

Project information	
Project name	Laurie Gibbons Memorial Park - replace boilers with electrically heated
	systems
Sentient ID#	39951
Programme name	PRG Energy Efficiency and Sustainability
Programme Sentient	27039
ID#	
Project complexity	
rating (PCAT)	
Author and date	Deena Benjamin
Project budget	\$
requested and funding	
source(s)	
Estimated start and	
finish date	25/Oct/2023

## **Document control**

<Text in grey boxes or <> provides commentary and guidance for drafting purposes only and should be deleted when no longer required.>

## **Document history**

Version	Date	Updated by	Update details

# **Strategic case (Case for change)**

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Introduction	
Background	The existing boiler no longer works at Laurie Gibbons toilet and changing room facility (council-owned asset) and needs to be replaced. A \$1 million per year fund was established in FY 2019 to enable energy efficiency projects.  Laurie Gibbons changing room has 12 showers heated by a 200kw Gas boiler, which is near the end of its working life, hot showers have been unavailable on many occasions in the past 2 years.  The financial and carbon saving calculated make this a viable investment for sustainability funding.
Opportunity/problem	Environmental well-being Carbon reduction of 1.37 tonnes per year  Gas system:  80% Efficient = 7,000kWh Gross (663m³ NG)  Carbon Equivalent: 1,600kg  Heat pump driven system:  COP 3.1:1 = 1,800kWh Gross  Carbon Equivalent: 230kg
Objectives	The key objectives that the project is aiming to achieve is smooth operation of the facility with plant generating least carbon and using the least amount of energy.



Introduction				
High level benefits				
Alignment to strategy:				
Auckland Plan Outcom	nes Our Strategy Goals			
Climate Priorities	Māori Outcomes			
Energy and industry	No specific outcome focus areas			
Describe the strategic	linkage in more detail here:			
Climate change	Heat pumps are one of the most energy-efficient forms of heating and use			
(adaptation and	electricity to capture thermal energy in the air therefore produce no direct			
mitigation):	emissions and can reduce total carbon emissions by 90%.			
Māori outcomes and	The requirement for iwi engagement is not anticipated for this asset			
engagement	renewal project.			
Alignment to existing	<describe alignment="" an="" any="" existing="" link="" of="" or="" programme="" s="" to="" work=""></describe>			
programmes:				
Constraints	Electrical Capacity available for the heat pumps to be installed			
Dependencies	Time when there will be no games that might be impacted due to lack of			
	hot water for the showers.			
Assumptions	Assuming that there will be sufficient electrical capacity at the transformer			
	& that the work can be completed during the off season.			
Health, safety and				
wellbeing				
High level risks and	Omicron variant is projected to result in widespread transmission, which			
issues	will likely impact on human resource availability.			

# **Economic case (Determing value for money)**

### In Scope

Replace existing gas boilers with electrically heated boilers in the toilet changing room facility at Laurie Gibbons.

FY22/23 - investigation and design and physical works

#### Out of scope

## Service change assessment

Service / process description	Proposed change & impact
Will this initiative cause a	
change to a service or process	
e.g. adding an additional	
service, changing or removing	
an existing service?	

### **Outline options analysis**

<To make an informed decision, what options have been researched to demonstrate we are getting value for money for the investment? How do the options stack up against each other?>



Option	Description
<option 1=""></option>	
<option 2=""></option>	
<option 3-5="" etc.=""></option>	

Description (click here for CBA	Option 1: Do	Option 2:	Option 3:	Option 4:
Description (click here for CBA worksheet)	nothing	Option 2.	Option 3.	Option 4.
Appraisal period (years)				
Implementation cost (\$000)				
Whole of life cost (\$000) (ongoing consequential opex, disposal cost, plus implementation cost)				
Cost Benefit analysis:				
Financial benefits and costs (excluding dep	reciation)			
Net present value of benefits (\$000)				
Net present value of costs (whole of life) (\$000)				
Net present value (\$000)				
Non-financial benefits				
Benefit 1				
Benefit 2				
Benefit 3				

### Preferred option

<Highlight the rationale or compelling reasons for preferring one option over others. Along with the above analysis there may be other considerations that have resulted in the preferred option such as time to deliver, risk, climate impact etc>

#### **Benefits tables**

<The <u>Benefits Library</u> is a guide which can be used to assist with completing the financial benefits and non-financial benefits tables below. Please contact the <u>EPMO</u> if you require additional assistance>

<b>Benefits</b>	Benefits and dis-benefits								
Category	Sub- category	Туре	Metric	Benefit statement	Benefit Description	Benefit Measure and Method	Source of data or cost centre/GL code	Baseline	Expecte d benefit and date(s)
Non- financial	Environme ntal Outcomes	Climate change mitigation	tCO2e	Electrically heated systems	Project is aiming to achieve is smooth operation of the facility with plant generating least carbon and using the least amount of energy.	Energy consumption.			TOTAL
Benefit owner & Role Deena Benjamin Benefit Reporter Deena Benjamin					1				

<sup>\*</sup>Note: If there are additional benefits, add extra rows, with a Benefit owner signature line after each



benefit.

