ICT Digital Foundations

Business Case

25 January 2024

Part of the Energy Queensland Group

CONTENTS

1 EXECUTIVE SUMMARY

Title	Non-Network ICT – Integrated Grid Planning
Application	All Energy Queensland lines of business
Expenditure category	☐ Replacement ☐ Augmentation ☐ Connections ☐ Tools and Equipment ☒ Non-network ICT ☐ Property ☐ Fleet
Identified need	☐ Network resilience ☐ Facilitate customer and community opportunities ☐ Evolving grid infrastructure ☒ Safe, efficient and affordable operations This business case addresses the non-network ICT investment required to support the key investment driver 'Safe, efficient and affordable operations'. Energy Queensland is committed to providing network services that meet customer and market expectations as operations become both more complex and technology dependent. The Digital Foundations business case ensures our foundational ICT services remain safe, effective, efficient, support affordability for our customers and enable Energy Queensland to keep pace with fast changing technology and business requirements.
Benefits	This business case realises four benefit categories: improved integration performance; improved access to applications for office and field workers; improved scalability and robustness of telecommunications, compute and storage; and improved technology service delivery. The quantitative benefits to be realised from this investment are $210.0M (present value $177.0M).
Recommended option	Option 2 'Enable office and field worker collaboration and modernise cloud capabilities' is the recommended option as it maintains the effectiveness of the existing business capabilities at the current level and keeps pace with the industry transition. This option allows for the risk mitigation of Option 1 plus some minor continuous improvements in areas where we have known requirements for keeping pace with the industry transition. While these are relatively minor improvements, they are intended to advance Energy Queensland's existing business capabilities and introduce efficiency outcomes. This option also best enables Energy Queensland's core Digital Foundations capabilities so that it will be compliant with its legislative obligations and is adaptive and flexible to increasing volume and complexity of data driven by the expected industry transition. This option also best underpins all four investment drivers identified in the Electric Life Strategy, not just Safe, efficient and affordable operations.
Expenditure[1]	The total investment costs associated with the recommended option ($M).

FY26	FY27	FY28	FY29	FY30	Total 2025-30
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	137.5

[1] All financial figures have been rounded and shown in $ million ($M) throughout this document, shown using the costing approach for non-network ICT expenditure described in the Non-network ICT Plan document section 7.1.

2 DOCUMENT BACKGROUND

2.1 Purpose of Document

The purpose of this document is to outline the EQL's proposed program of work pertaining to Digital Foundations for the next regulatory control period from 1 July 2025 to 30 June 2030 (2025-30).

2.2 References

Table 1: Related Documents

Date	Name	Type
19/04/2023	Energex Business Narrative Ergon Energy Network Business Narrative	Direction
25/01/2024	Non-network ICT Plan 2025-30 (Attachment 5.8.01)	Document
25/01/2024	Non-network ICT Common Glossary (Attachment 5.8.10)	Document
31/10/2023	RDP 2025 Project – Shared Assumptions	Assumptions Document
26/06/2020	Energy Queensland Low Carbon Future Statement	Document
19/07/2023	Ergon Energy Network and Energex: Demand Management Plan 2023-24	Document
25/01/2024	All other non-network ICT business cases (Attachments 5.8.02 to 5.8.08)	Document

2.3 Document History

Table 2: Document History

Version Number	Change Detail	Date	Updated by
0.1	Review and develop initial document templates	July to August 2022	EY
0.2	Scoped proposal, assessed costs and benefits, and developed options Draft 1 completed	September 2022 to January 2023 31 January 2023	Energy Queensland EY
0.3	Continued refinement of messages, format and content including incorporating feedback from RRG Session 1 Draft 2 completed	February to June 2023 30 June 2023	Energy Queensland

Version Number	Change Detail	Date	Updated by
0.4	Updated based on feedback from RRG Session 2, Residential Focus Groups, Draft Plan consultation and Strategic Review by Deloitte Draft 3 completed	July to November 2023 24 November 2023	Energy Queensland
0.5	Strengthened strategic narrative, benefits and options analysis Draft 4 completed	December 2023 to January 2024 25 January 2024	Energy Queensland Deloitte
1.0	Final submitted to the Australian Energy Regulator	31 January 2024	Energy Queensland

2.4 Approvals

Table 3: Document Approvals

Position	Name	Signature	Date
Approver: General Manager General Manager			30/01/2024
Final Approver: EGM A/Chief Information Officer			30/01/2024
Final Approver: EGM Chief Engineer			30/01/2024

3 STRATEGIC CONTEXT

3.1 Background

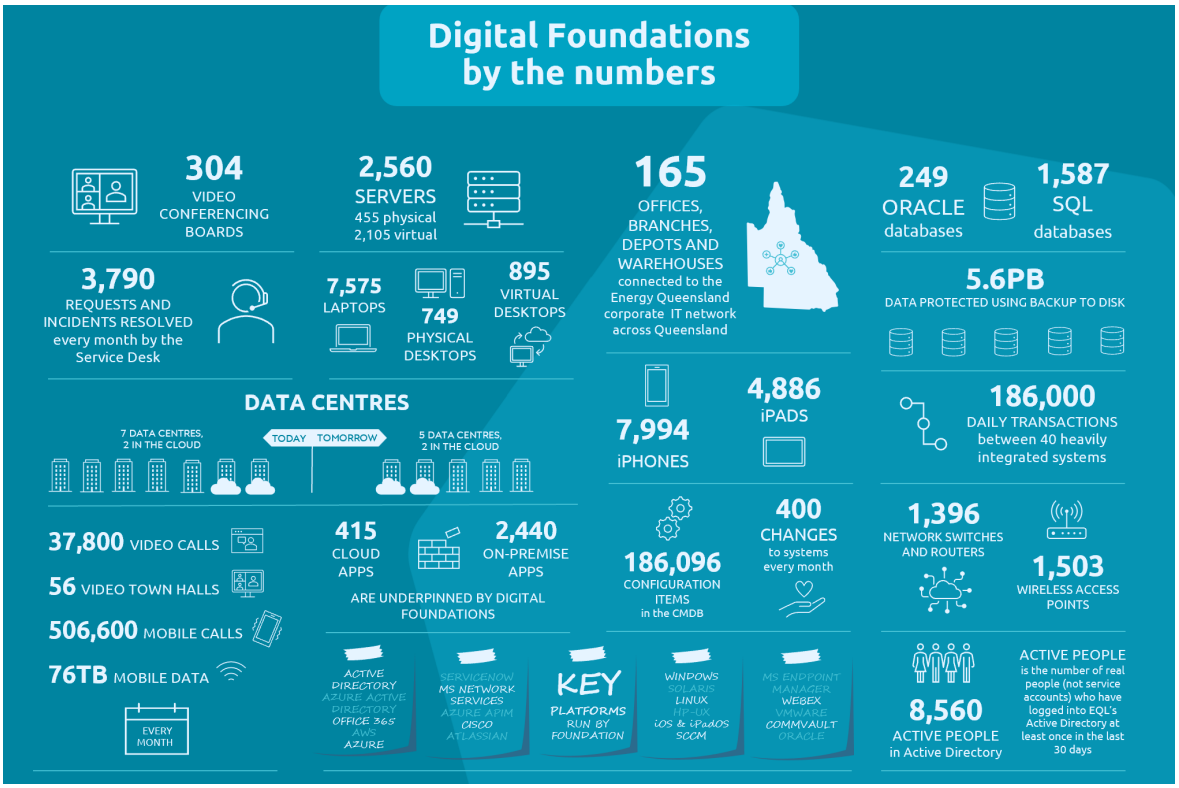
EQL's Digital Foundations are enabled by a large range of Information and Communications Technology (ICT) infrastructure and end-user devices. EQL operate their ICT infrastructure and business service in accordance with IT Service Management practices, to ensure prudent, efficient, and effective management of service quality, performance, and change.

