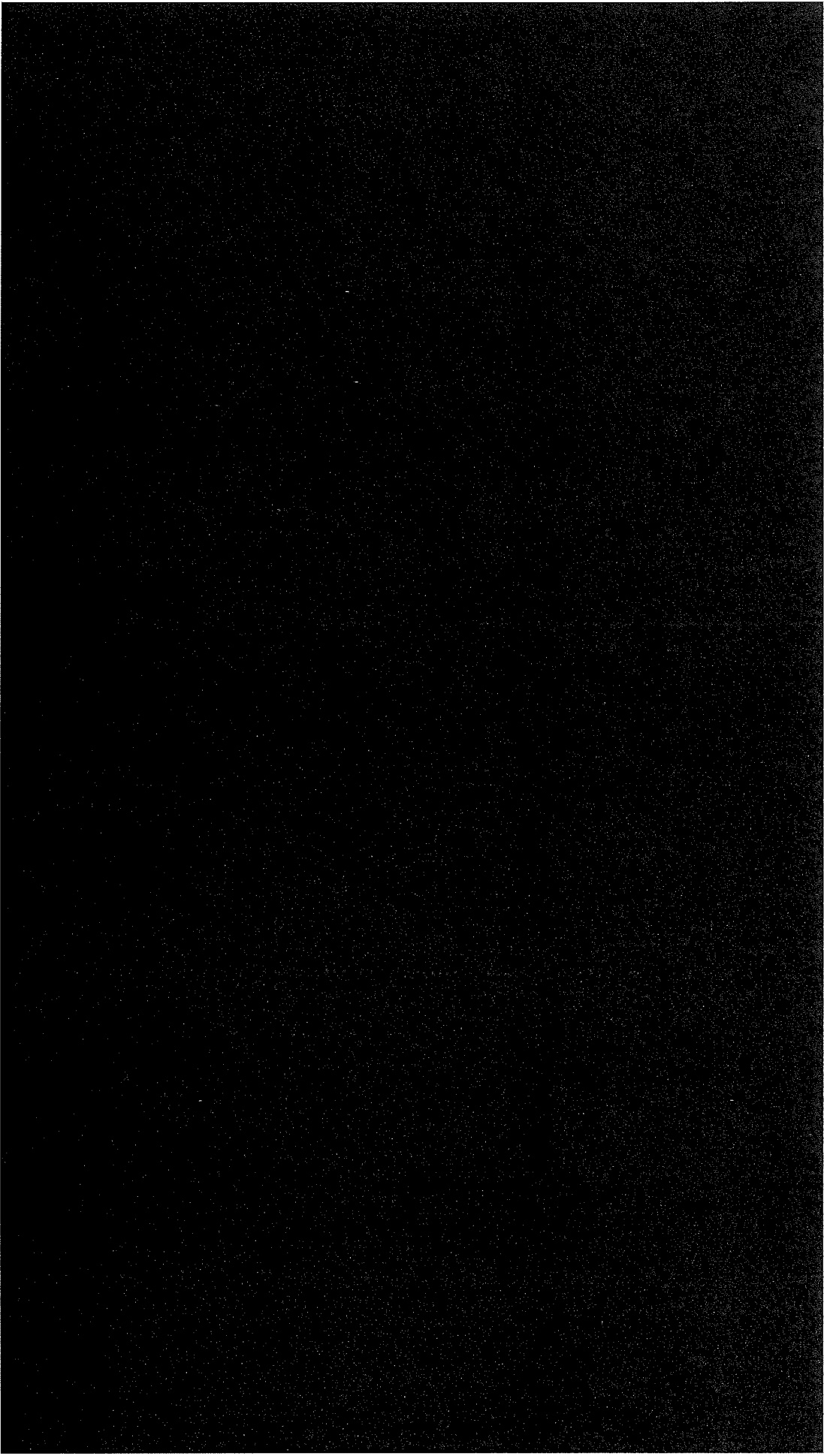
- Timely review of contracts for preferred bidder. No allowance has been made for extended legal negotiations that may occur.
- The EIS process relies upon the overlap of permitting and of development of detailed design. This itself may precipitate late design changes and late stage permit modification. It is assumed that these changes will be minor and can be processed by EPSDD in a timely manner.

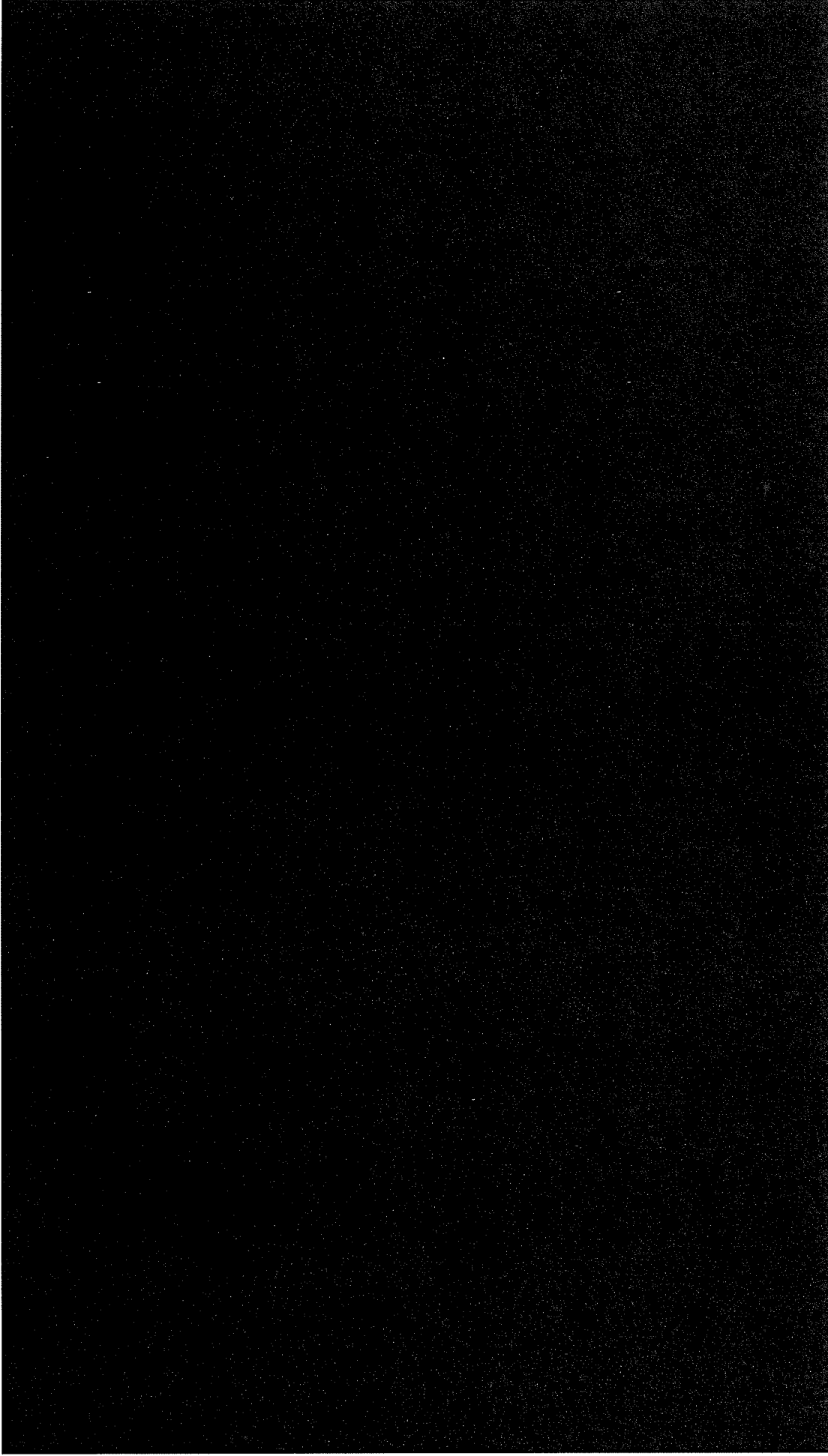
12. Appendices

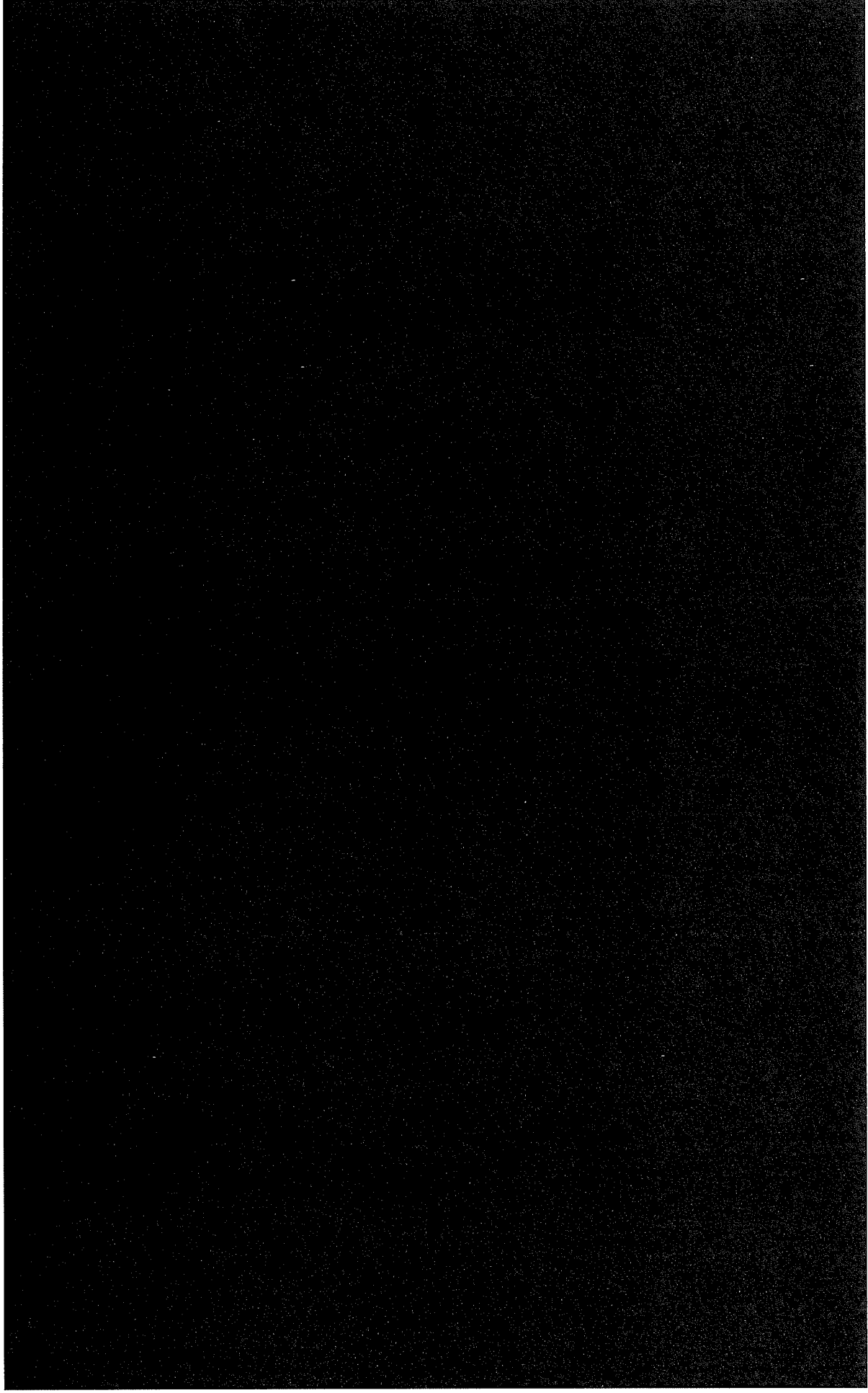
12.1 Appendix A – Functional Brief / Output Specification

The Functional Brief/Output Specification is to be provided by Major Projects Canberra as part of the Procurement Strategy. This will summarise the needs and outcomes that ACT NoWaste is seeking to achieve from the project to assist in the achieving successful outcomes.

