

Property Services Strategic Asset Management Plan

24 January 2019



Part of the Energy Queensland Group

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1 PURPOSE

The purpose of the Property Services Strategic Asset Management Plan (SAMP) is to provide an overarching framework for strategic asset decision making and ensure alignment with broader corporate performance targets. In essence, the Property Services SAMP ensures the asset decisions are enabled through clear and comprehensive considerations that reflects the corporate intent, vision and values.

Note: Any words highlighted in green italics have a formal definition in Chapter 7

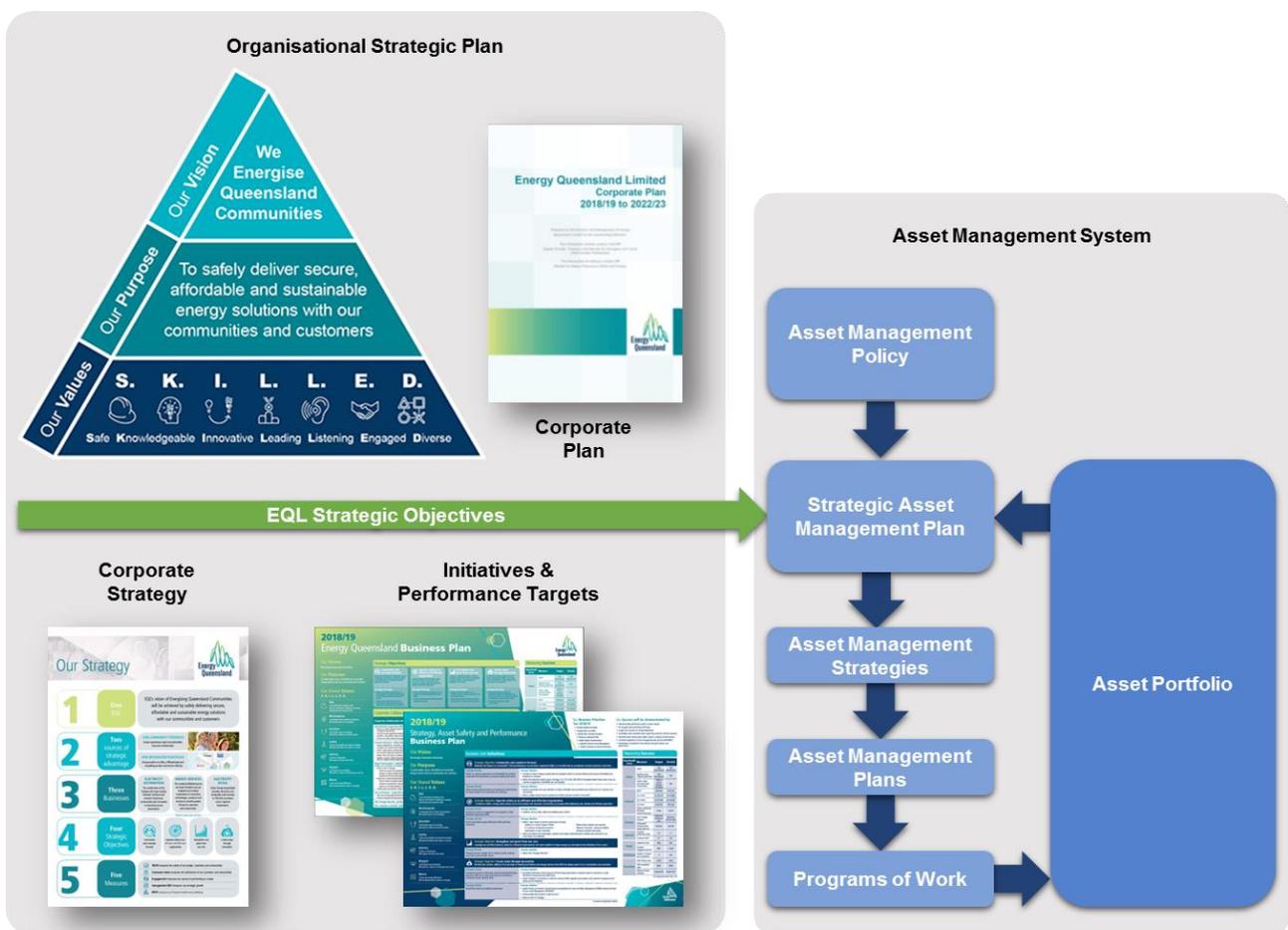


Figure 1-1 SAMP Overview and Purpose

2 ORGANISATIONAL CONTEXT

2.1 External Environment

The Australian energy sector has never been more challenging. Technological innovation, the increasing uptake of renewables and customers who are increasingly empowered in their ability to respond in the face of rising prices, continue to drive significant industry disruption. New market entrants are emerging seeking to capitalise on these changes by offering customers innovative products and services.