The role of Digital Foundations is to maintain prudent and efficient non-network ICT asset lifecycle management of Energy Queensland's foundational technologies to support the delivery of efficient, reliable and secure energy services to customers and communities, and address an increasingly complex cyber security and critical infrastructure landscape. Foundational technologies are the set of critical ICT infrastructure technologies that underpin the majority of Energy Queensland's ICT systems and digital services and play a key role in ensuring a strong cyber posture to keep systems safe from cyber threats and maintain security of critical infrastructure.

As customer and market expectations across the network grow increasingly digital, Energy Queensland forecasts a significant uplift in the volume of data we must manage. Digital Foundations play a key part in managing this growth in data so that Energy Queensland can respond to customer and market expectations and how we maintain secure access of people and systems to data, devices, collaboration tools, storage and telecommunications.

Figure 1 illustrates the breadth of EQL's Digital Foundations estate and the complexity of ICT network of infrastructure that is critical to EQL's electricity network.

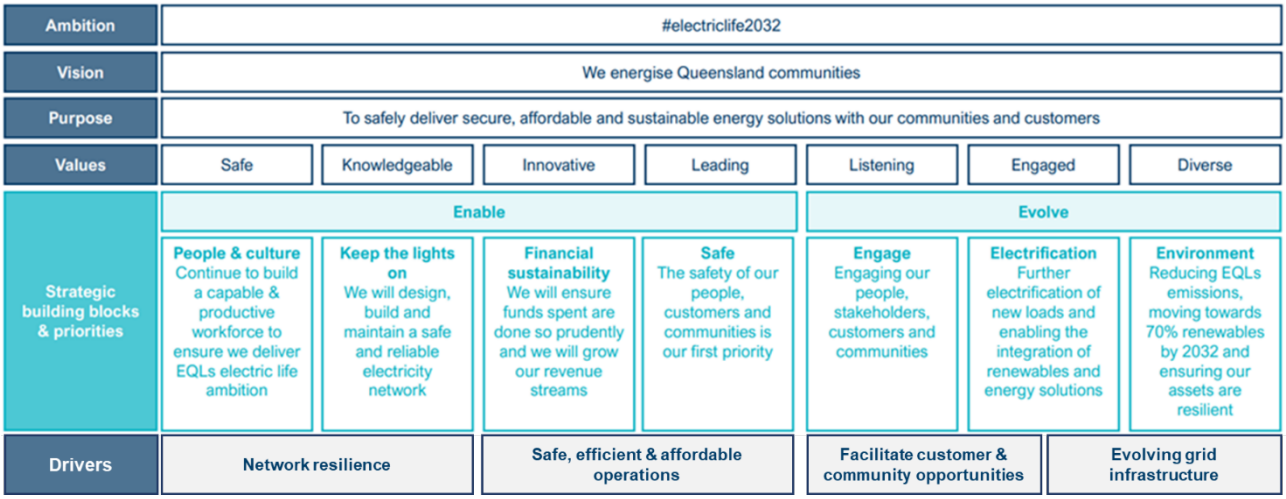
Figure 1: Energy Queensland's Digital Foundations by the numbers



3.2 Electric Life 2032 and Investment Drivers

There are four investment drivers that underpin Energy Queensland's Electric Life 2032 ambition, vision and strategic priorities which will inform development of our expenditure plans and forecasts for the 2025-30 regulatory control period, as identified in Figure 2 and which are reflected in our Non-network ICT Plan. The investment drivers are reliant on investment in information technology to deliver the information, infrastructure, security and capability across the breadth of our customer base, and to support the ecosystem of employees, contractors and suppliers who deliver the services that customers expect.

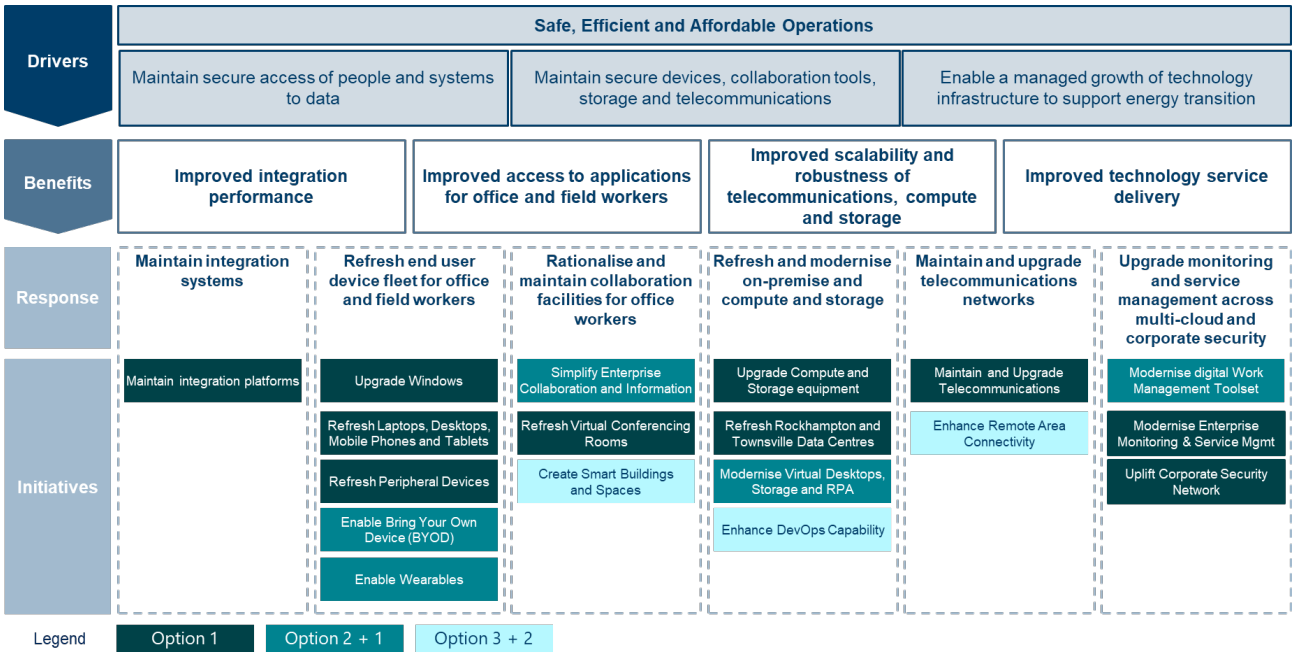
Figure 2: Energy Queensland's Strategic Framework



This business case addresses the non-system ICT investment required to support the investment driver 'Safe, efficient and affordable operations'. Energy Queensland is committed to delivering electricity services in the most efficient and affordable way, with consideration for customer, community, and employee health and safety. The Digital Foundations business case ensures our foundational ICT services remain safe, effective, efficient, support affordability for our customers and enable Energy Queensland to keep pace with fast changing technology and business requirements.