12.3 Appendix C – Risk Register

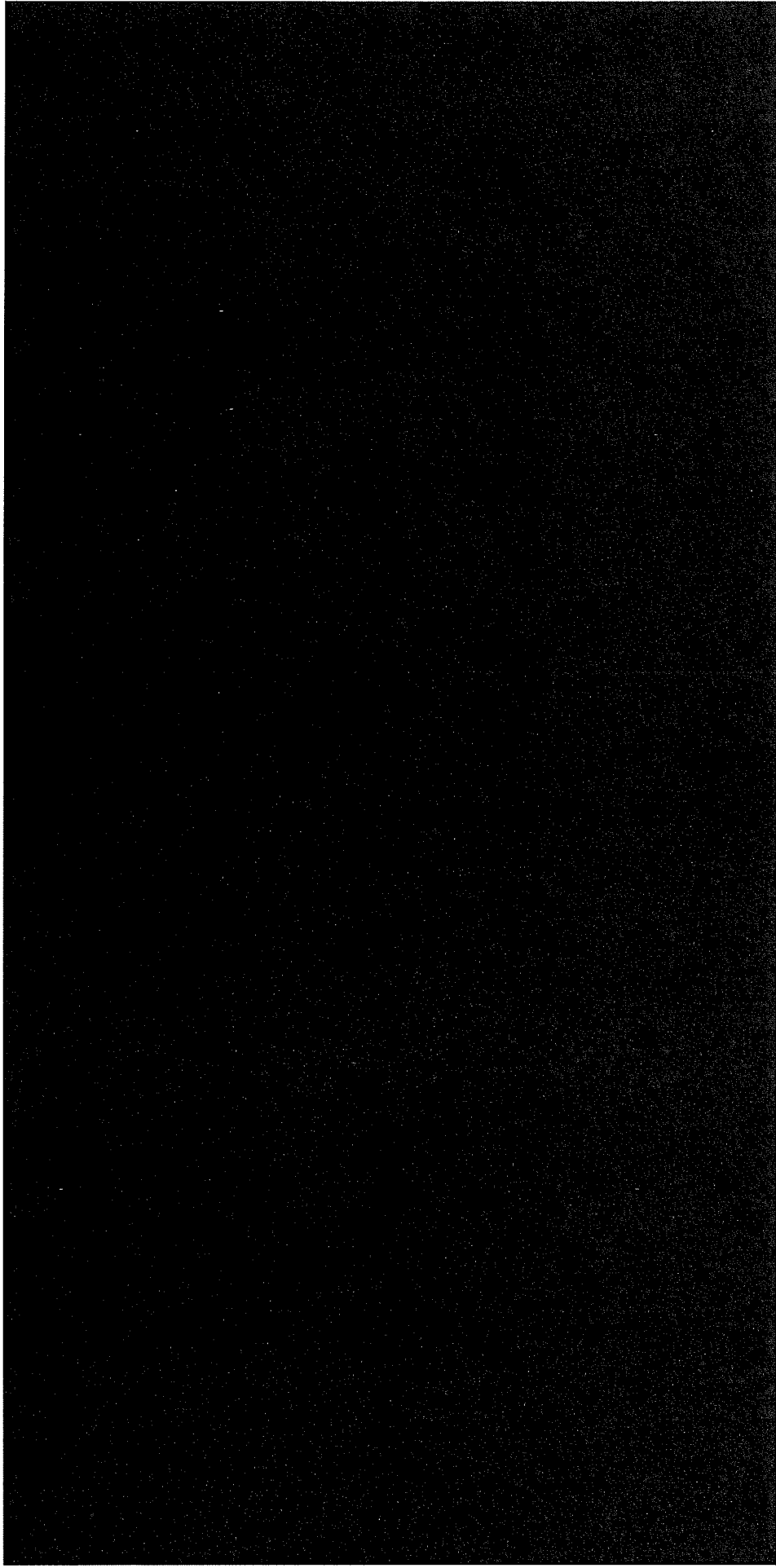


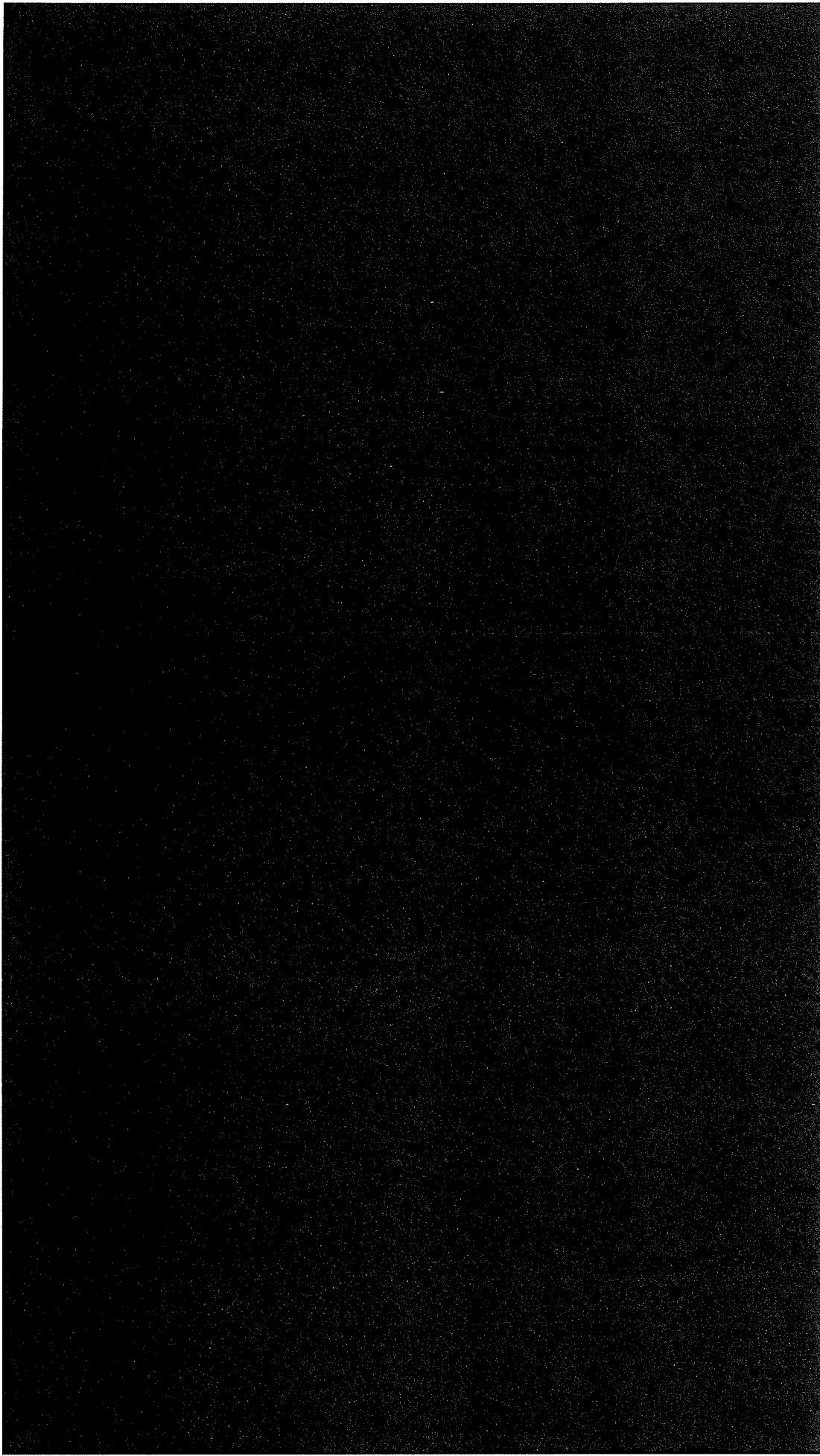


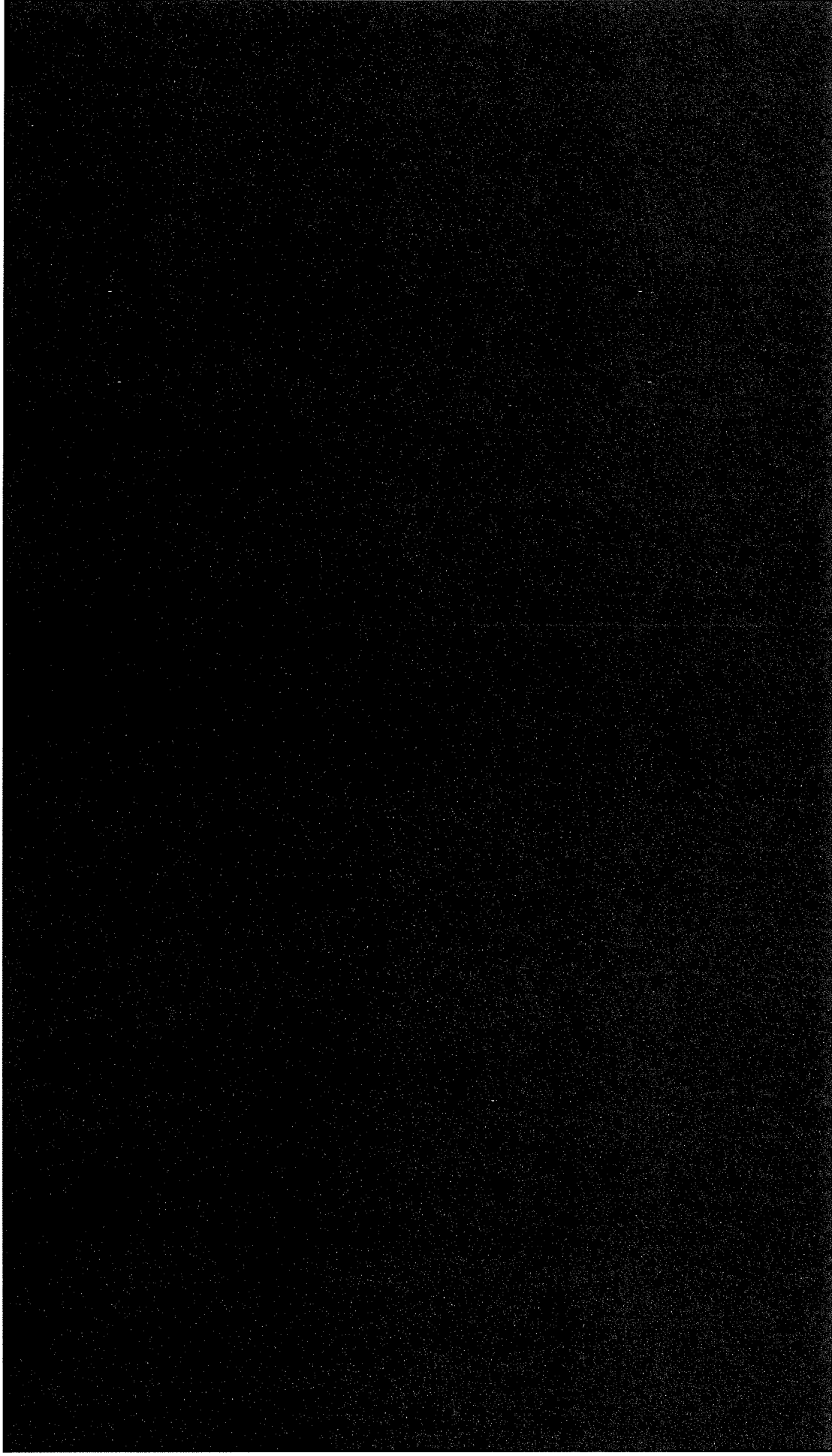


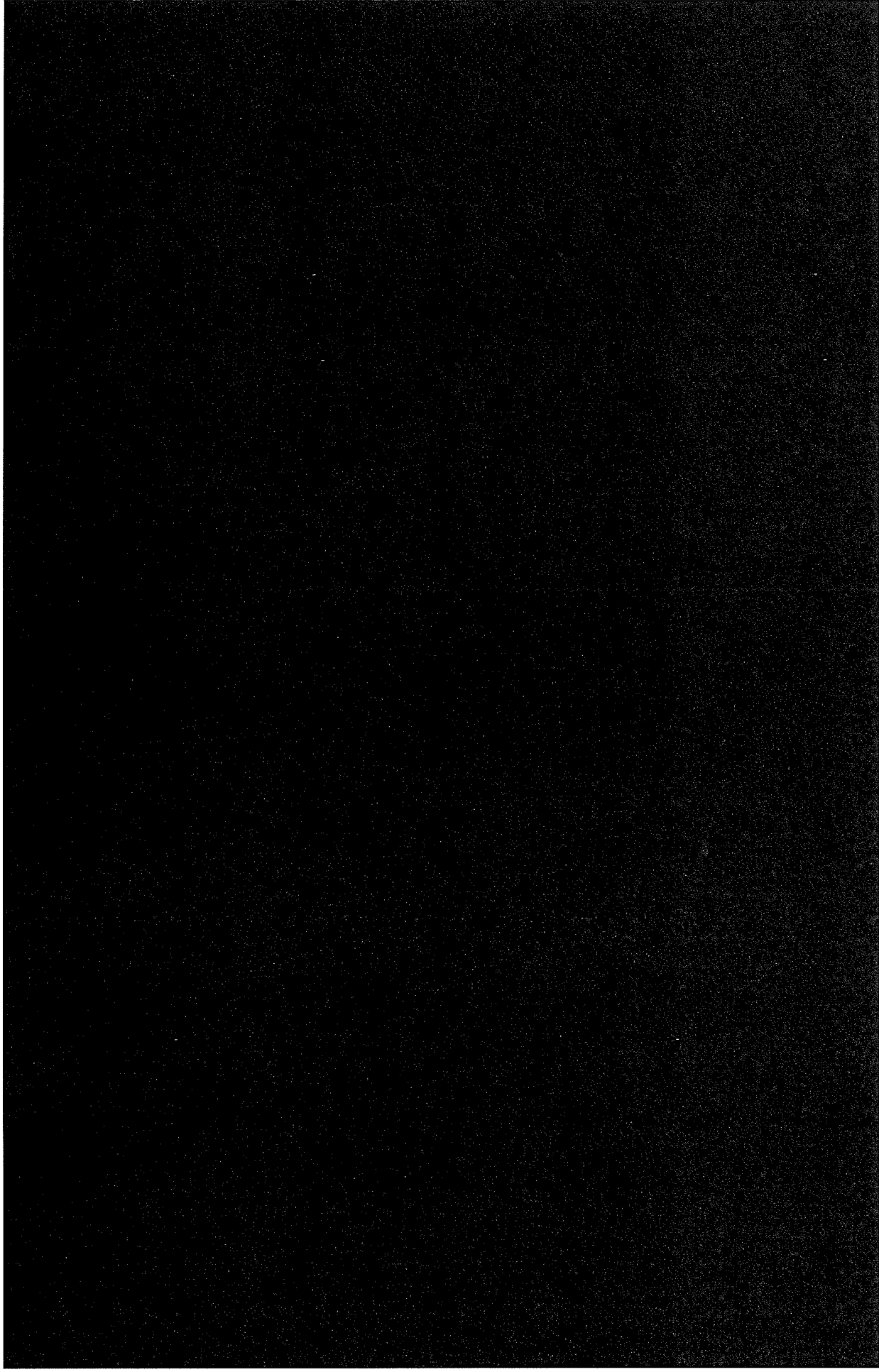
12.4 Appendix D – Project Programme

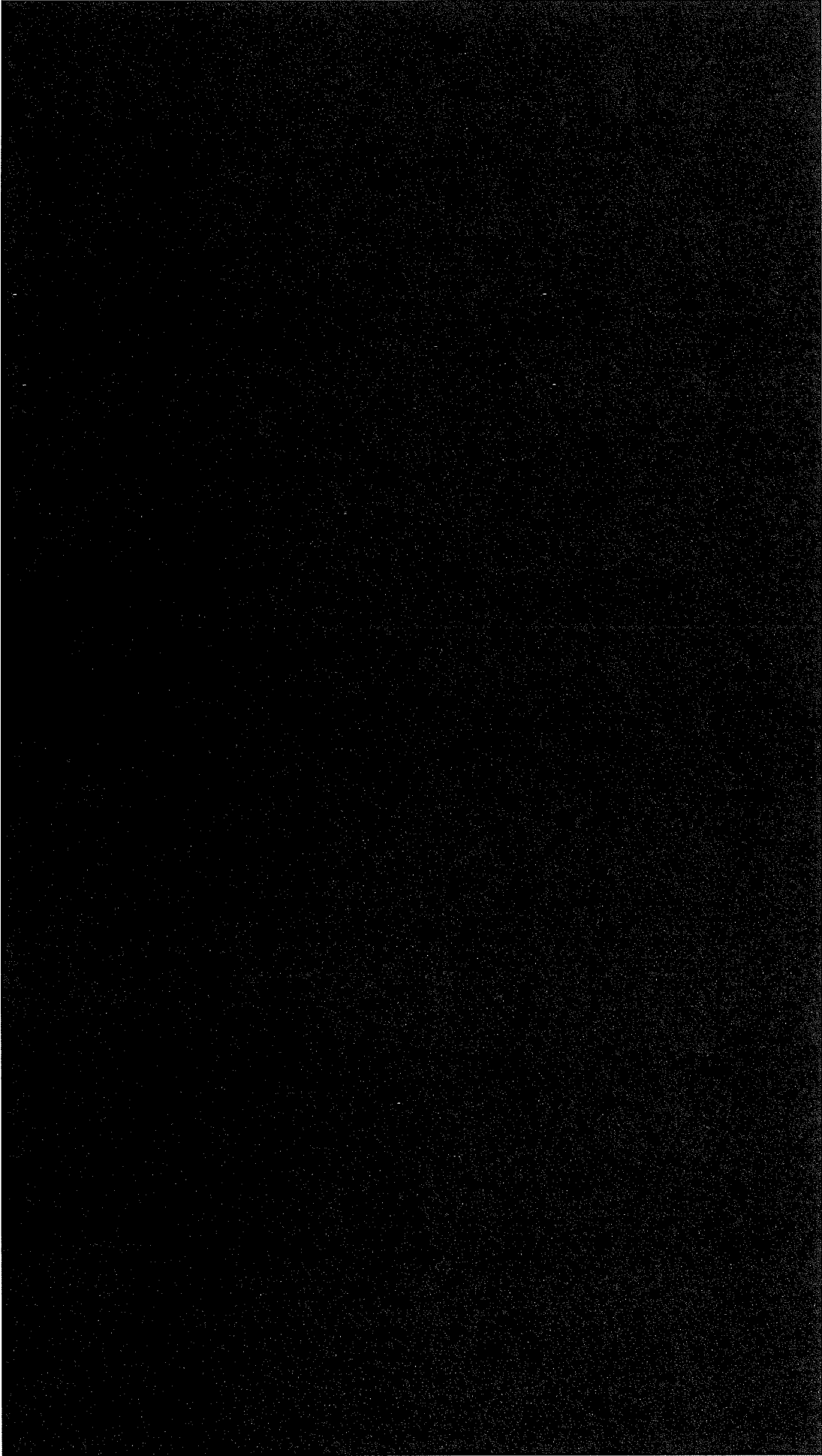
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Stakeholder	Impact and interest on the project	Consultation to date	Method of Consultation	Planned consultation	Method of Consultation
Major Projects Canberra (MPC)	Leads the procurement and delivery of the Territory's infrastructure program in partnership with other directorates. They typically are designated projects that have significant complexity and scale.	Participation in various workshops during the Directions Paper, Feasibility Study and Business Case stages of the project. They were involved with several workshops such as the Risk Workshop and the entire process of developing the Business Case. They have also been engaged about the upcoming procurement of the project.	Consultation and Workshops	MPC will lead the procurement and delivery of the FOGO infrastructure project, including development of tender and contract document, tender evaluation and project oversight during the design and construction phases.	Consultation and Workshops

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Stakeholder	Impact and interest on the project	Consultation to date	Method of Consultation	Planned consultation	Method of Consultation
Local community	Key stakeholders in the success of the FOGO facility. Community education and engagement is essential to ensure volumes and quality of feedstock. The local community is likely to benefit most from the project, particularly as this proposal is in response to community concerns.	Market surveys and engagement to understand broader level of food waste and interest in composting.		Education and engagement prior to rolling out the FOGO facility. Education and engagement are included in the waste collection business case and will be delivered using a combination of in-house ACT resource and contractor resources under the waste collection contract. Education engagement will take place at the end of 2021 prior the FOGO trial and will be refined and expanded prior to full rollout of the service across the ACT, including incorporation of specific advice or requirements from the selected FOGO processing provider.	Media Campaigns and Information Sessions