Technology and demand are enabling alternative energy supply options creating a shift from traditional one-way power flows to multiple power sources and energy flows. This is driving energy generation choices, including distributed generation and storage. The increased level of residential rooftop solar photovoltaic (PV) throughout the Queensland electricity network has in turn reduced overall demand from baseload generation. Customers are now routinely, and in ever-increasing numbers, generating their own energy for their use.

Increasing levels of energy resources without effective management and coordination may potentially compromise reliability, quality of supply and system security. This will require new approaches to operate a network increasingly characterised by multi-directional power flows. Distributors have moved beyond the traditional engineering solution of building new or additional network as the default preferred solution in meeting these new challenges. Current market participants need to adapt and introduce new and more flexible solutions to ensure long term sustainability.

Current regulatory and energy policy in Australia continues to create uncertainty which impedes the ability of market players to proactively respond to the changing energy landscape. Energy Queensland will continue to look to influence the policy debate to support better outcomes for our communities and customers.

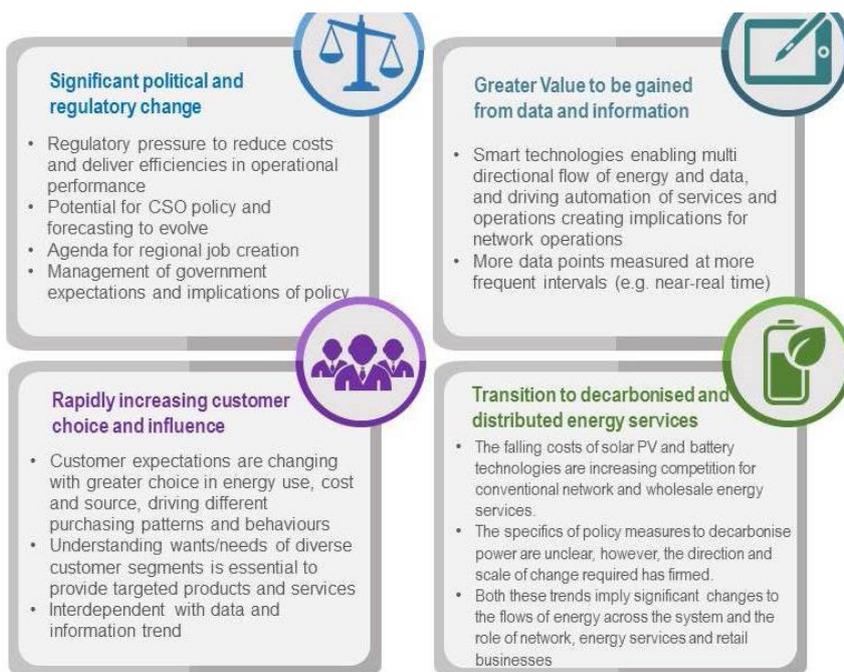


Figure 2-1 External Environment

2.2 Internal Environment

EQL is a government-owned energy company that formed in June 2016. The organisation includes Energex, Ergon Energy Network, Ergon Energy Retail, Yurkia and a number of other businesses and power communities within Queensland. As a business, EQL currently owns, operates, and maintains assets valued at over \$24 billion. It delivers a service that connects and supplies electricity to approximately 2 million customers across Queensland and a retail customer base of approximately 700,000. To provide this service, EQL retains approximately 7000 employees with a customer reach of 220,000km.

Property Services is a group within the EQL organisation with a vision to support a high performing organisation by leading innovative and collaborative non-network infrastructure solutions. The newly formed group was established in June 2016 consisting of both employees from Energex and Ergon Energy. The group is structured in separate value streams with a focus on Strategy, Assets, Customer and Security. The figure below shows the relationship between EQL and the Property Services Group (currently in the non-system category).