Non-quantifiable Benefits and additional information	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

## **Commercial case (Procurement of preferred option)**

Detailing the procurement strategy

Risk Description	Mitigation	Date Idenfitied	Owner
Omicron variant is projected to result in widespread transmission, which will likely impact on human resource availability.	Discuss alternative staffing with Contractor if allocated staff members test positive / are a close contact of a positive case.	27/04/2023	Deena Benjamin
Issue Description	Resolution	Resolution Date	Owner

## Financial case (Affordability & funding)

## Financial analysis

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Please complete the <u>financial</u> <u>analysis</u> spreadsheet and use the output to complete this table	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026-28	Total
Capital expenditure						
Operating expenditure						
Total expenditure						
Consequential operating expenditure						
Financial benefits (revenue/cost reduction)						
Net ongoing cost						

<sup>&</sup>lt;Please attach the financial analysis spreadsheet as an appendice.>

#### **Financial sources**

<Specifically, how is this initiative being funded i.e. is part of it from existing BAU? New or additional funding request or LTP allocated funds? Is there any other external party funding involved? Are other departments within council also contributing a portion from their own BAU budget?</p>

#### Contingency

<What contingency is included in the above costs. This is calculated by individual projects and is based on risk.>

# Management case

#### **Change Impact Assessment**

For scoring assessment guideline, please refer to "Change impact assessment matrix" in Kotahi < If you scored 1 extreme or 2 High or 3 Medium, you'd need to engage a "Change Manager">

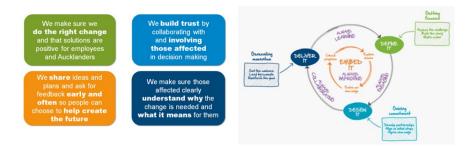
Impact Assessment	Impact



	(Low, Moderate, Medium, High, Extreme)
Size of the change	
Complexity of the change	
People increase/reduction change	
People – skills, training, new ways of working	
System change	
Process change	
Organisation structure change	
Culture change	

## **Change management**

The <name of programme/project/nitiative> will follow <u>Auckland Councils Change Management</u> Framework.



The change management plan will need to be completed in the plan phase, if applicable.

### Stakeholder engagement

Key stakeholders				
The following stakeholder groups will be impacted by this change in the following ways:				
Stakeholder name / group / Evidence of collaboration / Agreed outcome				
contact	impact assessment			

The stakeholder engagement plan will need to be completed in the plan phase, if applicable.

## Outline project plan

Outline project plan			
How will this project be delivered, by who and when?			
Deliverable(s) Delivered by Date due			
Heat Pump to heat the water for the showers which is energy efficient & reduces the carbon foot print.			

#### **Health and safety**

This project is expected to < include / not include > design or modification of an existing asset, as such the requirements of Safety in Design will apply/not apply to this project.

There is legal responsibility on Auckland Council (as the 'Person Conducting a Business or Undertaking') to ensure, so far as is reasonably practicable, the health and safety of workers and other persons over the life of the asset.

The following health and safety related risks were identified in the option assessment relating to this



project which will need to be considered for elimination or where not able to be eliminated to be minimised.

Option	Health and Safety Risk	Project Phase
	<e.g. cables="" live="" power="" striking=""></e.g.>	
	<e.g. dislodging="" exposing="" falling="" lid="" manhole="" network="" of="" risk="" stormwater="" surcharge,=""></e.g.>	
	<e.g. clean="" confined="" device="" in="" space="" to="" work=""></e.g.>	

# **Approval and acceptance**

## Handover activities

The following activities and documents will be handed over once acceptance criteria have been met: <Designs, procedures, registers, maintenance manuals, templates, as built materials, post-project benefits monitoring and realisation activities, post project evaluation etc. (attach any relevant documentation to appendices)>

Governance sign off	Name	Signature to endorse	Date	Comment
I agree that the potential costs/benefits identified are realistic, and the low complexity delivery path reflects PCAT findings and approve and or endorse the project to continue for funding.				
Financial Manager / Commercial Manager				
Project sponsor	Grant Jennings			
Business owner	Eli Nathan			
Benefit Owner	Deena Benjamin			

SME endorsement <i>If</i> applicable	Name	Signature to endorse	Date	Comment
Eg.Change, legal, financial transactions, governance, communications etc				

Advisor/stakeholder endorsement	Name	Signature to endorse	Date	Comment

# **Appendices**

## **Appendices**

<a href="#"><Attach PCAT report and all related supporting documents/information to this section></a>