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Collections contractor(s)	Waste collection is a key point of control for identifying sources of contamination and rejecting unacceptably contaminated loads to protect the overall quality of the recovered FOGO product. Once operational, the FOGO processing facility and FOGO collection service will have a directed working relationship. However, these services will be provided under separate contracts with the ACT Government, and the ACT Government remains responsible for managing the interface between waste collections and waste processing.	The Territory has commenced services for a FOGO pilot in November 2021. A proportion of the households in the pilot area have shared waste onsite collection arrangements. Information and data gathered from FOGO pilot will inform the city-wide roll out of FOGO collections to households. Consultation with local government councils, authorities and related government agencies has focused on the service model for the future FOGO collections, which is currently being tested in the pilot.	The current waste collection services contract is expiring in October 2023. A service provider for all household waste collection, including FOGO, will be confirmed through a tender process and collection services under the new contract will commence in October 2023. The Territory will be engaging the market through a first stage, Request for Information, process to understand the market's capacity to deliver FOGO collections within the Territory's context. The second stage procurement process will include requirements for FOGO collection, and the tender assessment and negotiation stage may include direct discussion with tenderers on FOGO-related topics. Tenderers may be required to propose contractual relationships and frameworks to effectively interface with processors. Once a preferred tenderer has been	Request for Information issued in late 2021.
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12.7 Appendix G – Case Studies

Case study: Bunbury-Harvey Regional Council WA²⁹

Population

Approximately 46,000 people across 7 local government areas.