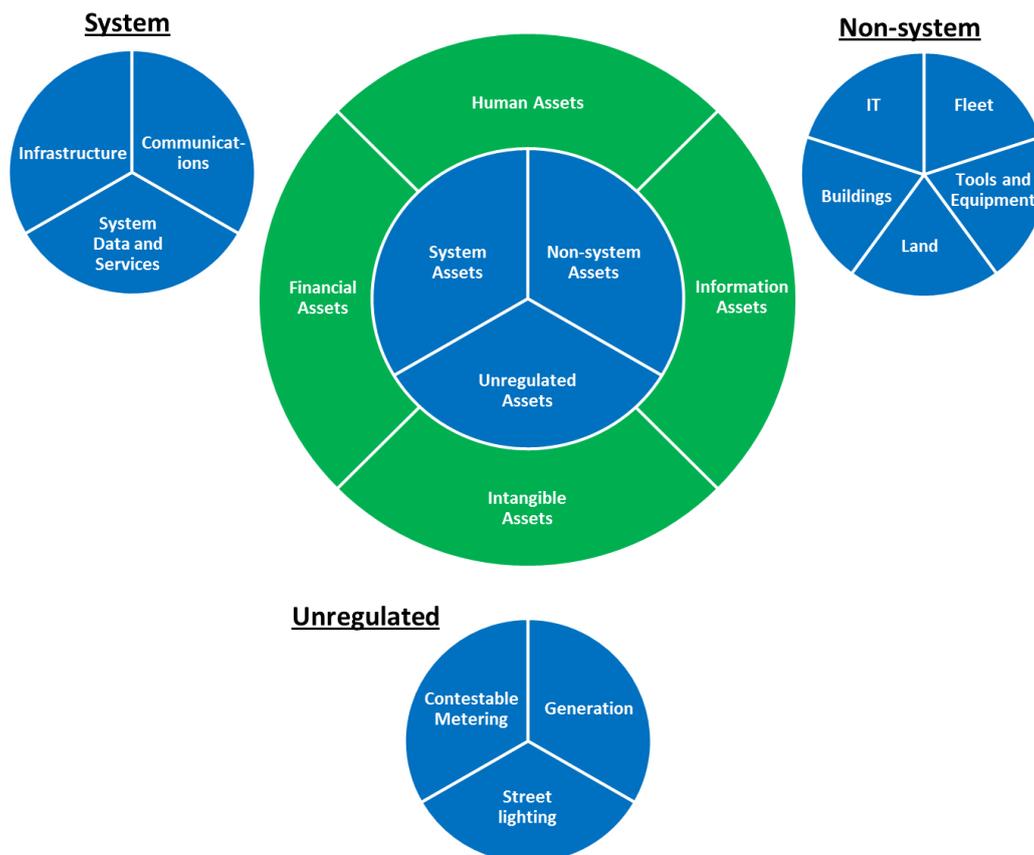


Figure 2-2 Asset Portfolios and relationship between EQL and Property Services Group

2.3 EQL Vision, Purpose and Values

The Energy Queensland vision is to energise Queensland communities.

Energy Queensland provides an opportunity to deliver better outcomes for customers, employees and all Queenslanders. Energy Queensland will effectively manage Queensland's electricity network, and respond to the future needs of the energy market.

In the current environment, the Energy Queensland vision underpins the provision of a safe, reliable and cost-effective electricity distribution network.

To achieve the vision, Energy Queensland's purpose is to deliver secure, affordable and sustainable energy solutions with our communities and customers



Figure 2-2 EQL Vision, Purpose and Values

2.4 Scope of the Asset Management System (Property Services)

The Property Services Group is responsible for the asset base of approximately \$1.4 billion and manages all phases of the asset life cycle. The domain of the Property Services Group and its services includes but not limited to:

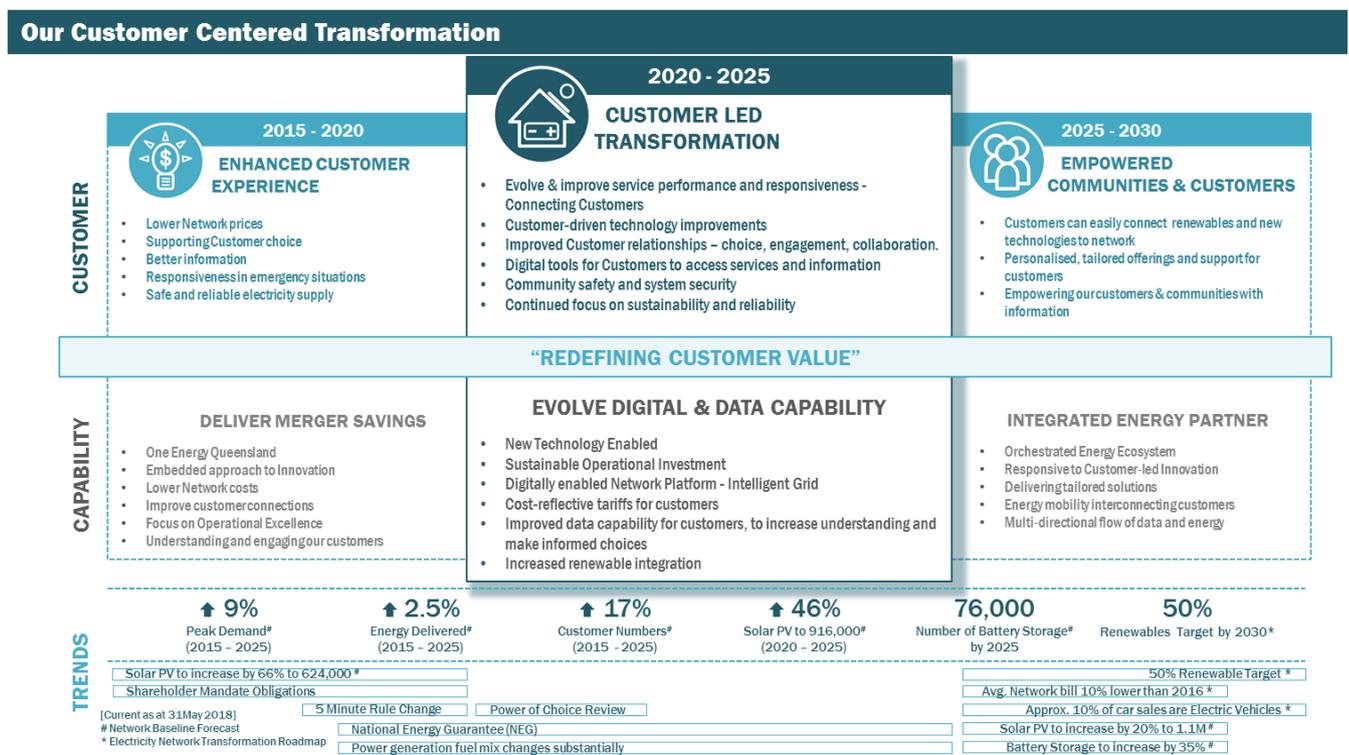
- All facets of Asset Life Cycle Management system for the *EQL Corporate Portfolio*
- Asset Life Cycle Management of the *Isolated Generated Systems*
- Management of selected building services of the *EQL Network Asset Portfolio*