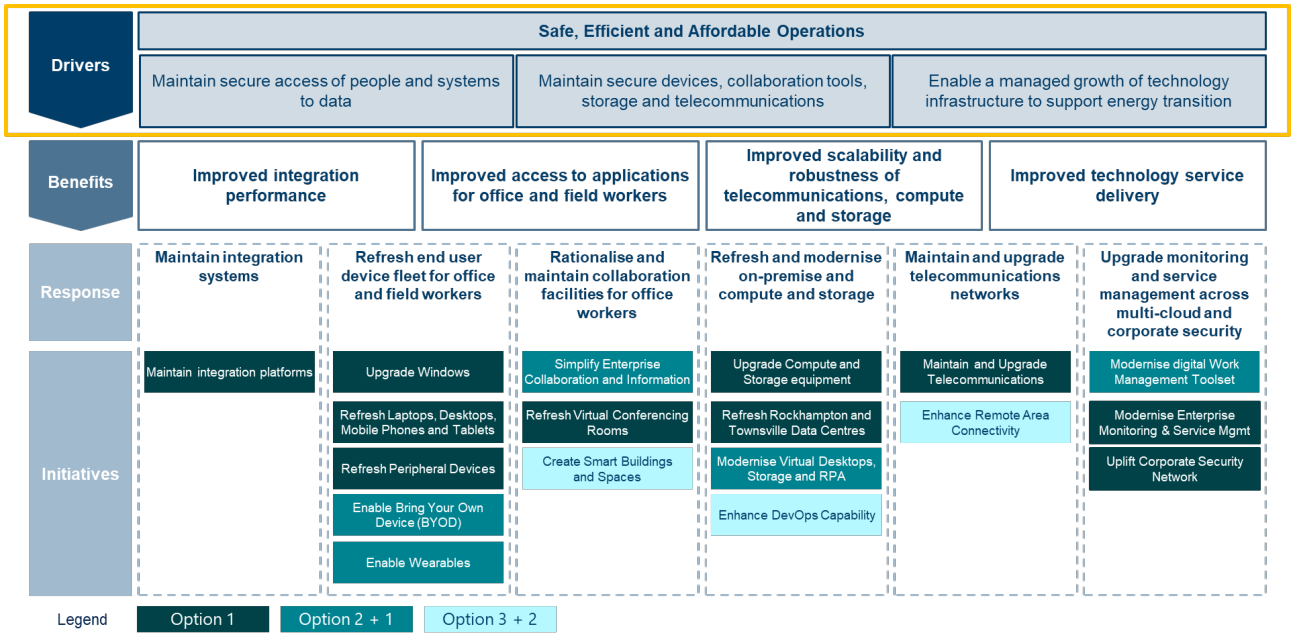
Within this driver, are three sub-drivers, each with a unique set of identified challenges for investment, the benefits that can be realised, and the objectives that can be met and outcomes achieved through delivery of a strategic response (i.e., programs).

Figure 3: Investment Logic Map for Digital Foundations business case



3.3 Drivers and Challenges

Figure 4: Investment Logic Map identifying three sub-drivers for Digital Foundations business case



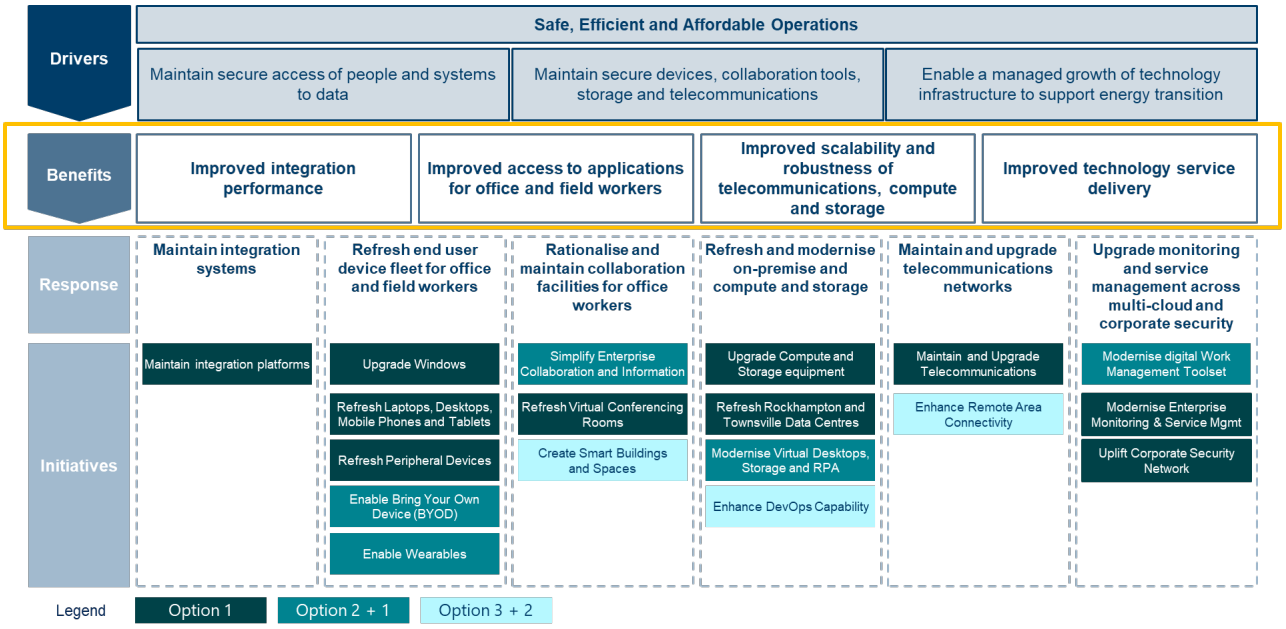
The key driver applicable to this business case is 'Safe, efficient and affordable operations'. The electricity network is a critical asset, enabling economic activity and community safety, thereby also requiring it to be performant, modern, and reliable to meet evolving customer and market demands. Providing an electricity network that meets customer and market expectations, as customer numbers increase and as operations become both more complex and technology dependent, presents opportunities to enable modern capabilities on a lean infrastructure platform that is capable, performant and mitigates cyber risk.

The three sub-drivers for investment for this business case are:

- **Maintain secure access of people and systems to data.** Maintaining secure access of people and systems to data is a key component of the Safe, efficient and affordable operations driver for EQL. Increasing business, data and systems complexity requires scaling of operations and presents significant challenges for EQL - an inability to scale process or information complexity will lead to operational inefficiencies and/or process quality issues. There are also regulatory obligations EQL must satisfy in a dynamic, data-driven operating environment. EQL must maintain strong controls and security on the accessibility of customer data as well as ensure the appropriate availability of data – keeping critical systems up to date, supported and secured is a key enabler of maintaining these controls.
- **Maintain secure devices, collaboration tools, storage and telecommunications.** Ensuring that devices, collaboration tools, storage and telecommunications infrastructure remain resilient, is critical for a DNSP. The expected industry transition will require EQL to place a greater reliance on enabling digital infrastructure, requiring this underpinning infrastructure to be reliable, secure and accessible.
- **Enable a managed growth of technology infrastructure to support energy transition.** Energy Queensland's Digital Foundation's consists of the underpinning infrastructure upon which many of the organisation's ICT systems depend on. Critical to the efficiency of both internal and external processes, Digital Foundation capabilities are essential in supporting EQL's response to the expected industry transition.

3.4 Way Forward and Benefits

Figure 5: Investment Logic Map identifying four benefit categories that address the drivers



We have identified the following four benefit categories that can be realised in response to the identified driver and sub-drivers. Please refer to section 4.3 and 6.2 for an analysis of the quantifiable and qualitative benefits associated with the investment.