The Bunbury-Harvey Regional Council (BHRC) owns and operates two waste processing sites serving seven local councils. These sites are the Stanley Road Waste Management Facility, which has a transfer station and a landfill, and the Wellington Regional Organics Processing Facility at Banksia Road, which is 20km away in the Shire of Dardanup. The seven local councils remain responsible for collection services, including deciding when and how to introduce FOGO.

FOGO program introduced

First adopted in 2013 by the City of Bunbury and the Shire of Capel. Other local councils have moved to FOGO over time, with 7 councils participating in 2019.

Tonnes of FOGO

18,000 in 2019. Facility is experiencing some operational pressures as it approaches its 20,000tpa licence limit.

FOGO processing technology

Open windrow processing with a mobile aerated floor system, and periodic turning of the piles to achieve uniform composting.

BHRC are constructing a new in-vessel composting system at their Stanley Road Waste Management Facility which will allow them to process higher tonnages and have secure land tenure for their organics processing. The IVC has been approved for 35,000tpa initial operating capacity, and designed to support future expansion up to 50,000tpa.

Contamination rates and decontamination

The average contamination rate is 2.4%. Contamination rates vary between councils, with three of the participating councils achieving contamination rates below 2%. Under the feedstock supply agreement, councils are obliged to pay a penalty if they exceed 5% contamination. This has not yet happened, and BHRC lets councils know when their contaminations rates are rising towards 5% so that they can reinforce education messages.

The site recently trialled manual decontamination of FOGO prior to composting. This is done by manual picking from loads tipped and spread on hardstand, before moving the decontaminated FOGO to the composting piles. BHRC are happy with the improvement in compost quality as a result of introducing this manual decontamination stage, but it is not a long-term sustainable approach. The design for the new IVC facility includes a conveyer system with manual picking.

BHRC emphasised that this is an unpleasant job, and they rotate it between different operational teams. BHRC have also gathered photos and footage of the decontamination process for councils to

²⁹ <https://www.wasteauthority.wa.gov.au/programs/view/online-fogo-sessions>

the organic certification as important to their brand and marketing. They also see organic farming as a growth area, particularly in viticulture, and they intend to continue with the organic certification.

Case study: Tweed Shire Council, NSW

Population

FOGO service provided to approximately 60,000 people in the region. Total population approximately 100,000 people.³⁰

FOGO bins are provided to all single-unit dwellings in the Tweed urban area. Multi-unit dwelling and businesses can opt into the FOGO service for an additional fee.

FOGO program introduced

1 July 2017

Tonnes of FOGO

12,258 tonnes in 2018/19.

FOGO processing technology

FOGO collections are currently bulked at the council transfer station and transported 80km to Phoenix Power Recyclers in Queensland. Phoenix Power Recyclers is a commercial composting operation using predominantly open windrow composting. An in-vessel composting facility was constructed at the site and commissioned in 2019, to increase the quantities of commercial liquid waste and food waste that the site can accept.

In 2019, Tweed Shire Council conducted a competitive tender process and selected SoilCo to construct an in-vessel composting facility at the council's Stott's Creek Waste and Resource Recovery precinct, adjacent to the council-owned landfill. The facility will be delivered under a design-build-own-operate-transfer model and expected to be operational by 2022.³¹

The new FOGO in-vessel composting facility will have capacity to process up to 21,000tpa of FOGO material, and will also have flexibility to accept commercial food and organic wastes.

Contamination rates

Tweed Shire Council recorded a 4% contamination rate in 2018. This is somewhat higher than typical contamination rates for FOG in NSW but was acceptable to their processor. The Council is continuing to work on education and engagement to reduce the contamination rate over time.

Bin auditing and tagging found that 82% of green bins were being used correctly. Tweed is conducting ongoing bin inspections 3 days per week. A video of a waste collection truck using an onboard camera to view the contents of a bin and spot contamination was the most-viewed post on the council's social media channels, with around 9,000 views. Waste collection drivers reported 2,944 contaminated bins, helping the council to identify contamination hotspots. A targeted

³⁰ <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wastestrategy/20p2373-appendix-waste-resource-recovery-report-2108-19.xlsx?la=en&hash=FDCE65DFA69AA7BD854471429BB39E09F9FCFA72>

³¹ <https://wastemanagementreview.com.au/compost-by-the-river-soilco/>

The Bega Valley Shire Council achieves one of the lowest contamination rates in Australia, averaging just 0.4% over their first year. This does not mean that contamination issues never arise. However, their operations still include feedstock decontamination. Feedstock is spread using a wheeled loader, and two staff carry out manual picking before the material is transferred to the composting windrows.³⁵ The council would also like to purchase a wind-sifter for their site, to help remove small pieces of plastic from the compost, as plastic contamination sometimes makes a batch unsaleable.³⁶ Another example of contamination challenge was a complaint received in 2020 about glass shards in a load used on a family garden.³⁷

However, the service is generally operating well because residents have a strong understanding of the connection between their waste separation at home and the compost used in their parks and gardens, and this clear link helps to keep issues to a manageable level.

Compost outlets and experience

Composting is sold back to residents through each of the council's transfer stations. This has been well received, with compost supplies running out at sometimes of year. The council also uses the compost directly on its parks and gardens. The council is continuously building up the experience of its operational staff, with technical support from the technology provider of the aerated floor system. For example, in 2019 the site experienced some issues with balancing maturation time and compost supply. Some "young" batches of compost were released for sale when mature supplies ran out. However, these proved too immature and some gardeners reported issues with fluctuating pH and plant growth. As a result, Bega Valley increased their maturation time, meaning that compost was not available for a period of a couple of months. This is a typical example of the trade-off between processing time and product quality which all composting operations need to balance.³⁸

Spotlight on education and engagement

Bega Valley Shire Council focused on community education and engagement in the lead-up to the FOGO rollout, supported by two grants from the NSW EPA, totalling \$671,000 to cover the costs of caddies, community engagement and food waste avoidance activities. The council contributed its own funding to cover the cost of compostable liners and three temporary jobs in the FOGO education and rollout team.³⁹

The council explained the incoming FOGO system to residents using a range of media platforms and physical mailouts. The council also produced a "FOGOmentary" video starring school children and ABC Gardening TV personality Costa Georgiadis which was launched at a gala event shortly before the FOGO service commenced and shared on various local media and social media platforms. The area has a high tourist population during summer holidays, so the council also worked with holiday accommodation providers to limit contamination during the tourist season. Education for this

³⁵ <https://begavalley.nsw.gov.au/page.asp?f=RES-VFF-86-71-52>

³⁶ <https://begavalley.nsw.gov.au/page.asp?f=RES-VFF-86-71-52>

³⁷ <https://www.begadistrictnews.com.au/story/6858511/glass-shards-found-in-fogo-compost-after-spreading-on-family-lawn/>

³⁸ https://begavalley.nsw.gov.au/cp_themes/default/page.asp?p=DOC-CML-68-53-24

³⁹ <https://begavalley.nsw.gov.au/page.asp?f=RES-VFF-86-71-52>

Compost is sold back to residents and is available for collection from the Cooma landfill site.⁴⁷

Compost from the Snowy-Monaro FOGO service has also been used in an NSW EPA-funded trial demonstrating the benefits of compost in improving pasture for grazing. Controlled trials were conducted at two grazing properties with granite and basalt soils in the Cooma-Canberra corridor. The trials found that applying compost helped desirable cattle fodder plants to grow better, and reduced the pasture weed African Lovegrass by around 50% compare to the control areas. Compost supported the growth of feed crops by increases soils carbon and nutrient levels in forms which are readily available to plants. The trial results predict that within 5 years, improved pasture productivity could eliminate the need to purchase stock feed in winter.

Case study: City of Sydney food waste collection trial in MUDs

Population

Trial currently involved 88 actively participating MUDs buildings, with a further 11 approved but not yet commenced collections. The largest participating complex includes 810 dwellings across 17 buildings, within a single development. The total CoS LGA has around 2000 MUD buildings. Extension of the service to all MUDs is envisioned under the CoS 2030 plan.⁴⁸

Food waste trial introduced

2019

Food waste processing technology and contamination

Food waste is sent for anaerobic digestion at the Earthpower facility in Camellia. The food organics from CoS are a very small component of overall feedstock for that existing facility. Arup also consulted with the Earthpower operator, who was very satisfied with the quality and composition of the waste from the CoS trial. No contamination issues have been experienced to date.

Rollout and engagement

Arup consulted directly with the City of Sydney, which is currently trailing an opt-in food organics collection service for both detached houses and multi-unit dwellings. This service achieves excellent performance with respect to contamination, as confirmed by the food waste processor, Earthpower. The City of Sydney acknowledged that the opt-in format means that all households participating in the scheme must demonstrate some active interest, which supports good engagement and low contamination. The City of Sydney trial experience also noted:

- Engagement with each participating MUD building to gain support from the strata committee and the building manager and ensure that FOGO bins can be installed and managed effectively within the existing building systems.
- On-line and in-person sign-up campaigns for each building, achieving an opt-in rate of about 40% among residents in participating buildings.

⁴⁷ https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wastegrants/18p0747_snowymonaro-cooma-fogo-case-study.pdf

⁴⁸ <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wastegrants/18p0694-monaro-lovegrass-case-study.pdf>

Infrastructure and service format preferences

England has steadily reduced household waste to landfill since 2001. Between 2001 and 2010, greater recycling and composting drove this improvement, and the UK now has significant depth of experience in organics recovery infrastructure.⁴⁹

The waste infrastructure mixes initially included MBT facilities to extract organics from mixed residual waste. However, over the last decade there has been a strong shift away from MBT facilities and towards source segregation of food and garden organics from composting and anaerobic digestion. This has included repurposing of buildings and mechanical components of MBT facilities to transition to source separated organics.

It is common in the UK for garden waste to be collected separately from food waste. This is motivated in part by the fact that local authorities are not allowed to impose a direct charge on households for collection of residual waste, including food waste. However, garden waste can be charged separately, which drove the early introduction of separate garden waste collections. A fourth collection stream for food waste was introduced later in many areas, as MBT treatment of mixed residual waste became unacceptable.

Garden waste is predominantly directed to open windrow composting. Food waste is directed either to wet anaerobic digestion, which is well established in the UK due to renewable energy subsidies, or to in-vessel composting, where it is mixed with other wastes to achieve a suitable bulk density and carbon: nitrogen ratio for composting.