Note: Any words highlighted in green italics have a formal definition in Chapter 7.

Given the fluid and dynamic nature of the scope and services to manage the properties of the Corporate Portfolio, Isolated Generated systems and the Network Asset Portfolio, the detail is not captured in the Property Services SAMP. This detail can be sourced in the Property Services Asset Management Manual.

2.5 Strategic Planning at EQL

The EQL corporate strategic planning process starts with the development of the Strategic Direction which is informed by analysing the external environment to determine EQL’s aspirational goals and overall strategic intent. The corporate plan then outlines the high-level strategic responses and specific initiatives aimed at achieving the aspirational goals and strategic intent over a five-year time horizon. EQL’s corporate plan guides the business in aligning the short and medium-term priorities, initiatives and Key Result Areas (KRAs), the longer-term direction is set out in the 2030 Strategic Narrative.



EQL’s strategic framework provides the context and direction for the asset management objectives and resulting strategies, plans and other supporting strategic responses. The SAMP considers the strategic environment and the aspirational goals linked to EQL’s strategic direction, its 5-year performance targets, corporate risk appetite and the commitments made under its Corporate Plan. All these elements influence the development of Asset Management Objectives and the SAMP.

3 ASSET MANAGEMENT OBJECTIVES

The Asset Management Objectives are the outcomes required from the asset management system to ensure EQL and the Property Services Group strategic goals are met. The Asset Management Objectives are multi-faceted to align with various organisational drivers and ensure a clear 'line of sight'. The Asset Management Objectives also consider a systemic perspective with a focus to develop, mature and improve the asset management system.

The Tactical Initiatives are the targets that support the Asset Management Objectives. It is a secondary set of targets which scaffold the AM objectives. For the purposes of this document, the tactical initiatives will not be listed in this document, however, the content of each will be further detailed in the associated Asset Management Plans (AMP's).