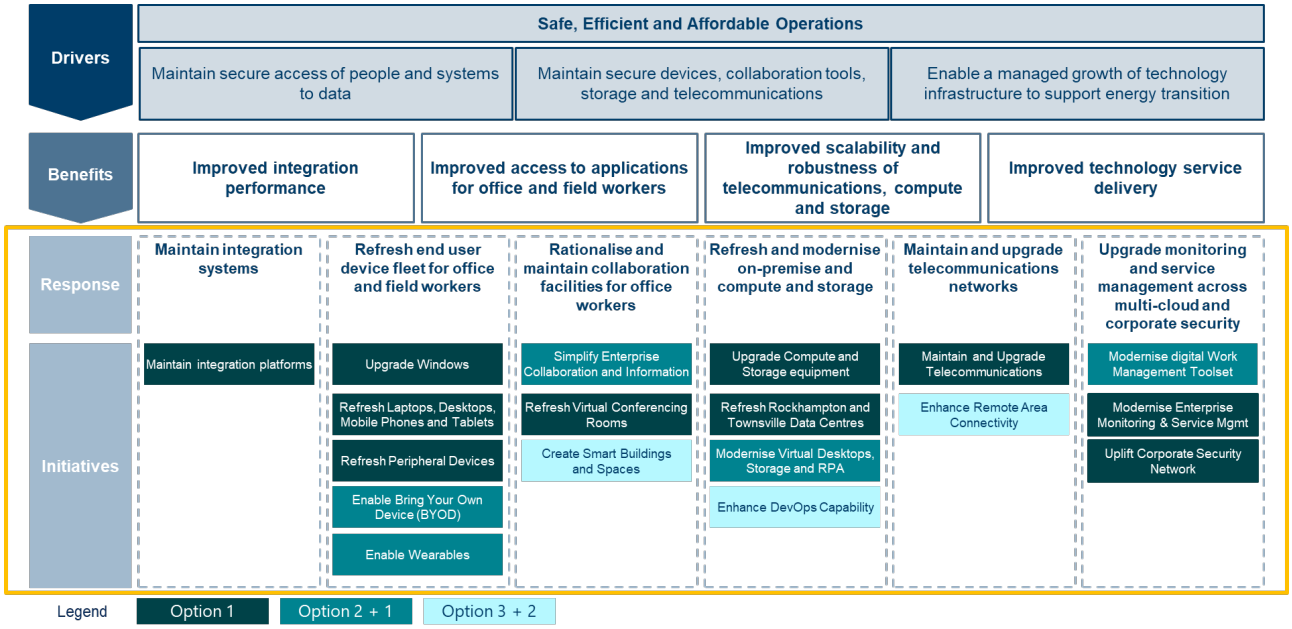
- **Improved integration performance.** The improved integration of systems not only enhances overall performance through the adoption of up-to-date technology but also ensures advanced data protection and more efficient management of internet of things (IoT) devices, contributing to a more robust and streamlined operational environment. The list below provides information on the benefits:
  - System Integration and Performance Improvement with Up-to-Date Technology: Up to date software and hardware provide strong system integration capabilities, meets performance demands, and enables adoption of new technologies.
  - Enhanced Data Protection and IoT Management: Improved ability to secure our customer and business data, and IoT device footprint (Data Protection Modernisation, Managing IoT devices).
- **Improved access to applications for office and field workers.** Enhanced access to applications empowers staff with modern technologies, fostering productivity, secure employee interactions, and effective cyber risk mitigation. The list below provides information on the benefits:
  - Realising Full Potential of New End User Devices Technologies: Ability to realise full potential of new end user devices technologies, including full benefits from the Asset and Works Management business case (e.g., wearables, Enterprise Information Accessibility, files in the cloud).

- Advancing Staff Development in Modern Technologies: Improved development opportunities for staff in modern technologies.
- Employee Engagement and Productivity through Modern Technologies: Improved employee engagement and productivity through modern end user technologies, technology flexibility (including BYOD) and collaboration (e.g., Enterprise Social, Digital Toolset).
- Foundation for Secure and Capable Customer-Facing Systems: Enablement of newer technologies lays the foundations for more secure and more capable customer-facing systems.
- Cyber Risk Mitigation through Software and Hardware Support: Mitigation of security vulnerabilities through keeping software and hardware on supported versions, which is one of the key controls to mitigate cyber risks.

- **Improved scalability and robustness of telecommunications, compute and storage.** Enhanced storage scalability and robustness offers Energy Queensland improved infrastructure adaptability, outage prevention, efficient scaling of processes without productivity loss, and a reduced carbon footprint through strategic cloud migration. The list below provides information on the benefits:
  - Improved Infrastructure Scalability for Modern DNSP: Improved scalability and adaptability of core infrastructure to adapt to changing data and integration requirements associated with a modern DNSP.
  - Outage Prevention through Server and Data Centre Renewal: Avoided outages and incidents through renewed server hardware and replacement of ageing data centre infrastructure.
  - Efficient Scaling of Processes without Productivity Loss: Ability to effectively scale processes or information complexity without loss of employee productivity / need for additional headcount increases (e.g., Robotic Process Automation, Enterprise Information Accessibility).
  - Carbon Footprint Reduction through Cloud Migration: Reduced carbon footprint through moving more services to the cloud.
- **Improved technology service delivery.** Improved technology service delivery ensures secure, scalable digital capabilities for workforce changes and enables seamless adaptation to ongoing regulatory and compliance changes. The list below provides information on the benefits:
  - Secure Digital Capability and Service Delivery for Workforce Changes: Efficient, scalable, and secure digital capability and service delivery (e.g., Digital Toolset, Desktop virtualisation), also supporting changes in the workforce.
  - Keeping Pace with Ongoing Regulatory and Compliance Changes: Keep pace with a predictable, regular level of ongoing regulatory and compliance change.

3.5 Initiatives and Outcomes

Figure 6: Investment Logic Map identifying responses and initiatives that realise the benefits



The following initiatives are proposed to meet our investment drivers, address the development challenges, and realise the benefits identified:

- **Maintain Integration systems**. Energy Queensland has a very heavy reliance on its various integration platforms for key internal and customer facing systems, completing close to 200,000 transactions every day between 40 heavily integrated systems. This response will focus on maintaining the integration platforms to maintain the integration of Energy Queensland applications. The initiatives within this response include:
  - Maintain Integration Platforms: Maintain integration platforms in a supported state to enable the efficiencies and accuracies afforded by integrated systems, and to maximise operational stability and cyber resilience.
- **Refresh end user device fleet for office and field workers**. This response will upgrade and refresh devices and peripherals to the latest technology, enhancing operational stability, cybersecurity and accessibility to applications and data for Energy Queensland's office and field workers. The initiatives within this response include:
  - Upgrade Windows: Upgrade the fleet of laptops and desktops to the latest Windows Operating System to take advantage of advances to make it easier to work in the office, the field, at home, and on the road, and to keep them in a supported state to maximise operational stability and cyber resilience.
  - Refresh Laptops, Desktops, Mobile Phones and Tablets: Refresh the fleet of legacy laptops, desktops, mobile phones and tablets to take advantage of advances to make it easier to work in the office, the field, at home, and on the road, and to keep them in supported state to maximise operational stability and cyber resilience.

    The advent of 'anywhere, anytime' connectivity, notably to cloud services, in the current cyber climate heightens the need to protect corporate information. Modern devices that

run the latest hardware with modern software provide the best possible first line of defence against cyber threats.

- Refresh Peripheral Devices: Printing and Uninterruptable Power Supply. Refresh and consolidate Energy Queensland's fleet of printers and plotters by providing this service centrally at locations only where needed, in an environmentally friendly manner, to keep them in a supported state to maximise operational stability and cyber resilience.

  Renew the uninterruptable power supplies that provide redundant power to racks in data centres and communications rooms across Energy Queensland's 165 physical sites that house ICT equipment to maximise operational stability.

- Enable Bring Your Own Device (BYOD): Empower Energy Queensland's employees, contractors and partners to securely access only the applications and the information they need to do their jobs from personally owned devices, where appropriate. Benefits include better security and the efficiencies and productivity gains that result from people working on their preferred devices.