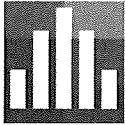
Infrastructure procurement

The Public Financing Initiative (PFI) was set up in the early 1990's to provide private financing for a range of public infrastructure, and later adjusted and renamed to Public-Private Partnerships (PPP). It was used heavily for waste infrastructure between roughly 2000-2010. PFI/PPP financing was a solution to tight restrictions on capital expenditure by local governments. The private sector provided the capital for infrastructure works, and this was translated into recurrent payments from the government reflective of the capital investment, cost of borrowing, and a margin covering profit and risk for the infrastructure provider. These recurrent payments were seen as easier to for local governments to manage. However, over the last decade there has been a shift away from this delivery model, including a general view that it has not necessarily offered value for money for waste infrastructure in the UK. There have been various instances of local governments faced with budgetary pressures acting on financial advice to pay for an early exit from PFI contracts. In some cases, the early exit agreement has also been initiated by the contractor. This comes in the context of a general shift back towards local governments directly delivering a wider range of services, including waste collections and some waste processing.

⁴⁹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/710124/Digest_of_Waste_and_Resource_Statistics_2018.pdf

Opex

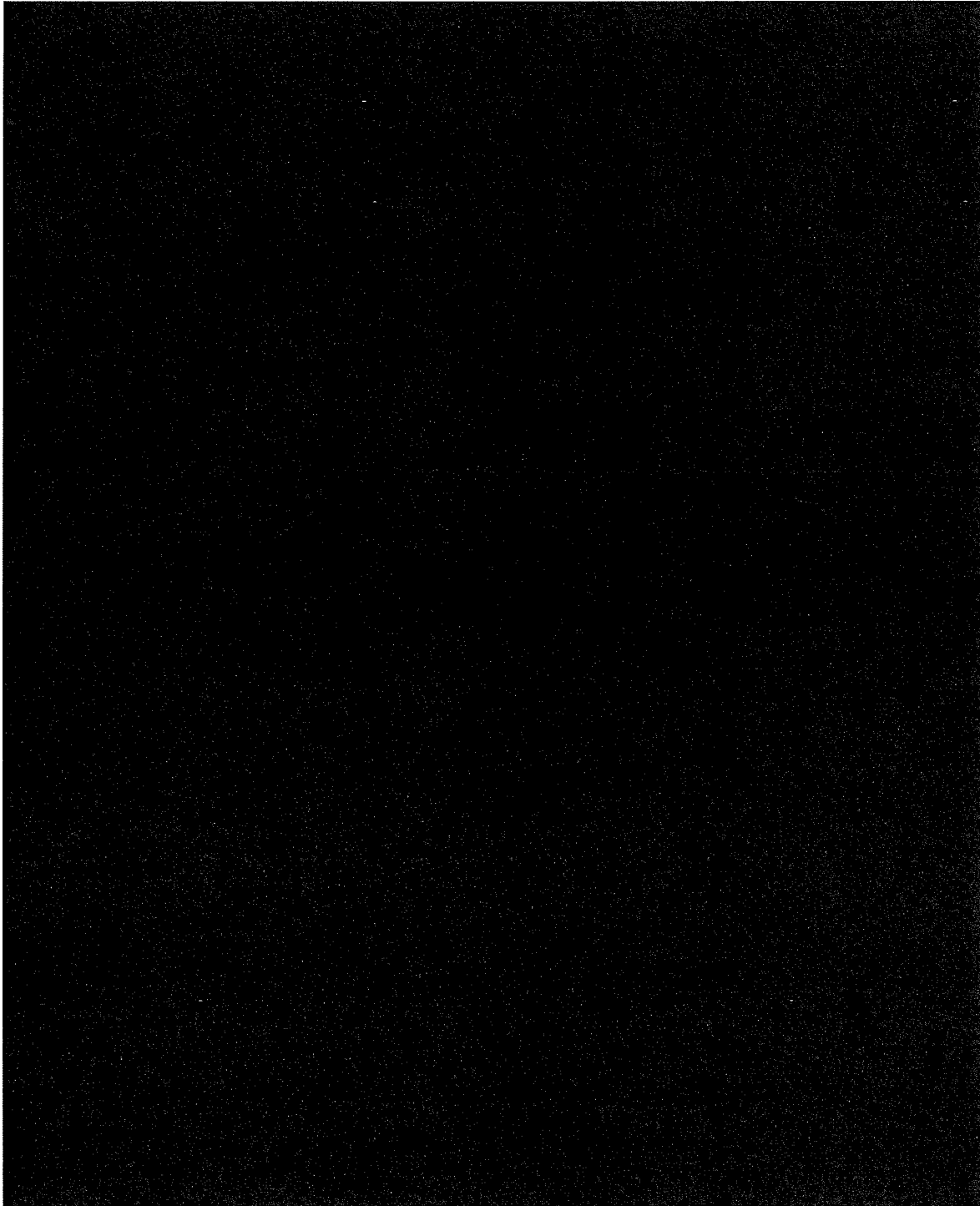


Total opex risk - 'Modelling opex'!AP9

Report: Compact Output Report

Performed By: Miles.Miranda

Date: Tuesday, 18 May 2021



12.9 Appendix J – Delivery Model Shortlisting

- The long list of delivery models considered for delivery of the FOGO facility are shown in the table below. These have been based on the ACT Government Capital Framework, Draft Delivery Model Analysis Guidelines, and grouped into the following four categories. Group 1: User Charge PPP, Availability PPP, DCMO
- Group 2: MC, Alliance, ECI, Delivery Partner
- Group 3: D&C, DCM
- Group 4: PMA, D then C, CM

Table 58: Delivery Model groupings

Delivery model type	Specific Models
1. User Charge PPP, Availability PPP, DCMO	• Design Construct Maintain Operate • Availability PPP • User Charge PPP
2. MC, Alliance, ECI, Delivery Partner	• Managing Contractor • Alliance • Early Contract Involvement • Delivery Partner
3. D&C, DCM	• Design & Construct • Design, Construct, Maintain (Long term)
4. PMA, D then C, CM	• Design then Construction • Document & Construction • Design, Construct, Maintain (Short term) • Project Management Agreement • Construction Management

These four groups have been used to shortlist Delivery Models, based on a range of key criteria. The short-listing process aimed to assess the appropriateness of each model in relation to the project in terms of scale, scope, risk and whole-of-life service opportunities.

The approach used is summarised in Table 59 below.

Table 59: Delivery Model Shortlist Checklist

Issue	Project Details	Group 1	Group 2	Group 3	Group 4
Scale					
Is the project value over \$100 million?	No	✓	✓	✓	✗
Is the project value under \$50 million?	Yes	✗	✗	✓	✓
Are there substantial lifecycle costs?	Yes	✓	✗	✗	✗

to a minimum amount of organic waste to be processed by the facility, with gate fees to be payable on the basis of the higher of actual throughput or minimum agreed tonnage.

Delivery Model Shortlist

- Design Construct Maintain Operate
- User Charge PPP
- Design & Construct
- Design, Construct, Maintain (Long term)
- Design then Construction
- Document & Construction
- Design, Construct, Maintain (Short term)
- Project Management Agreement
- Construction Management

Validation

To validate the delivery model selection, market sounding and benchmarking to other projects was completed as part of the Feasibility Study. The market sounding is summarised above in Section 6.3.2 above.

Detailed Delivery Model Assessment

The process of selecting the preferred delivery model applied a Multi-Criteria Analysis (MCA) on short-listed options. The MCA consisted of four key steps which are outlined in Figure 18.

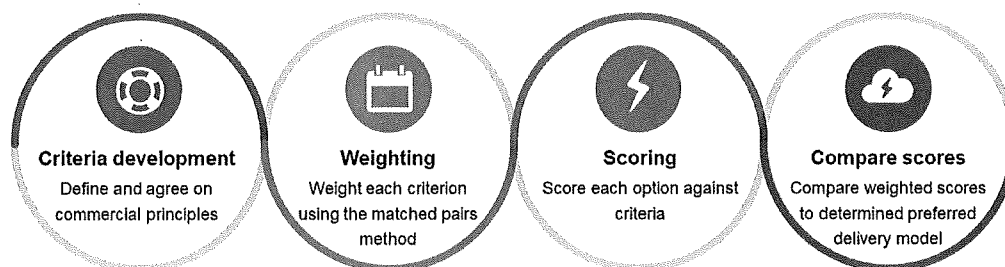


Figure 18: Multi-Criteria Assessment Framework

The results of the scoring process for each of the options, in relation to each of the Commercial Principles (Criterion) in the sections below. A brief justification for the scoring has also been provided.

Time to deliver

Delivery Model	Score: Time to Deliver	Justification
Design then Construct	4	Flexible to meet time requirements with advantage of rapid procurement
Design & Construct	4	Flexible to meet time requirements with advantage of rapid procurement
Design Construct Maintain (Short Term)	3	Can meet delivery time requirement; procurement process may take slightly longer than traditional D&C methods
Design Construct Maintain (Long Term)	3	Can meet delivery time requirement; procurement process may take slightly longer than traditional D&C methods
Design Construct Maintain Operate	3	Can take longer to document than a traditional procurement method which can delay commencement.
User Charge PPP	2	Longer procurement period expected for PPP, as greater time is needed for Government to prepare tender and contractual documents, longer tender evaluation period due to greater levels of due diligence, and fundraising activity and more stakeholders involved (particularly due to financing element), which combined can delay commencement.

Flexibility

Delivery Model	Score: Flexibility	Justification
Design then Construct	4	Contract can be easily amended to address variation arising from uncertainty at initial stages
Design & Construct	3	Ability to accommodate uncertainty and variation ultimately dependent on contract terms and nature of project
Design Construct Maintain (Short Term)	2	Limited ability to innovate or upgrade until initial operating term has concluded. Design may be influenced by initial operational model and expensive or

Delivery Model	Score: Level of Risk Transfer	Justification
Design then Construct	2	Little or no involvement by operator in the D&C phase, resulting in risk of suboptimal operations / functionality, or expensive refit after initial O&M term.
Design & Construct	2	
Design Construct Maintain (Short Term)	4	
Design Construct Maintain (Long Term)	4	Compost market risk remains with ACT to resolve. Considerable interface risk between construction and operations. ACT can share in any compost/output upsides
Design Construct Maintain Operate	5	Integrating the D&C and operational phases of the project encourages private sector to ensure design is focused on maximising operational functionality. Contractor assumes significant risk.
User Charge PPP	5	The most complete level of integration between D&C and operating phases, with the incorporation of private financing. As a result, encourages private sector to focus on optimising whole of life costs. Contract typically assumes the majority of risk under this model.