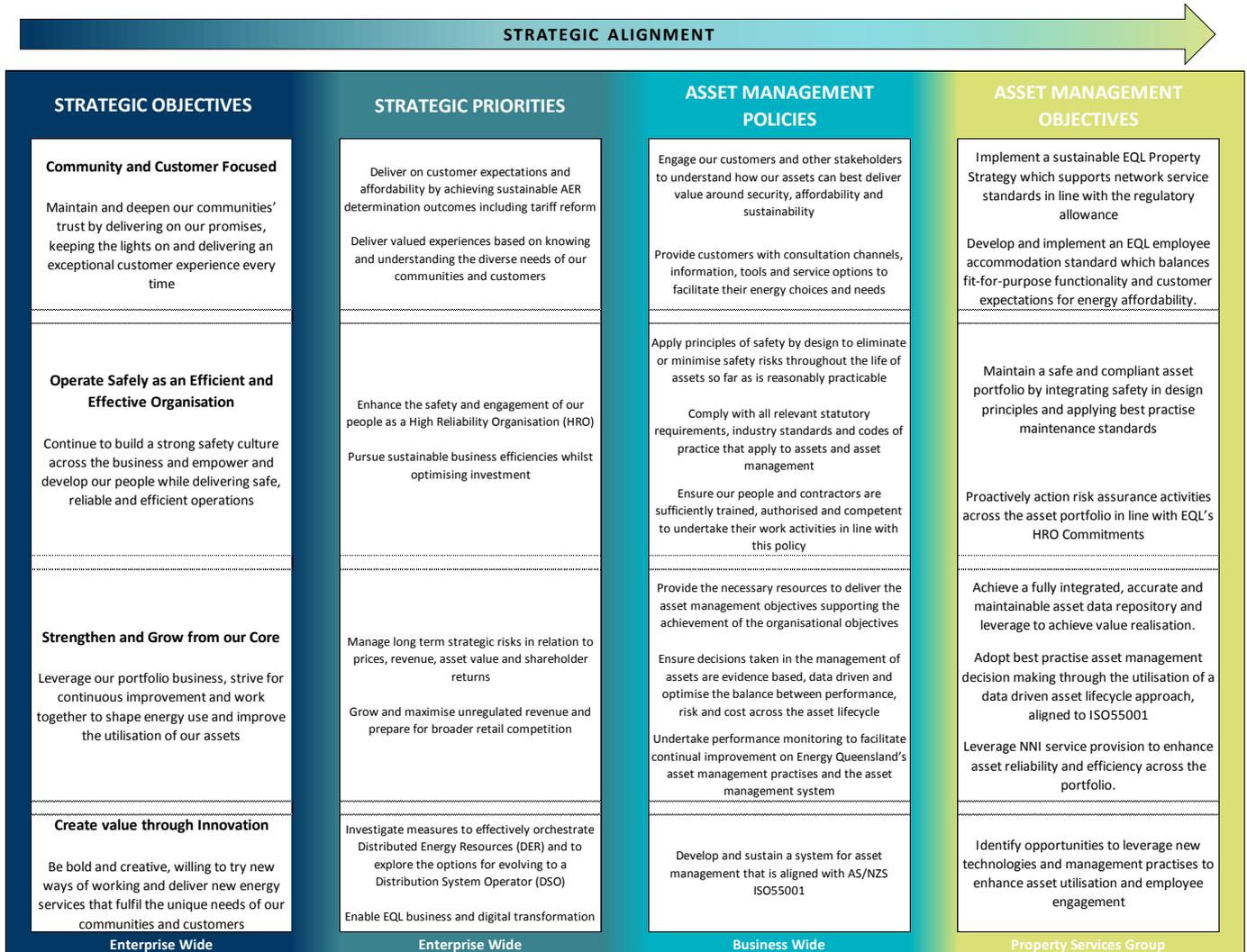


Figure 3-2 EQL Asset Management Objectives

4 ASSET MANAGEMENT FRAMEWORK

4.1.1 EQL Business Plans (Organisation & Property)

Based upon the EQL Vision, Purpose and Values the tiered EQL business plan focuses on corporate intent as opposed to asset performance. The business plan provides context for all employees, contractors, suppliers and delegates and interlinks the direction of the organisation and with the role of the employee or individual. The four strategic objectives are consistent throughout all business plans which are listed below:

- Customer and Community Focus
- Operate Safely as an Effective Efficient Organisation
- Strengthen and Grow from Core
- Create Value through Innovation

Further detail can be sourced at the EQL intranet “The Wire”.

4.1.2 Network Asset Management Policy & Commitment

The EQL Asset Management policy provides direction and broad framework for the establishment, implementation and ongoing commitment of the EQL asset management system. The overarching premise is to ensure that asset management decision making taken by employees is aligned with achieving Energy Queensland’s strategic objectives and ISO 55000. This policy is in development and acts as a key platform for direction for the EQL SAMP and Property Services SAMP. The Asset Management Policy below is a draft only. The updated document can be sourced at the EQL intranet “The Wire”.

The Asset Management policy itself constitutes and articulates EQL’s commitment to ISO 55000. The policy not only defines general intent but nominates responsibilities for key players within the organisation to ensure an organisational commitment and on-going accountability.

4.1.3 Network Strategic Asset Management Plan (SAMP)

The EQL SAMP is the strategic asset management plan for the organisation. It is a quantifiable development of the asset management policy and provides overarching direction with a focus on the organisation deliverables and targets within asset management. The EQL SAMP provides a framework on the agreed key organisation deliverables detailing strategic targets, constraints and the process of continuous improvement. Although this document is in draft format it has facilitated the development of the Property Services SAMP.

4.1.4 Property Services Strategy

The Property Services Strategy is a “property-centric” strategy designed to deliver a safe and efficient, fit-for-purpose and customer-centric property portfolio. The EQL property portfolio will support Queensland communities and customers by ensuring EQL has facilities in the right locations to enable the operation of a safe and efficient network. It is responsible for providing the overarching framework for optimising and maintaining the combined property portfolio for Energy

Queensland (EQL), consisting of the Energex and Ergon Energy property assets. Although this document is in draft format it has facilitated the development of the Property Services SAMP.