- Enable Wearables: Equip field staff with wearable technologies, notably smart watches and Virtual Reality (VR) headsets. The smart watches bring safety features including fall and crash detection, emergency SOS and temperature alerts, which contribute to the well-being of our field staff.

  VR headsets will be deployed as a training aid, to a safe and controlled environment for skill development and scenario-based training. Key benefits are immediate safety enhancements and long-term training effectiveness.

- **Rationalise and maintain collaboration facilities**. This response will maintain collaboration, refresh conference rooms, and create smart spaces to improve access to applications and collaborative working for office and field workers. The initiatives within this response include:

  - Rationalise and Simplify Enterprise Collaboration and Information: Make it easier to find relevant information by providing the ability to search disparate information repositories from a single search. Rationalise and simplify our disparate and disconnected collaboration tools to provide user-friendly, easy-to-use, connected and contemporary enterprise collaboration capabilities.

    Evolve Energy Queensland's enterprise social media platform to encourage social connections, foster awareness of what's happening throughout the organisation, and enable a place to gather the collective intelligence of Energy Queensland's workforce.

  - Refresh Virtual Conferencing Rooms: Maintain video conferencing equipment in 304 meeting rooms in a supported state to provide enterprise-grade collaboration capabilities and to maximise operational stability and cyber resilience.

    Video conferencing (also commonly referred to as 'online meetings') is a mission-critical capability for Energy Queensland, notably with the advent of hybrid working. This importance is evidenced by the statistic that, on average, Energy Queensland conduct close to thirty-five thousand (35,000) online meetings every month.

  - Create Smart Buildings and Spaces: Create smarter connected workspaces to monitor occupancy levels, meeting room utilisation and building hot desks to proactively manage office spaces.

- **Refresh and modernise on-premise compute and storage**. This response will refresh and modernise compute, storage, data centre, and cloud-based operations to improve scalability of storage and provide robust storage services in a cloud-centric environment. The initiatives within this response include:

  - Upgrade Compute and Storage Equipment: Upgrade the server fleet to make sure information and digital assets are secure, highly available and performant to maximise operational stability and cyber resilience. Modern servers that run the latest hardware and software provide the best possible line of defence against cyber threats, whilst modern operating systems make a staged and controlled migration to cloud easier.

    Refresh our on-premises storage arrays to make sure information and digital assets are secure, highly available and performant to maximise operational stability and cyber resilience. Although Energy Queensland's transition to cloud is well underway, many large, mission-critical systems remain on-premises due to the high complexity of moving them to cloud and are dependent on performant and highly available storage arrays to keep them operational.

  - Refresh Rockhampton and Townsville Data Centres: Refresh Energy Queensland's Rockhampton and Townsville data centres to ensure key Energy Queensland ICT assets are secure, available and can meet the demands of modern ICT equipment. Although Energy Queensland's transition to cloud is well underway, a large number of our systems still reside in our on-premises data centres due to the high complexity of moving these systems to the cloud.

  - Modernise Virtual Desktops, Backup Storage, Files in the Cloud and RPA (Robotic Process Automation): Modernise our significant on-premises virtual desktop fleet with a flexible and scalable cloud solution to take advantage of the efficiencies and performance afforded by on-demand virtual desktops.

    Modernise our data protection strategies and technologies to take full advantage of the efficiencies afforded by large-scale cloud storage.

    Leverage the cloud storage in our existing Microsoft 365 investment to create a cohesive cloud-based file storage ecosystem for staff 'home drives' and 'shared drives' that makes it easy to securely work and collaborate with documents on any device, from anywhere.

    Provide the foundational capabilities for automation, using Energy Queensland's key enterprise platforms, to automate repetitive business processes to free up staff for higher value work.

  - Enhance DevOps Capability: Cloud Engineering Platform and Application Portability. Augment our existing cloud capabilities by enhancing our DevOps practices to take advantage of cloud automation to improve our cloud security and lift operational efficiency.

    Develop the people, process & technology needed to containerise applications. This ability to migrate applications with more ease promises less costly, less disruptive and less risky large ICT asset renewal programs of work.

- **Maintain and upgrade telecommunication networks**. This response will upgrade and enhance Energy Queensland's remote site telecommunications for improved connectivity in remote areas for office and field workers. The initiatives within this response include:
  - Maintain and upgrade Telecommunications: WAN and Wi-Fi Modernisation. Maintain the Wi-Fi (wireless networking) equipment across EQL's 165 remote sites to ensure Energy Queensland's Wi-Fi network is secure, highly available and performant to maximise operational stability and cyber resilience. With over 7,500 laptops across 165 sites, Wi-Fi is a key business enabler for Energy Queensland.

    Upgrade the telecommunications equipment across Energy Queensland's 165 sites to ensure our wide-area network is secure, highly available and performant to maximise operational stability and cyber resilience. Our wide area network provides the secure, private connectivity that is a foundational element of Energy Queensland's ICT infrastructure, and a cornerstone business capability to keep our people, customers and systems connected.
  - Enhance Remote Area Connectivity: Strengthen connectivity for better access to information in remote areas using newly available low earth orbit satellites, including vehicles that travel to very remote areas.
- **Upgrade monitoring and service management across multi-cloud and corporate security**. This response will improve digital work management, modernise monitoring and service management and renew corporate security infrastructure to improve technology service delivery at Energy Queensland. The initiatives within this response include:
  - Modernise Digital Work Management Toolset: Improve the Digital Division's ability to plan, initiate, track and deliver work by taking advantage of the efficiencies and accuracies afforded by fit for purpose, integrated work management tools. This includes modernising project management and delivery capabilities, maturing the enterprise architecture repository to enable data-driven business and technology planning, and maturing DevOps capabilities to support and advance our adoption of cloud services.

    Establish an enterprise-wide capability to provide an industry-standard secure, capable and supported platform to enable the management of growing numbers of IoT devices.
  - Modernise Enterprise Monitoring and ICT Service Management: Modernise the enterprise monitoring solution to provide better fault-finding and faster resolution for Energy Queensland's complex hybrid multi-cloud infrastructure and applications. Uplift the security and capability of ServiceNow, a key enterprise platform, by enabling advanced security and features to provide a technical map of Energy Queensland's ICT assets to guide decision making and to track changes to Energy Queensland's large ICT asset inventory.
  - Uplift Corporate Security Network. Renew the ICT infrastructure that runs the physical security controls (CCTV, gates, intercoms, fences, building turnstiles, etc.) at our substations, buildings and depots to keep our people and the public safe: This infrastructure underpins the systems used by the Energy Queensland Monitoring Centre to provide dedicated proactive and reactive monitoring to ensure the safety of people and assets.

4 INVESTMENT OPTIONS

4.1 Options Description

Three options were considered by EQL to address the drivers outlined in Section 3.3 and deliver on the benefits described in Section 3.4. During the option formation process, consideration was given to the business cases dependent on this business case (Cybersecurity, Data & Intelligence, Customer, and Asset & Works Management).

Figure 6: Initiatives mapped to options

Note: Unless indicated above under Initiatives and Outcomes, each subsequent option includes initiatives from the previous option.

Option 1: Minimum sustainment of existing foundation capability

The focus of this option is to provide minimum sustainment of existing integration platforms, laptops and peripheral devices for office and field workers, refresh servers, storage arrays and the telecommunications network, and enterprise monitoring and service management capability.

This includes ensuring prudent life cycle management of non-network ICT assets and minimum necessary adjustments to digital capabilities to account for predictable changes and compliance requirements.

This involves a smaller investment program than proposed in Option 2, which adds a relatively small amount of non-recurrent investments, pertaining to cloud modernisation and productivity benefits.

Option 2: Enable office and field worker collaboration and modernise cloud capabilities

Option 2 includes the initiatives outlined in Option 1.