Innovation and Incentive

Delivery Model	Score: Innovation and Incentive	Justification
Design then Construct	2	Output is fixed at the outset with minimal opportunity or incentive for the contractor to drive innovation.
Design & Construct	3	Innovation is possible during the design phase.
Design Construct Maintain (Short Term)	3	Innovation is possible during the design phase.
Design Construct Maintain (Long Term)	4	Design and build will be incentivised for long term costs savings for maintenance.
Design Construct Maintain Operate	4	Incentivises for whole-of-life cost savings for maintenance and operations

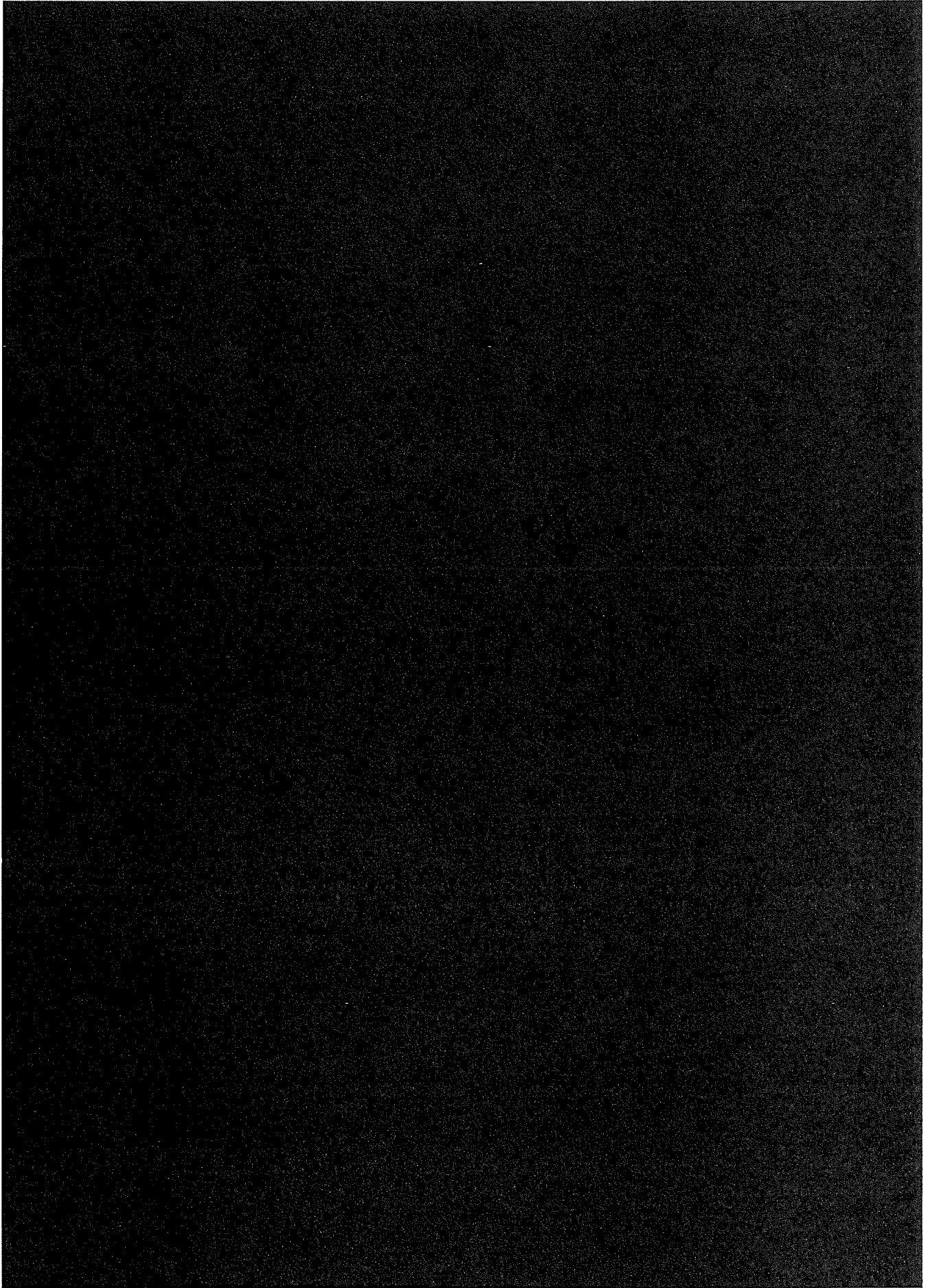
Delivery Model	Score: Cost and Level of Complexity for Government	Justification
Design Construct Maintain (Short Term)	3	Some complexity arising from incorporating short term O&M to D&C arrangements. Additional time and/or cost may be incurred in procurement due to the need to identify and vet bidders with ability to deliver during both the D&C and O&M phases.
Design Construct Maintain (Long Term)	2	Separate arrangements would need to be made for operations (either self-operated or outsourced), increasing effort and cost associated with documentation. Additional time and/or cost may be incurred in procurement due to the need to identify and shortlist bidders with ability to deliver during both the D&C and O&M phases.
Design Construct Maintain Operate	2	Complex contractual arrangement, which has limited precedent in ACT context. Procurement process will be more complex due to the need to identify and shortlist bidders with ability to deliver during both the D&C and O&M phases.
User Charge PPP	1	Complex contractual arrangement. Procurement process will be more complex due to the need to identify and shortlist bidders with ability to deliver during both the D&C and O&M phases. Further time and cost incurred in understanding and evaluating bidders' proposed financing arrangements.

Price Certainty

Delivery Model	Score: Cost and Level of Complexity for Government	Justification
Document & Construct	2	Provides only short-term construction price certainty in accordance with agreed terms, but

Table 62: Summary of MCA Analysis

MCA Criteria	MCA Weighting	Document & Construct	Design & Construct	Design Construct Maintain (Short Term)	Design Construct Maintain (Long Term)	Design Construct Maintain Operate	User Charge PPP
Time to deliver	16%	4.0	4.0	3.0	3.0	2.5	2.0
Flexibility	11%	4.0	3.0	2.0	2.0	2.0	1.0
Level of Integration / Bundled Services	16%	1.0	1.0	3.0	3.0	5.0	5.0
Level of risk transfer	16%	2.0	2.0	4.0	4.0	4.5	5.0
Innovation and Incentive	11%	2.0	3.0	3.0	3.5	4.0	5.0
Output Specification	5%	1.0	1.0	4.0	4.0	5.0	5.0
Procurement Cost and level of complexity for Government	11%	5.0	5.0	3.0	2.0	2.0	1.0
Price Certainty	16%	2.0	2.5	3.0	3.5	4.0	5.0
TOTAL	Total / 5	2.63	2.71	3.11	3.13	3.63	3.68



TCCS- 2023-24 Initiatives Costing Template

Business Unit 712_ACT NoWaste

Initiative Description

2023-24	2024-25	2025-26	2026-27	Total
\$'000	\$'000	\$'000	\$'000	\$'000

Expenditure	
- Employee	
- Supplies & Services	
- Implementation	
- Grants & Purchased Services	
- Corporate	
Total Costs	
Depreciation	
Offset by	
- Revenue	
- Employee	
- Supplies & Services	
- Grants & Purchased Services	
- Corporate	
Total Benefits	
Net Cost/Benefit	
Capital Funding Required	
Operating Funding Required	

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2023-24 Budget – Business Case

Proposal Name: Building a Circular Economy – Continuation or expansion of the Food Organics and Garden Organics (FOGO) pilot, next steps to deliver the full FOGO program.

Basis of authority for consideration in 2023-24 Budget: Building a Circular Economy – Continuation or expansion of the Food Organics and Garden Organics (FOGO) pilot, to deliver the full FOGO program was one of the items listed on the Commissioning Letter from the Chief Minister dated 24 January 2023.

Brief Description: This proposal provides four options for the future of the current FOGO collections pilot. The FOGO pilot is stage one in the delivery of the full FOGO program (Attachment 1) and also requires full funding for the FOGO Facility (Attachment C).

FOGO pilot:

The pilot is currently operating in the suburbs of Belconnen, Bruce, Cook, and Macquarie. The proposal includes options to either:

- **Option 1** Expand the pilot to include an additional 6,000 households (in single unit dwellings (SUDs)) in suburbs within the Belconnen region (south of Ginninderra drive). Suburbs will be chosen in consultation with collection contractors and may consider:
 - o Florey
 - o Weetangera
 - o Page
 - o Hawker
 - o Scullin
 - o Higgins
 - o Latham
- **Option 2:** Expand the FOGO pilot to include remaining MUDs (apartment buildings) in the current four suburbs.
- **Option 3:** Continue the pilot under the current collection model in the four suburbs for two further years within the term of the current contract arrangements.
- **Option 4:** Conclude the pilot and return to the previous bin collection frequency in these four suburbs.
- **Option 5 (recommended):** Expand the pilot to both MUDs (apartment buildings) and some additional suburbs (to a total of approximately 6,000 household; being approximately 3000 SUDs and 3000 MUDs, the final balance to be negotiated with the contractor)

Lead Minister: Steel

Portfolio: Transport and City Services

Supporting Minister(s) and related portfolio/s: N/A

Lead Agency: Transport Canberra and City Services Directorate

Supporting Agencies: N/A

Wellbeing domain 1: Environment and climate

Wellbeing domain 2: Safety

Wellbeing Framework priority target group(s): (Multiple categories can be ticked)

- | | | | |
|---|--|----------------------------------|---------------------------------|
| ☐ Older Canberrans | ☐ Women and/or
gender diverse people | ☐ LGBTIQ+ | ☐ Carers |
|---|--|----------------------------------|---------------------------------|

CABINET

Business Case Authorisations

Lead Minister

Ministerial Endorsement	Signature and date or evidence of endorsement
Lead Minister: Steel Portfolio: Transport and City Services	

ICT reviews

Responsible area	Name, position, signature and date or evidence of endorsement
1. Business system owner	
2. Digital, Data and Technological Solutions (Senior Director, Strategic Business)	(DDTS representative) *
3. Budget Assessment Sub-Group Committee	(BASG representative) *

*This signature does not represent support for the proposal as a spending proposition.

Business case contact officer

Responsible area	Name, position, signature and date or evidence of endorsement
ACT NoWaste	Margaret Kitchin, Senior Director SCP

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Option 2: Expand the pilot to include remaining MUDs (Apartment Buildings) in the current four suburbs

Financial Impacts Summary (Preferred Option)	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Capital Impacts					
Capital injection	67	15	7	-	89
Capital inflows	-	-	-	-	-
Capital - Offset – Existing provision ^(a)	-	-	-	-	-
New capital provision	-	-	-	-	-
MPC fee – resources received free of charge (if applicable) ^(b)	-	-	-	-	-
Expense Impacts					
Expense	1,613	2,255	750	-	4,618
Expense – Offsets ^(c)	-	-	-	-	-
Expense – Offsets – Existing provision ^(a)	-	-	-	-	-
New expense provision	-	-	-	-	-
Depreciation	-	-	-	-	-
Revenue ^(d)	-	-	-	-	-
Commonwealth contribution	-	-	-	-	-
Savings	-	-	-	-	-
Staffing Impact^(e)	2023-24	2024-25	2025-26	2026-27	
Total Additional FTEs (number)	1	1	1		

(a) Please identify the title of the existing provision.

(b) Please refer to Treasury Memoranda (Memo 2022/05) for additional details as to how MPC-related fees should be incorporated. Should not be applied to ICT or to designated major projects.

(c) Please refer to 'Identifying genuine savings' in the 2023-24 Budget Process Rules for what constitutes a genuine offset.