4.1.5 Property Services Asset Management Plans (AMP) & Context

The Asset Management Plans (AMPs) are a separate stand-alone document that provides further detailed planning considerations for selected asset management objectives. The AMP's identify the performance issues and risks presented by each objective and define specific actions that must be undertaken to deliver agreed asset and or system performance. The AMPs are to be supported by detailed reports and standards to ensure assets are appropriately maintained and the detailed condition, and associated risk, of selected assets is well defined and understood. This detail of each AMP can be sourced in the Property Services Asset Management Manual.

The plans present the need for maintenance, refurbishment and construction activities required for the assets to meet the asset management objectives. Plans may include high levels costings for the purposes of assessing options, however, the specific programs required to deliver the needs, limitations and actions identified in the plans are set out the Network Program Documents that form the Program of Work.

4.2 SAMP Review and Update

The Property SAMP nominal planning period covers the current regulatory period of (2015-2020) and (2020-2025). Together with the other Asset Management System (AMS) documents, this document will be reviewed and updated on an annual basis.

5 ASSET MANAGEMENT ACTIVITIES

The Asset Management Activities shown in Figure 5-1 supports the achievement of EQL’s Asset Management Objectives through ensuring that all essential elements of asset management practice are operationalised. The system illustrates the breadth of activities within the scope of asset management, the interrelationships between activities and the need to integrate them, and the critical role for asset management to align with and deliver the goals of an organisations strategic plan. Further discussion on the asset management system is set out in this section.

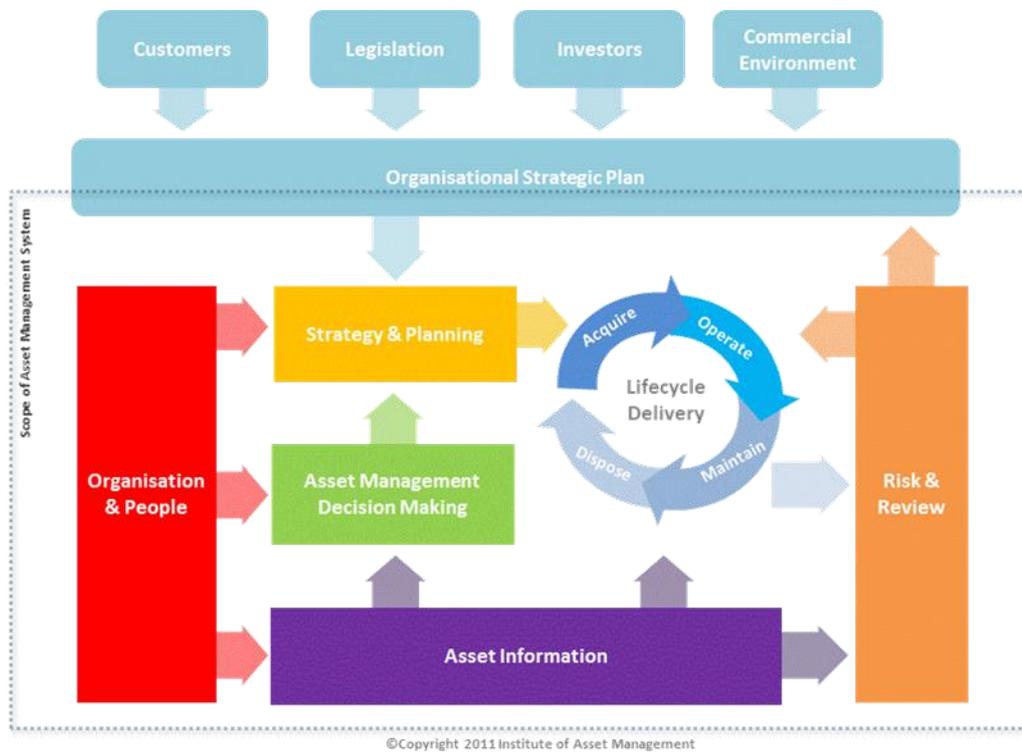


Figure 5-1 Asset Management Activities

5.1 Strategy and Planning

Strategy and planning aligns the organisation’s asset management activities, the output’s from its assets and EQL’s overall organisational objectives. This element identifies the asset management objectives for EQL, establishes the asset management policy, this strategic asset management plan, various asset management plans.

5.2 Asset Decision making

Effective decision making is essential for EQL to maximise the value from its assets. This element outlines the criteria and assessment strategies put in place for EQL to make decisions on its current and future assets. Asset Management decisions must balance capital and operating expenditure to manage identified risks, cost and portfolio performance. This element of the system considers the challenges faced and the approaches to decision making for the three main stages of an assets life (acquisition/creation, operation/maintenance, end of life).