The focus of this option is to enable small productivity gains and modernise cloud capabilities by introducing new technologies including Bring Your Own Device (BYOD), wearable devices for field workers to improve safety, simplify how Energy Queensland collaborate across the enterprise and creating an integrated and connected toolset for Digital to better manage the delivery of work.

This involves a larger investment program than proposed in Option 1. It covers a larger range of non-recurrent investment associated with enabling a secure and modernised technology footprint.

Option 3: Modernise digital foundations for future operations

Option 3 includes the initiatives outlined in Options 1 and 2.

The focus of this option is further modernise the digital foundations capability to enable smart buildings, advanced use of cloud platforms and to provide enhanced connectivity for remote field workers. Option 3 was considered and discounted early in the options analysis, so has limited analysis.

4.2 Criteria Description

The options were reviewed across the following four criteria to arrive at an overall assessment.

- **Risk mitigation associated with option:** Assesses the qualitative likelihood of each option mitigating Energy Queensland corporate risks (i.e., probability of risk occurring). For this criterion, a high / medium / low risk mitigation scoring is provided.
- **Financial benefits associated with option:** Assesses the financial benefits delivered to Energy Queensland, and the broader community from each option. For this criterion, only the total value of the financial benefits is included (if any).
- **Non-financial/non-quantified benefits associated with option:** Assesses the non-financial / not-quantified benefits delivered to Energy Queensland, and the broader community from each option. For this criterion, a limited / partial / full benefit realisation scoring is provided.
- **Costs associated with option:** Assesses the quantitative non-recurrent and recurrent (capital and operating) costs associated with each option. For this criterion, only the total value of expenditure is included.

Table 4 provides a summary of the assessment of the three options, to demonstrate the recommended option for investment.

4.3 Summary of Options Analysis

Table 4 summarises the analysis of the three options. Detailed analysis of each option against the criteria is in the Appendix.

Table 4: Summary of Options Analysis

Criteria	Option 1: Minimum sustainment of existing foundation capability	Option 2: Enable office and field worker collaboration and modernise cloud capabilities (Recommended)	Option 3: Modernise digital foundations for future operations
Risk mitigation associated with the investment	**Medium risk mitigation.** All risks with existing technologies are mitigated prudently in Option 1. Remaining risks pertain to the inability to not keep up with business requirements, or expectations of partner, suppliers, customers, or staff.	**High risk mitigation.** Option 2 reduces Energy Queensland's risks by maintaining the Digital Foundations business capabilities at pace with the industry transition.	**High risk mitigation.** Same as Option 2.
Financial benefits associated with the investment	$190.0M	$210.0M	$210.0M

Criteria	Option 1: Minimum sustainment of existing foundation capability	Option 2: Enable office and field worker collaboration and modernise cloud capabilities (Recommended)	Option 3: Modernise digital foundations for future operations
Non-financial benefits associated with the investment	**Partial benefit realisation across all categories.** Non-financial benefits associated with Option 1 include: • System Integration and Performance Improvement with Up-to-Date Technology • Outage Prevention through Server and Data Centre Renewal • Cyber Risk Mitigation through Software and Hardware Support • Enhanced Data Protection and IoT Management • Improved infrastructure scalability for DNSP • Foundation for Secure and Capable Customer-Facing Systems	**Full benefit realisation across all categories**. Non-financial benefits associated with Option 2 include: • All non-financial benefits from Option 1 • Realising Full Potential of New End User Devices Technologies • Carbon footprint reduction from Cloud Migration • Secure Digital Capability and Service Delivery for Workforce Changes • Employee Engagement and Productivity through Modern Technologies • Compound benefit of this option is that it keeps pace with stakeholders' expectations in the industry transition	**Full benefit realisation across all categories.** Non-financial benefits associated with Option 3 include: • All non-financial benefits from Option 2 • Compound benefit of this option is a maturity uplift in Energy Queensland's Digital Foundations capabilities which outpace the expected industry transition
Costs associated with the investment	Total Expenditure: $110.0M • Recurrent capex: $105.0M • Non-recurrent capex: $5.0M	Total Expenditure: $137.5M • Recurrent capex: $105.0M • Non-recurrent capex: $32.5M	Total Expenditure: $148.5M • Recurrent capex: $105.0M • Non-recurrent capex: $43.5M
Commercial NPV	$66.9M	$60.0M	$50.5M
OVERALL ASSESSMENT	**Not Recommended**	**Recommended**	**Not Recommended**

4.4 Recommended Option

The objective of the digital foundation operation is to maintain secure access of people and systems to data, maintain secure systems and devices, collaboration tools, storage, servers, and telecommunications, and to enable a managed growth of technology infrastructure to support the energy industry transition.

In developing Energy Queensland's option recommendation, we considered how each of the three options take advantage of the scalability and on-demand functionality aspects of cloud-enabled technologies, lightening the burden of continued asset renewal, and providing the business capabilities to support the expected industry transition.

Option 2 'Enable office and field worker collaboration and modernise cloud capabilities' is the most prudent and efficient option.

Option 1 is the base case for minimum sustainment of the existing business capabilities at the current level in a continuously changing environment. Option 1 mitigates operational stability and cyber risks of the existing Digital Foundations footprint. However, it does not keep up with the changes required to enable and secure the use of technologies foreseeable in 2025-30.

Option 1 'Minimum sustainment of existing foundation capability' lacks initiatives to keep pace with the changes in the industry transition which will lead to changes in business needs and expectations from Digital.

Option 2 'Enable office and field worker collaboration and modernise cloud capabilities' is maintaining the effectiveness of the existing business capabilities at the current level and allows for technology modernisation at pace with the industry transition. Option 2 allows for the risk mitigation of Option 1 plus continuous improvements in areas where we have known requirements for technology modernisation to keep pace with the industry transition. While these are relatively minor improvements, they are intended to advance Energy Queensland's existing business capabilities and introduce efficiency outcomes.

The benefits anticipated with Option 2 will enable the set up for Option 3 in the next regulatory control period.

Option 3 'Modernise digital foundations for future operations' includes additional investments that would position Energy Queensland ahead of industry peers, Energy Queensland has clearly heard from stakeholders and customers that it should keep pace with the expected industry transition, as opposed to advancing ahead. Therefore, this option was discounted early in the options analysis, so has limited analysis, however, this option would incur significantly higher cost than Option 2, which is not offset by significant business benefits that can be identified at this time.