(d) A positive number here indicates a proposal that is increasing the revenue collected by government. A negative number here indicated a proposal which is reducing the amount of revenue collected by government.

(e) All initiatives seeking additional FTEs will require a recruitment strategy to be completed, refer to section 6 of the business case.

Breakdown of capital injection	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Delivery of New MGBs	59	-	-		59
Replacing Broken assets (FOGO bins and Caddy's)	8	15	7		30
TOTAL	67	15	7		89

Breakdown of Expenses	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Employee expenses	140	145	50	0	335
Other (further details in Table 5)	1,473	2,110	700	0	4,283
TOTAL	1,613	2,255	750	0	4,618

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Option 5 (recommended): Expand the FOGO pilot to approximately 6000 households including a mix of MUDs and additional suburbs in the Belconnen region

Financial Impacts Summary	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Capital Impacts					
Capital injection	94	25	10	-	129
Capital inflows	-	-	-	-	-
Capital - Offset – Existing provision ^(a)	-	-	-	-	-
New capital provision	-	-	-	-	-
MPC fee – resources received free of charge (if applicable) ^(b)	-	-	-	-	-
Expense Impacts					
Expense	1,862	2,513	881	-	5,256
Expense – Offsets ^(c)	-	-	-	-	-
Expense – Offsets – Existing provision ^(a)	-	-	-	-	-
New expense provision	-	-	-	-	-
Depreciation	-	-	-	-	-
Revenue ^(d)	-	-	-	-	-
Commonwealth contribution	-	-	-	-	-
Savings	-	-	-	-	-
Staffing Impact^(e)	2023-24	2024-25	2025-26	2026-27	
Total Additional FTEs (number)	2	2	2	-	

Please identify the title of the existing provision.

(b) Please refer to Treasury Memoranda (Memo 2022/05) for additional details as to how MPC-related fees should be incorporated. Should not be applied to ICT or to designated major projects.

(c) Please refer to 'Identifying genuine savings' in the 2023-24 *Budget Process Rules* for what constitutes a genuine offset.

(d) A positive number here indicates a proposal that is increasing the revenue collected by government. A negative number here indicated a proposal which is reducing the amount of revenue collected by government.

(e) All initiatives seeking additional FTEs will require a recruitment strategy to be completed, refer to section 6 of the business case.

Breakdown of capital injection	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
<i>Delivery of New MGBs</i>	80	-	-		80
<i>Replacing Broken assets (FOGO bins and Caddy's)</i>	14	25	10		49
TOTAL	94	25	10		129

Breakdown of Expenses	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Employee expenses	262	281	94	0	637
Other (further details in Table 10)	1,600	2,232	787	0	4,619
TOTAL	1,862	2,513	881	0	5,256

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Collecting FOGO from MUD complexes will require engagement from households and building managers which may require a variety of new collection models to suit the needs of each complex. These collection models will be dependent on the capacity of the collection contractor and the engagement of MUD households to be successful.

The “Republic Belconnen” MUD complex is a set of buildings housing around 5,000 dwellings. This development has significant scale and will require careful planning and resources to develop and effective collection model, manage the logistics, engagement, and contamination. A phased approach with collaboration with building stakeholders would be required to explore the best service delivery model(s).

This option would require an additional MUDs engagement resource within ACT NoWaste to support the engagement of the remaining MUD households.

In terms of timing considerations, this option would not require six months’ notice for either of the collection contractors. A variation to the Environmental Authorisation of the composting site is not likely to be required as there is sufficient capacity to accept the additional FOGO material. This option is not likely to be impacted by supply chain issues associated with new collection vehicle requirements as the existing vehicle may have sufficient capacity.

Option 3: Continue the FOGO pilot until new collection arrangements are in place.

Under Option 3, the FOGO pilot would continue to operate under the current contractual arrangements in the same four pilot suburbs of Belconnen, Cook, Macquarie and Bruce. This option requires the extension options of current contract to be exercised for a further two years (28 October 2025).

The collection frequency will continue to be fortnightly for landfill bins and weekly for FOGO bins. The collection calendars will remain unaligned.

Additional funding will be required to continue this option. Funding would be an extension of initiative TCCS2021-22-0032-C-Household waste collection.

Option 4: Do not continue the FOGO pilot.

Under Option 4, the FOGO pilot will not continue after 28 October 2023, when the current contract arrangements expire and the extension options are not exercised.

The collection services for FOGO pilot suburbs will be restored to a weekly landfill bin collection and a fortnightly garden organics collection service. It should be noted the garden organics collection service would need to operate across all FOGO pilot households rather than the opt-in basis for other households across Canberra. Collection calendars for the four pilot suburbs may not be aligned due to the different contract arrangements for landfill and garden organic collections.

Additional funding would be required for the increase in frequency of landfill collections which would be partially offset by the reduction in frequency of garden organics collections.

Option 5: Expand the Pilot to approximately 6000 households including a mix of MUDs and additional suburbs in the Belconnen region (recommended)

Under Option 5, the FOGO pilot would expand to include approximately 3,000 additional single unit dwelling households exclusively from additional Belconnen suburbs and approximately 3000 additional Multi unit dwellings from the participating suburbs. The exact numbers will be finalised in negotiation with the contractor based on truck runs and space. A deed of variation will also detail

2.1 Options comparison table (summary comparison)

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	Option 3: Continue the FOGO pilot until new collection arrangements are in place.	Option 4: Do not continue the FOGO pilot.
Benefits Outline the key strengths and advantages	Maintains and supports the resource recovery achievements of the pilot to date and continues to provide a service with the majority of the participants support.	The households in the FOGO pilot area are provided standard services. (Note, the collection calendar may continue to not be aligned)
Disadvantages List weaknesses and negative consequences	The FOGO pilot services continue for longer than anticipated and households do not have an aligned collection calendar for landfill, recycling and FOGO collections.	Lose the behaviour change which households have undertaken to transition to FOGO; and potentially require behaviour changes to be re-introduced as part of the future city-wide rollout of FOGO.
Timescale What period will the costs and benefits be incurred over	Maintains the pilot program until the city-wide rollout of FOGO is implemented.	The next two to five years until the city-wide rollout of FOGO is implemented.
Costs Summarise the costs and assumptions	The costs will be a continuation of the rates agreed in the current contract arrangements.	The costs will be a continuation of rates agreed in the current contract arrangements.
Major Risks Summarise the major risks associated	Reputational risks of customer dissatisfaction associated with the pilot running for longer than expected. (A special consideration policy offers households free additional landfill bin capacity if their medical needs or large households).	Reputational risks of customer dissatisfaction associated with changes to household behaviour during the reversion to standard services and the re-introduction to FOGO services.
Performance measurement Determine how the performance of the proposal will be monitored	By maintaining FOGO pilot collections, this option diverts waste from landfill, avoids greenhouse gas emissions and preserves landfill capacity at Mugga lane as a long-term asset for essential waste disposal in the ACT.	This option removes the FOGO pilot collection. This is a lost opportunity to divert waste from landfill, avoid greenhouse gas emissions and preserve landfill capacity at Mugga lane as a long-term asset for essential waste disposal in the ACT.
Benefits Outline the key strengths and advantages	Option 5: Expand the pilot to approximately 6000 households including a mix of MUDs and additional suburbs (recommended) Expands the resource recovery achievements of the pilot to date and continues to provide a service which the majority of the participants support. Expands the resource recovery achievements of the pilot to date and continues to provide a service with the majority of the participants support. Enhances the knowledge base of ACT NoWaste on how to engage challenging MUDs with a new resource recovery program and better supports full rollout of FOGO to all households. Provides opportunity for assessment of FOGO service in suburbs of different demographic and housing make up while including more MUDs.	

3. Proposed Solution (as per options table above)

Option 5: Expand the pilot to approximately 6000 households including a mix of MUDs and additional suburbs

This option will expand the FOGO pilot under the current contract arrangements. The current contract will be extended up to 28 October 2025 and service expanded to an additional 6,000 single dwelling households with a mix of single unit dwellings in new suburbs and multi-unit dwellings across the pilot area.

The proposal is part of a broader program, including the FOGO facility project and the Household Waste Collection Services procurement.

This option will continue to achieve the outcomes provided under the FOGO pilot including:

- Gathering data to inform the city-wide rollout of FOGO collections
- Diverting FOGO from landfill and reduce greenhouse gas emissions
- Providing continuity to the FOGO pilot households

FOGO pilot households have indicated broad support for the FOGO service. The primary beneficiaries of this proposal are FOGO pilot households; and the broader community because of extended landfill life and reduce greenhouse gas emissions.

4. Policy alignment

The ACT Government has identified diversion of food and garden organics from landfill as a key action to achieve resource recovery and emissions reduction targets.

Delivering a FOGO service for households is identified as a priority in the 2018 Waste Feasibility Study Roadmap and Recommendations, the ACT Climate Change Strategy 2019-2025 and the Appendix 3 (Labor Policy Platform) of the Parliamentary Agreement for the 10th Legislative Assembly (2020). The following specific items in the Parliamentary Agreement are relevant to this proposal:

Appendix 3 (ACT Labor policy platform)

Item 9.2: "Roll out a household food waste collection service by 2023, starting with a pilot program in Belconnen"

This proposal also supports the Commonwealth Government target of halving the amount of organic waste sent to landfill by 2030, as set out in the National Waste Policy Action Plan.

Household waste and recycling was considered a strategic issue in the Better Suburbs Statement, and it ranked as the (equal) second most urgent and important topic. The better suburbs statement recommends increased servicing for household waste and recycling to reduce climate change impacts and preserve limited natural resources, including land. Provision of bulky waste collection and food waste collection services were both raised as proposed changes in the Better Suburbs Statement 2030.

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5.5 Risk Identification and Management

Risk	Mitigation
Residents not using the service correctly, leading to low landfill diversion, or high contamination undermining the quality of recovered FOGO and comingled recycling.	Education and community engagement throughout services, led by ACT NoWaste. Ongoing education provided by the collection contractor as part of the services procurement proposed in this business case.
Service does not meet residents' expectations	Service design based on extensive review of advice and case studies from other jurisdictions. Adopted changes, particularly regarding service frequency, bin size and investment in education and engagement reflect dominant trends interstate with numerous established and successful collection services. In collaboration with the contractor, other collection models from other cities with high density MUDs may be considered.
Amenity issues due to service not being used or collected correctly	Education and community engagement throughout services to ensure residents understand which bin to use. MUD engagement officer included to address DCC and other MUD challenges.
Delivery within budget	Conservative cost estimates based on ACT existing contract data wherever possible.
Stakeholder management	Timely communication with relevant stakeholders. Including the ACT Environmental Protection Authority, Collection Contractors, Strata, Participants and Transport Workers Union ACT Branch.
Delivery within Timeline	Proactively seek information relating to necessary approval, delivery of assets and required notification periods for different actions.

6. Recruitment strategy

Option 1:

One ASO4 has been costed. The ASO4 would be an additional Customer Service Officer, which would manage special consideration applications and support the Customer Service Hotline for additional services.