Key References	Key Inputs	Key Outputs
Asset Management Policy Strategic Asset Management Plan	Industry Standards Legislative Obligations Property Services Strategy NNI Asset Management Software	Asset Management Plans Policy & Procedures for Life Cycle Stages

5.3 Life Cycle Delivery

Lifecycle delivery is the element in which assets are acquired, operated, maintained and disposed of in accordance with the Asset Management Plans. The activities of owning and operating assets are undertaken (construction and commissioning, fault response, decommissioning etc.) as part of this element. Areas such as standards development and compliance, maintenance and operational manuals are also developed in this element to ensure successful delivery of the asset management plans.

5.3.1 EQL Context

EQL incurs the majority of its’ assets-related expenditure through the activities in Lifecycle delivery. The majority of the direct asset related expenditure occurs in this element where assets are acquired, maintained and disposed of. A focus on the integration of activities across the lifecycle can enable EQL to reduce avoidable downstream costs. Good design, procurement and asset operation practices all reduce the levels of asset corrective maintenance this is needed, and increase the asset reliability and availability, delivering associated value at a lower cost.

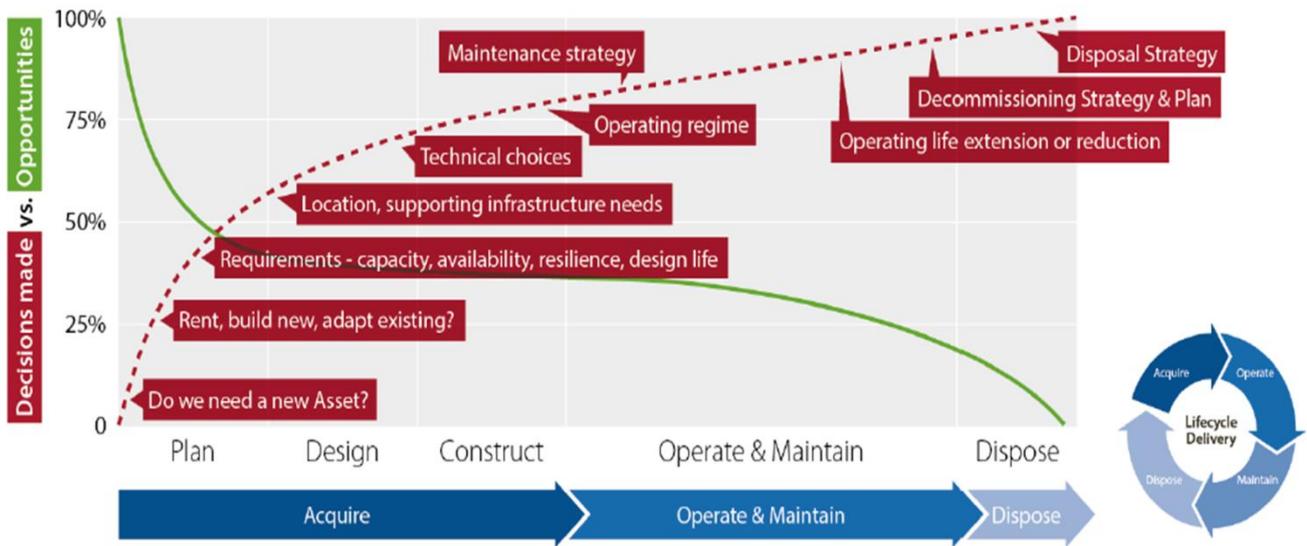


Figure 5-2 Opportunity Influence During Life Cycle Delivery

5.4 Risk and review

This element facilitates the constant and evolving trade-off between performance, cost, risk and opportunity. This element also provides the mechanisms for the asset management system to inform the development and adaptation of the corporate plan, strategies and objectives. Constant review of asset management activities helps Property Services better understand its assets and can help in responding to asset failure and/or asset safety-related incidents.

Key References	Key Inputs	Key Outputs
Asset Management Policy Environment Risk Management Manual Health and Safety Risk Management Board Approved Risk Appetite Statement	Industry Standards Legislative Obligations Property Services Strategy	Documented Corporate & Property Risks in the Asset Management System

5.4.1 EQL Context

Through applying risk management throughout the asset management system to decision making and in reviewing the Lifecycle Delivery performance, Property Services is able to effectively assess the performance of the asset against the asset management objectives. It is important to understand that risk does not necessarily need to be avoided, but understanding the risk throughout the system ensures that the potential rewards should be sufficient to proceed with the exposure to the risk.

