

STRATEGIC ASSESSMENT AND DISCOVERY DOCUMENT (SADI) COMMUNITY FACILITIES

SECTION I – STRATEGIC ASSESSMENT

The purpose of this the strategic assessment is to provide a high-level outline of the proposed initiative, describing the need for change, related benefits and how this fits with Auckland Council's strategic outcomes. If the budget holder agrees with the strategic assessment, s/he should sign off approval to move the proposed initiative into the work programme for consideration by the decision making body.

INVESTMENT PROPOSAL INFORMATION			
Initiative Name:	Albany Pools - install solar panels	Decision making body: Business unit/ department/CCO, local board, etc.	Upper Harbour
Park/Reserve/Facility:		Objectives:	To increase energy efficiency in a more sustainable way for the environment To save money long-term on electricity.
Initiative Lead:	Melissa Johnston	Is this a planned initiative or new?	New
Sentient ID#	36482	Date:	27 May 2022

STRATEGIC CASE				
Introduction				
What does this proposed initiative involve?				
<p>Scope: To install a Solar Photovoltaic (PV) array on the roof of Albany Stadium Pool. The proposed solution from Reid Technology Limited is a 242 kilowatt peak (kWp) system made up of 440 solar modules. It is expected the system will generate approximately 335,900 kWh of electricity per year.</p> <p>Activity Description (proposed): Install solar panels on the roof of the pool complex as part of Project Gigawatt. FY21/22 - investigation and design FY22/23 - physical works</p> <p>Risk Adjusted Programme (RAP) project.</p> <p>Out of Scope: Anything unrelated to the solar panels</p>				
What is the targeted delivery date / estimated time to deliver this initiative?				
30 June 2023				
If possible, provide a ballpark figure of delivering this proposed project.				
Capex:				
Funding Sources	Financial Year One	Financial Year Two	Financial Year Three +	Total
ABS: Capex - Development	\$22,070	\$369,500	\$0	\$391,570
Project Total	\$22,070	\$369,500	\$0	\$391,570
Is funding sought to build the business case? No				

Strategic assessment – Outlining the need for investment

Auckland Council has declared a climate emergency and has committed to reducing carbon emissions by half by 2030, and net zero emissions by 2050.

All carbon reduction strategies rely on increased use of electricity in both transport and stationary heating. This will increase demand for electricity and Project Gigawatt is aiming to install enough distributed generation to offset this increase in electricity use by Auckland Council.

Solar PV technology has been steadily decreasing in price over the last 20 years. Although Auckland Council pays a small amount per kilowatt hour (kWh) of electricity purchased, the cost of solar PV technology has decreased to the point that it is now a commercially viable solution on Council facilities.

The following benefits are being derived from the project:

- Increased electricity generation in the Auckland Region giving improved energy resilience in dry years.
- 335,900 kWh of electricity generation annually.
- Auckland Council's Greenhouse Gas (GHG) emissions will reduce by 42 tonnes of carbon dioxide equivalent (CO₂e) per year.¹
- Approximately \$38,000 in reduced electricity charges per year (10.5% Internal Rate of Return).

What are the measurable benefits of implementing this change?

Increased electricity generation in the Auckland Region giving improved energy resilience in dry years.

Options Analysis:

Consider the options below to determine the best outcome. Describe the sought outcome and how this decision was made.

1. Do nothing	2. Remove asset and reinstate site
3. Renew asset to today's standards	4. Renew and upgrade the level of service
5. Upgrade park or facilities level of service	6. Other

5. Upgrade park or facilities level of service

What would happen if we didn't continue with this proposed initiative?

The electricity supply for the Albany Pools would continue to be delivered via the national grid and the costs would continue to increase over time. This would also neglect to fulfil Auckland Council's commitment to reducing carbon emissions where possible across the region.

What are the risks / Issues / Constraints / Assumptions relating to the project?

Constraints: In planning and delivering the work, there are some general environmental and/or site-specific constraints that require due considerations.