Option 2:

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- Reconciliation with RMC data on household waste disposal (expected to decrease due to bulky waste service introduction)

Project-level measures are expected to include:

- On-time commencement of the new services, aligned to availability of new/upgraded processing infrastructure
- Delivery within budget
- Number of interactions and/or people reached through education and engagement initiatives

8. Inter-agency collaboration and stakeholder management

Nil

9. Communications

All households in the ACT directly access waste collections services, and clear education and engagement is an important aspect of the proposal. Direct communications with the community are essential to:

- Household participation in the new FOGO service, with correct waste separation
- Increase awareness of the new bulky waste collection service, driving the increased uptake of the service toward the 40% participation rate allowed within the business case

The communication methods will be similar to those which were used in the initial FOGO pilot introduction and a budget for these activities has been allocated within this business case, as detailed in Section 11.7.

Public announcements regarding the expansion of the FOGO service, will need to wait until discussion with relevant stakeholders have been completed. The expanded services could commence as early as February 2024.

10. Detailed costs

10.1 Cost estimates

The preliminary cost estimate for funding the continuation and expansion of the FOGO pilot (Option 2) under this business case is presented in the costing template below, with key tables shown below.

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Table 5: Supplies and services cost profile for Option 2

Supplies and Services Costs	2023-24	2024-25	2025-26	Total
	\$'000	\$'000	\$'000	\$'000
Community education and engagement – Contractor Cost: Contractor staffing for bin tagging and general education. Contractor resource development and distribution - bin tagging and compliance collateral	Incorporated into collection cost			
Communications and promotion delivered by ACT NoWaste – FOGO pilot	35	60	25	120
Delivery of Liners and Caddies – FOGO pilot	354	364	0	718
Collection – FOGO pilot	750	1,145	477	2,372
Processing – FOGO Pilot	264	461	192	917
Auditing and evaluation -FOGO pilot	60	60	0	120
Caddy repair and replacement	10	20	6	36
Total Supplies and Services Costs (Non-indexed)	1,473	2,110	700	4,283
Total Supplies and Services Costs (Indexed)				

Table 6: Capital expenditure cost profile for Option 2

Capital expenditure	2022-23	2023-24	2024-25	Total
	\$'000	\$'000	\$'000	\$'000
Delivery of MGBs	59	0	0	59
Replace MGBs	8	15	7	30
Total Capital Expenditure (non-indexed)	67	15	7	89
Total Capital Expenditure (Indexed)				

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Table 9: Supplies and services cost profile for Option 5

Supplies and Services Costs	2023-24	2024-25	2025-26	Total
	\$'000	\$'000	\$'000	\$'000
Community education and engagement – Contractor Cost: Contractor staffing for bin tagging and general education. Contractor resource development and distribution - bin tagging and compliance collateral	Incorporated into collection cost			
Communications and promotion delivered by ACT NoWaste – FOGO pilot	35	60	25	120
Contract Payment (second composting dome)	100	-	-	100
Upgrades to WSMS to improve record keeping	100	-	-	100
Delivery of Liners and Caddies – FOGO pilot	257	276	-	533
Collection – FOGO pilot	788	1,378	574	2,740
Processing – FOGO Pilot	250	438	182	870
Auditing and evaluation -FOGO pilot	60	60	-	120
FOGO Bin/Caddy repair and replacement	10	20	6	36
Total Supplies and Services Costs (Non-indexed)	1,600	2,232	787	4,619
Total Supplies and Services Costs (Indexed)				

Table 10: Capital expenditure cost profile for Option 5

Capital expenditure	2022-23	2023-24	2024-25	Total
	\$'000	\$'000	\$'000	\$'000
Delivery of MGBs	80	0	0	80
Replace MGBs	14	15	7	30
Total Capital Expenditure (non-indexed)	94	15	7	89
Total Capital Expenditure (Indexed)				

Number of households

ACT NoWaste has provided information on the number of SUD households serviced in Belconnen suburbs below:

- Hawker – 1,095
- Higgins – 1,236
- Holt – 2,030
- Macgregor – 2,515
- Weetangera – 1,002
- Evatt – 2,002
- Lawson - 193
- Florey – 1,759
- Giralang – 1,265

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10.2 Offsets

No offsets have been identified.

3. Direction and type of impact

Requirement: Identify the direction and type of the wellbeing impact(s).

A well-considered assessment will account for any possible negative wellbeing effects on individuals or groups, alongside the desirable positive effects.

A wellbeing impact may be **major** (a direct, sustained impact) or **minor** (either a direct, sporadic impact or an indirect, sustained impact).

An anticipated wellbeing impact should be considered in relation to the status quo.

Groups who may sustain negative wellbeing impacts should be described in the same way as groups whose wellbeing may be positively affected (i.e., identity of group, estimated size of group, nature of specific impacts). If multiple groups have been described and these groups will experience different magnitudes of effect, please indicate the anticipated effect for each group.

4. Timeframe

Requirement: Estimate the timeframe for the wellbeing impact(s) to be realised.

The suggested timeframes are: within one year, between one and five years, five years plus (or otherwise as determined by the maturity of the proposal).

You may wish to estimate timeframes consistent with stages of projects (as appropriate) such as during a feasibility study or differing phases of a project, or when close to completion and the potential impacts on wellbeing during these stages.

A proposal may include impacts with different timeframes; the possibility of longer-term impacts should also be considered even if they are difficult to estimate.

5. Evidence base/quality

Requirement: Describe the data and other evidence base that supports the identification of this proposal's impact(s) and the anticipated effect that these impact(s) will have on wellbeing.

What is the data and other evidence underpinning identified impacts?

Provide information about the nature of the evidence, including key references.

Provide evidence on the impact of capital works projects and how they affect wellbeing (e.g. road works may cause short-term dissatisfaction for people when commuting; however may eventuate in greater road safety).

Where quality and trusted data to measure wellbeing impact does not currently exist, identify whether data and evidence will be acquired through the implementation process (including in relation to expected outcomes).

- When citing data or statistics it is recommended to include at least author, creator, date of publication, title or description, publisher, and URL or DOI if the dataset is available online.
- The Wellbeing measures reported at www.act.gov.au/wellbeing are a possible source of evidence – but not every proposal will map neatly to an existing measure or indicator in the dashboard. Provide the evidence base that supports the documented impacts, whether it is part of the dashboard or not.

Domain		Definition	Our aspiration for wellbeing in this area
Access and connectivity		Getting around to places we value and accessing the services we need	Our planning, mobility and service systems allow us to move around our liveable city and access the types of places and services we need, when we need them. Those who require additional support to gain independence can access responsive, tailored services.
Economy		We share in our city's economy	A strong economy, business and innovation sector creates opportunities for all Canberrans to share in the wealth of our city.
Education and life-long learning		Gaining the skills and education needed at all stages of life	Canberrans have equitable access to education and learning opportunities, through all ages and stages of life, to develop and gain the skills needed to live life well.
Environment and climate		The environment sustains all life now and into the future	Canberra's natural environment sustains all life, is accessible, climate resilient, and clean.
Governance and institutions		Having a say, being heard, and working together for better outcomes	All Canberrans can have their say, connect with and be part of key government processes. Canberrans have a government and other institutions that respect human rights, are responsible, reliable, have integrity, are open, and are fair.
Health		Being healthy and supported with the right care	Canberrans have good physical and mental health at every stage of life and can access the services they need to lead healthier lives and manage illness. Individuals take steps to proactively maintain good health with the support of health-promoting environments.
Housing and home		Having a place to call home	Canberrans have access to secure, suitable and affordable housing throughout their lives.
Identity and belonging		Being able to express identity, feel a sense of belonging, and participate fully in society	All Canberrans can participate on equal terms, regardless of age, gender, sexual orientation, cultural background or disability. Aboriginal and Torres Strait Islander people have a strong voice, are decision makers on issues that impact them, and lead in the achievement of positive life outcomes. We are proud to be Canberrans.
Living standards		Having the financial resources to live life well	Canberrans can be economically secure and have the means to help manage their lives.
Safety		Feeling safe and being safe	Canberrans are and feel safe and secure around their families, homes, community and on-line.
Social connection		Being connected with family, friends and community	Canberrans are connected and supported within our community and come together in areas such as sport, culture, spirituality, religion and the arts.
Time		Having time to live life well	Canberrans have the time to do things we want to as well as the things we are required to do.

- Meet the ACT Parliamentary Agreement Policies which reinforces ACT Government's commitment to deliver an organic waste processing facility for households and business, and improve household and business waste reduction, along with further education provided to the community to drive behavioral change.
- Move the ACT towards the 90% resource recovery target (by 2025) set in the Waste Strategy – it is estimated that FOGO will contribute to an approximately 4% contribution to this target
- Support carbon neutrality of the waste sector
- Help redirect from landfill the c.50% of organic material in the domestic and commercial waste stream, and

The introduction of the ACT Waste Management Strategy in 2011 has created a goal of improving resource recovery and a carbon neutral waste sector. It sets out a strategy of 'reduce and reuse' to achieve resource recovery rates of over 90% by 2025. Since the introduction of this strategy there are continued shortfalls in achieving these goals, accelerating the need to create a direction towards organic waste recovery.

Accountability and evaluation

- Recognising community concerns, the ACT's *Climate Change Strategy 2019-25* includes actions to avoid and manage waste supported by a set of ambitious, yet achievable goals. The actions in Goal 6 (Waste Avoidance and Management) identified opportunities to reduce overall emissions from organic waste treatment.
- The value of resources and embodied energy in waste is a missed economic opportunity, as indicated in the National Waste policy, Australia, and its management attracts significant community interest. For example, community engagement and support for the development of the ACT Government Climate Change Strategy played a major role in shaping its actions and targets. A total of 226 suggestions were put forward by the community regarding waste matters with over 92% focused on diverting organic waste from landfill for beneficial re-use.
- There are various suggestions related to managing landfill waste, providing incentives for households to reduce organic waste, implementing a ban on food wastages by commercial and industrial sectors, and lowering Australia's emissions profile.
- A 2014 audit estimated that around 35% of household general waste is food and 10% is garden waste. Food organics represents the single largest proportion of waste in household garbage bins. In 2020-21 emissions from landfill were 159 kt CO₂-e¹, having risen ~25-35% year-on-year over the past three years, representing 10% of the ACT's total net greenhouse gas emissions.
- The Territory has commenced services for a FOGO pilot in November 2021. Information and data gathered from FOGO pilot will inform the city-wide roll out of FOGO collections to households. After 6 months of the commencement of the FOGO pilot service, results have shown high support for the FOGO service and contamination rates below 0.1%.
- These data and other learnings will be incorporated into the education and community engagement program which will commence at least 6 months prior to the commencement of the facility and collection service. The design and construction of the facility will not be impacted by the data collection and community engagement and education process.

Key relationships

Consultation during the Feasibility, Environmental Impact Study (EIS) Scoping and Business Case stages of the project was limited to key stakeholders whose input was required to inform into the project planning and design. Targeted stakeholder engagement will proceed in the future phases of the project's planning and delivery. Key government stakeholders have participated in critical workshops, received regular updates and provided reviews of project deliverables. A stakeholder register has been developed that includes the Stakeholder Engagement Plan.

Key Stakeholders for the project include:

¹ https://www.environment.act.gov.au/data/assets/pdf_file/0003/1918038/ACT-Greenhouse-Gas-Emissions-Inventory-Report-2020-21.pdf