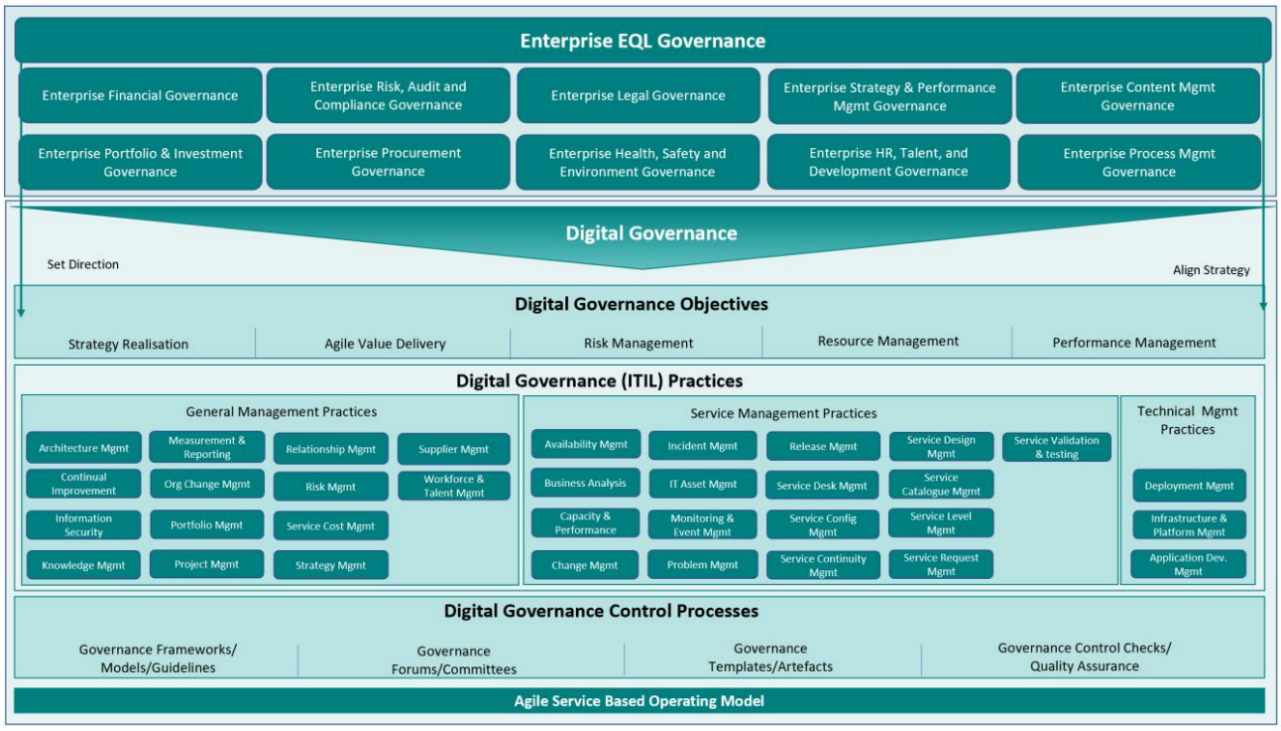
5 IMPLEMENTATION OF RECOMMENDED OPTION

To realise the significant benefits identified through Option 2, we will implement this investment in line with our standard governance and operating models, as described below.

5.1 Governance Arrangements

The initiatives will comply with the Digital Governance Framework (an element of the Corporate Governance Model). For further details, please refer to the Non-network ICT Plan 2025-30.

Figure 7: Digital Governance Model



In addition to this, the Digital Operating Model also incorporates the Scaled Agile Framework ways of working, which provides the approach to the day-to-day delivery of IT services (the how), and incorporates layers of operational governance to Digital planning, prioritisation, and execution activities. This links through to the governance objective of 'Agile Value Delivery'. For further details, please refer to the Non-network ICT Plan 2025-30.

5.2 Change Impact

The investments in scope of the Digital Foundations business case incur, broadly, four types of change impacts:

- **Infrastructure or tools changes that have significant impact on a relatively narrow cohort of technology experts who support and maintain the resulting capabilities.** This type of change impact is inherent to all in-scope initiatives in this proposal. Our standard IT Service Management processes ensure appropriate skills adaptation for affected support staff.

- **Infrastructure or tools changes that have significant impact on a relatively narrow cohort of technology experts who use the resulting capabilities to maintain or develop new digital capabilities.** Examples are the Digital Toolset uplift initiative or Robotic Process Automation, both of which will affect digital and business technologists. Appropriate user training will be provided as part of our embedded change management processes.
- **Capability changes that specifically support investments in other business cases**, for example Asset and Works Management, in conjunction with the introduction of Wearables for field staff. We will align with the delivery and change management approaches of the respective interdependent initiatives.
- **End user capability changes that have a very broad impact on most employees across the organisation.** Examples for these are Windows / Microsoft 365 updates, infrastructure refresh programs for end user devices, or uplifts of the Enterprise Social platform. We have embedded successful supporting approaches to deliver digital learning sessions and tutorials, also using our enterprise social capabilities.

5.3 Delivery Roadmap

Energy Queensland will be delivering these initiatives as per its standing *Digital ways of working* using a continuous iterative Agile methodology and platform-based approach. Energy Queensland will partner with the business who will have ownership of each of the initiatives with joint accountability for delivery between ICT and the respective business areas and will continue to consult with industrial partners.

The below planning roadmap represents the current view of how these initiatives will be prioritised and delivered over 2025-30. This will be continuously refined over the 2025-30 regulatory control period.

While assumptions of the expected external drivers, triggers, timing, and growth indicators in this expected industry transition have been made, Energy Queensland plans to continuously reassess, implementing as required by actual customer and industry needs.

Refer to Appendix 6.5 Delivery Risks and Controls, for an overview of the delivery risks, associated consequences, and proposed controls attached to the recommended option.

Figure 8: Planning Roadmap for Digital Foundations

5.4 Investment Benefits

The recommended option delivers all the benefits described in section 3.4.

The quantitative benefits to be realised from this investment are $210.0m (present value $177.0m). Please refer to Section 6.2 for a detailed description of the financial and non-financial benefits.

5.5 Investment Costs

The categories of investment are shown in Table 5.

Table 5: Total Costs Overview ($M, real December 2022)

Category	Type	FY26	FY27	FY28	FY29	FY30	TOTAL	NPV
ICT capex	Recurrent	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**105.0**	**89.1**
ICT capex	Non-recurrent	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**32.5**	**27.9**
ICT opex	N/A	-	-	-	-	-	-	-
TOTAL		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**137.5**	**117.0**

5.6 Financial Summary

Table 6 summarises the overall financial position of the recommended option (Option 2), with NPV sensitivity analysis captured in Table 7 below.

Table 6: NPV Overview ($M, real December 2022)

Net Present Value	Type	Option 2
ICT capex	Recurrent	(89.1)
ICT capex	Non-recurrent	(27.9)
ICT opex	N/A	-
Benefits	N/A	177.0
Commercial NPV		**60.0**

Table 7: NPV Sensitivity ($M, real December 2022)

Net Present Value	Discount Rate		Benefits	
	+1%	-1%	125%	75%
Recommended option (Option 2)	57.0	63.3	104.3	15.8

6 APPENDICES

6.1 Applicable Compliance Requirements

EQL is required to meet regulatory and compliance obligations within its Digital Foundations business capabilities in relation to its non-network ICT systems as set out below.

Table 8 Applicable Compliance Requirements Overview

Obligation	Description of Requirement
Electricity Supply (General) Regulations 2001	Electricity Supply (General) Regulation 2001 is one source of EQL distribution service standards in which EQL needs to report any network failures for small customers.
***Security of Critical Infrastructure Act* 2018 (SOCI Act)**	The SOCI Act seeks to manage the complex and evolving national security risks of sabotage, espionage and coercion posed by foreign involvement in Australia's critical infrastructure. The Act applies to 22 asset classes across 11 sectors including the energy sector and requires us to comply with certain obligations set out in the Act.
National Electricity Law and National Electricity Rules	The National Electricity Law (NEL) requires EQL to promote efficient investment in, and efficient operation and use of electricity services for the long-term interests of consumers of electricity with respect to price, quality, safety, reliability, and security of supply of electricity as per the National Electricity Objective (NEO). The operating and capital expenditure objectives set out in the National Electricity Rules (NER) require EQL to maintain both the quality, reliability, and security of supply of standard control services and the reliability and security of the distribution networks.
The Australian Energy Cyber Security Framework (AESCEF)	EQL must ensure their critical non-network ICT systems are kept up to date, supported and secured to meet the AESCSF maturity targets. There is potential that this will become a licensing requirement in the future and therefore the assets must be maintained to enable licenses to be kept up to date.
RIN Reporting Requirements	The Australian Energy Regulator (AER) uses RIN reporting to enable benchmarking between DNSPs and support in regulatory determinations. DNSPs are required to provide reporting to the AER annually.
***Work Health and Safety Act* 2011 (WHS Act) and Construction Work Code of Practice 2018**	The WHS Act and the Work Health and Safety Regulations (the WHS Regulations) provide EQL with practical guidance on how to achieve work health and safety standards and effective ways to identify and manage risks.
Model Code of Practice: Managing electrical risks in the workplace	EQL, in line with the Code of Practice, must eliminate electrical risks or, if that is not reasonably practicable, minimise the risks so far as is reasonably practicable.
Energy Queensland Safe System of Work	A Safe System of Work is a risk assessed documented methodology for performing work that ensures the safety of workers and any other persons affected by the work.
National Energy Customer Framework (NECF)	The NECF regulates the connection, supply, and sale of energy (electricity and gas) to grid-connected residential and small business energy customers. The NECF is comprised of the National Energy Retail Law, the National Energy Retail Regulations, and the National Energy Retail Rules.