Some examples are:

- Building occupants/tenants
- Weather conditions
- Current operation of the premises - make sure you liaise and communicate with building occupier/tenants. You may require them to shut their operations during their peak business.
- There is a risk that the pool roof cannot take the weight of the solar panels. This risk is considered to be low as the building was intended to have solar panels, but these were cut from the build project due to budget constraints. A structural assessment will be undertaken as part of the project.
- If the grid is congested with generation Vector may require grid strengthening in the area before agreeing to have distributed generation connected to their electricity network. The risk of this is low as there is a large electrical supply to the building. A distributed generation (DG) application will be lodged with Vector before the design is finalised.
- The equipment will need to be shipped to New Zealand. Supply chain constraints may cause delays.

Further requirements should be discussed with the relevant Design principal. Refer to Practice notes for further detail on constraints and how to manage them.

Assumptions:

- The roof is checked to ensure it can take the weight of the solar panel prior to installation
- Budget is adequate
- Consents are non-notified and approved
- Stakeholders and Governing body are informed
- Programme of works for the project is manageable

What other works are planned or are on the go that may impact this project?

Timing of the delivery of the following projects will need to be considered:

- 19839 Albany Pool - install disability amenities
- 27837 Albany Stadium Pool - renew components

What other similar projects / initiatives / programmes are currently on the go?

TBC - 36270 Albany Pool - Phase Out Boiler

Auckland Plan Outcomes**Our Strategy Goals****Possible Choices****Aligns To****Possible Choices****Aligns To**

Belonging and participation

Environment and cultural heritage

Focus on communities that need us most

Change how we serve our customers

Māori identity and well-being

Change how we serve our customers

Homes and places

Be a smaller and more adaptable organisation

Transport and access

Deliver within our means

Environment and cultural heritage

Opportunity and prosperity

Describe the strategic linkage in more detail here:

Focus area 6: Use green infrastructure to deliver greater resilience, long-term cost savings and quality environmental outcomes

You can read more about the Auckland Plan here: <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/homes-places/Pages/default.aspx>

Local Board Plan outcomes and/or key initiatives

LB Plan Outcome: 2020UH5 - A resilient local economy

LB Plan Objective: Our local businesses and industry are resilient and sustainable.

Relevant documents adopted by the local board

Auckland's Climate Plan 2020

<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/aucklands-climate-plan/Documents/auckland-climate-plan.pdf>

CLIMATE CONSIDERATIONS - "CLIMATE IMPACT"

Climate Change (Adaptation and Mitigation): Project management and decision-making to consider the reduction of GHG emissions through sourcing of low-carbon material options and use of products with environmental declarations for embodied carbon reductions. Consideration should be given to minimise waste from existing components through recycling and aiming for maximum diversion from landfill.

Climate Priorities: Built environment

Impact on Climate Goals: Positive impact on our climate change resilience

MĀORI OUTCOMES AND ENGAGEMENT

Māori Outcomes: No specific outcome focus areas

Degree of Māori Outcomes: Low or indirect outcomes

Māori Outcomes and Engagement: Inform Mana Whenua

KEY STAKEHOLDERS

Community Engagement Required: Inform

Community Engagement Approach: Via the Communication Advisor

Community Engagement Details: Local Board Members would like the Communications Advisor to inform the public.

Stakeholders:

- Sarah Clarke - Centre Manager
- Santosh Puthran – Senior Aquatics Facilities Specialist
- Kris Bird – Area Operations Manager
- Customers of Albany Pools
- Members of the public

STRATEGIC ASSESSMENT APPROVALS

Author:

Work Programme Lead	Melissa Johnston
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Prepared in Consultation With:

Area Manager	Kris Bird
Service / Benefit Owner/s	Chris Mc Arthur – Energy, Efficiency and Sustainability Manager Gwyn De-Arth - Regional Aquatic Facilities Manager Matthew Burden - Senior Centre Manager

Approval and Acceptance:

This initiative is worthy of inclusion in the work programme and further development into the initiate phase. I agree that the potential benefits identified are realistic, and the required budget appropriate to support movement into the work programme for approval by the decision makers.

Approver / Sponsor	Kris Bird	Signature:
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Appendices



36482 Albany Pool
Solar Array - Memo -