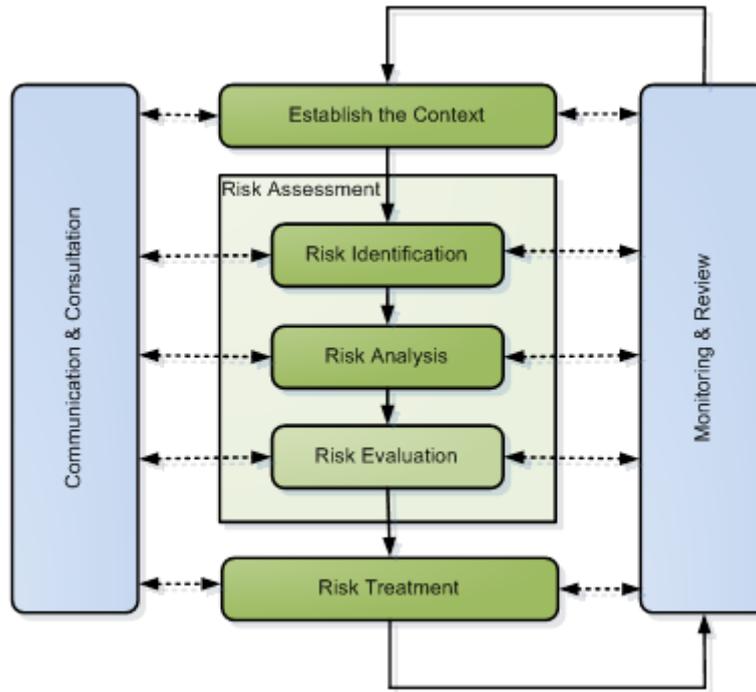


Figure 5-3 Risk Management Decision Process

5.5 Organisation and People

This element introduces and embeds asset management thinking and practise into all areas of EQL. Of particular importance is the organisational leadership, structure and cultural aspects as well as procurement and supply chain such that whole of life costs are considered in sourcing labour and materials. Asset management thinking and practises can be uncomfortable for people and its introduction can be quite challenging. In this way, this element is central to establishing asset management practice within EQL.

5.6 Asset Information

Asset information is a combination of data about assets and the context in which they operate. This is used to inform decisions about how assets are managed. Data and information requirements, including quality requirements, need to be identified and defined (in asset strategies) to ensure data that is collected and analysed fully supports the asset management objectives.

Key References	Key Inputs	Key Outputs
Asset Management Policy ERP and EAM Strategy Australian Standards Australian Standards	NNI Contract NNI Contract Asset Management Software Ellipse Asset Information & Condition Assessments	Property Services Asset Data Repository

5.6.1 EQL Context

Data-driven, risk-based decision making is central to EQL's asset management system and asset data and information is a key enabler across the breadth of asset management activities. As such, EQL has a range of asset information systems that collect, store, process and analyse data and information.

EQL is currently transitioning from legacy Ergon Energy and Energex systems to enterprise-wide ERP (Enterprise Resource Planning) and EAM (Enterprise Asset Management) systems. This activity is being undertaken as part of EQL's Digital Enterprise Building Blocks Project.

6 ASSET PERFORMANCE AND EVALUATION

6.1.1 Performance Improvement Measures

At present, there is no system in place for the performance evaluation. This process will need to include the following requirements specific to the Organisation's asset management policy and ISO55001. This framework will monitor asset performance outcomes against predetermined business outcome targets. The framework will also support a review of the critical business processes and organisational enablers that need to function effectively in order to deliver the business outcomes.

The intention is to develop the following evaluation criteria which includes;

- Develop a base or core level asset performance levels
- Continuously improve asset management activities and practices
- Achieve financial sustainability; and
- Maintain legislative compliance
- Conduct a review of the existing Asset Management Plans and supporting documentation;

The outcomes from this evaluation are reported to the Property Services Leadership Team.

6.1.2 Auditing

At present, there is no system in place for the on-going audit of the AMS. This process will need to include the following requirements specific to ISO55001:

- Plan, establish, implement and maintain an audit program;
- Define the audit criteria and scope for each audit;
- Select auditors and conduct audits who are objective/impartial;
- Ensure that the audit results are reported to management;
- Retain documented information as evidence of the audit; and
- Develop a preventative action, corrective action and continuous improvement process and register.

6.1.3 Management Review

At present, there is no system in place for the management review of the AMS. This process will need to review the following in terms of ISO55001:

- Status of actions from previous management reviews;
- External/internal issues that are relevant to the AMS;
- Information on asset management performance, including nonconformities and corrective actions and monitoring and measurement results;
- Asset management activity;

EQL PROPERTY SERVICES SAMP



- Opportunities for continual improvement;
- Changes in the profile of risks and opportunities; and
- Retain documented information as evidence of the audit.

7 GLOSSARY

7.1.1 Glossary Terms

- *EQL Corporate Portfolio* - TBA
- *Isolated Generated Systems* - TBA
- *EQL Network Asset Portfolio* - TBA