Obligation	Description of Requirement
Climate Change Act 2022	The *Climate Change Act* 2022 outlines Australia's greenhouse gas emissions reduction targets of a 43% reduction from 2005 levels by 2030 and net zero by 2050; requires the minister to prepare and table an annual climate change statement; requires the Climate Change Authority to give the minister advice in relation to the annual statement and future greenhouse gas emissions reduction targets; and provides for periodic reviews of the operation of the Act. This is implemented through the evolving climate change strategies of the Department of Climate Change, Energy, the Environment and Water (DCCEEW), which include investments and compliance requirements affecting DNSPs.
***Privacy Act* 1988, *Information Privacy Act* 2014**	As specified in the *Privacy Act* 1988, EQL are required to maintain strong controls and security on the accessibility of customer data as well as ensuring appropriate availability of data. Keeping EQL's critical systems up to date, supported and secured is a key enabler of maintaining these controls.
The Australian Energy Cyber Security Framework (AESCEF)	EQL must ensure their critical non-network ICT systems are kept up to date, supported and secured to meet the AESCSF maturity targets. There is potential that this will become a licensing requirement in the future and therefore the assets must be maintained to enable licenses to be kept up to date.

6.2 Options Analysis

This section summarises the options against the criteria analysed in defining the investment proposed in this business case.

Risk mitigation associated with option

This criterion assesses the qualitative likelihood of each option mitigating Energy Queensland corporate risks (i.e., probability of risk occurring). The table below outlines the assessment against the three options.

Table 9: Mitigation of risks across Options

Risk	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Continued use of legacy systems may, over time, increase the risk of security vulnerabilities and performance issues with critical ICT systems, due to a lack of security patching	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure Energy Queensland's systems are robust and efficient in protecting against cyber security threats	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure Energy Queensland's systems are robust and efficient in protecting against cyber security threats	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure Energy Queensland's systems are robust and efficient in protecting against cyber security threats
Adopting a reactive approach to managing Energy Queensland's ICT infrastructure rather than a proactive approach	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that infrastructure is capable, performant, and secure. This will ensure that Energy Queensland has the ability to take a proactive approach to managing critical ICT infrastructure, which underpins all other ICT systems	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that infrastructure is capable, performant, and secure. This will ensure that Energy Queensland can take a proactive approach to managing critical ICT infrastructure, which underpins all other ICT systems	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that infrastructure is capable, performant, and secure. This will ensure that Energy Queensland has the ability to take a proactive approach to managing critical ICT infrastructure, which underpins all other ICT systems

Risk	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Energy Queensland cannot keep pace with employee, partner, supplier, and customer expectations and changing business requirements over time	**Medium contribution to risk mitigation** Partially mitigates this risk, as the upgrade / refresh initiatives included in scope of Option 1 will ensure that the existing capabilities remain contemporary.	**High contribution to risk mitigation** Additional investments to enable new or modernise existing technologies are mitigating against not meeting needs and expectations, as they evolve.	**High contribution to risk mitigation** Same as Option 2

Financial benefits associated with option

This criterion assesses the financial benefits delivered to Energy Queensland, and the broader community from each option. The table below outlines the results of the analysis against the three options.

Table 10: Financial benefits associated with Options ($M, real December 2022)

Benefit category	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Cost avoidance	190.0	210.0	210.0

Non-financial/not-quantified benefits associated with option

This criterion assesses the non-financial/not-quantified benefits delivered to Energy Queensland, and the broader community from each option. The table below outlines the assessment against the three options.

Table 11: Non-financial/not-quantified benefits associated with Options

Benefit	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
System Integration and Performance Improvement with Up-to-Date Technology	**Fully Realised** Option 1 keeps pace by system upgrades that deliver capable integration platforms, which are central to our key systems	**Fully Realised** Option 2 keeps pace by system upgrades that deliver capable integration platforms, which are central to our key systems	**Fully Realised** Option 3 keeps pace by system upgrades that deliver capable integration platforms, which are central to our key systems
Enhanced Data Protection and IoT Management	**Not Realised** Option 1 fails to keep pace and does not modernise our systems	**Fully Realised** Option 2 keeps pace and modernises our systems to take advantage of cloud-based solutions	**Fully Realised** Option 3 keeps pace and modernises our systems to take advantage of cloud-based solutions
Realising Full Potential of New End User Devices Technologies	**Fully Realised** Option 1 keeps pace and modernises our end-user devices to realise their full potential	**Fully Realised** Option 2 keeps pace and modernises our end-user devices to realise their full potential	**Fully Realised** Option 3 keeps pace and modernises our end-user devices to realise their full potential
Advancing Staff Development in Modern Technologies	**Not Realised** Option 1 does not keep pace and fails to introduce newer technologies for staff development opportunities	**Partially Realised** Option 2 somewhat keeps pace and introduces some newer technologies for staff development opportunities	**Fully Realised** Option 3 keeps pace and introduces a good breadth of newer technologies for staff development opportunities

Benefit	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Employee Engagement and Productivity through Modern Technologies	**Not Realised** Option 1 does not keep pace and fails to introduce modern collaboration and productivity tools and systems	**Fully Realised** Option 2 keeps pace and introduces cohesive social and productivity tools	**Fully Realised** Option 3 keeps pace and introduces cohesive social and productivity tools
Foundation for Secure and Capable Customer-Facing Systems	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure that underpin our ICT systems	**Fully Realised** Option 2 keeps pace by upgrading our compute, storage and telecommunications infrastructure that underpin our ICT systems	**Fully Realised** Option 3 keeps pace by upgrading our compute, storage and telecommunications infrastructure that underpin our ICT systems
Cyber Risk Mitigation through Software and Hardware Support	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure to ensure our cyber posture is strong and resilient	**Fully Realised** Option 2 keeps pace by upgrading our compute, storage and telecommunications infrastructure to ensure our cyber posture is strong and resilient	**Fully Realised** Option 3 keeps pace by upgrading our compute, storage and telecommunications infrastructure to ensure our cyber posture is strong and resilient
Improved Infrastructure Scalability for Modern DNSP	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure to be scalable, performant and secure	**Fully Realised** Option 2 keeps pace by upgrading our compute, storage and telecommunications infrastructure to be scalable, performant and secure	**Fully Realised** Option 3 keeps pace by upgrading our compute, storage and telecommunications infrastructure to be scalable, performant and secure
Outage Prevention through Server and Data Centre Renewal	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure, and data centres, to be modern and supported by the hardware and software vendors	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure, and data centres, to be modern and supported by the hardware and software vendors	**Fully Realised** Option 1 keeps pace by upgrading our compute, storage and telecommunications infrastructure, and data centres, to be modern and supported by the hardware and software vendors

Benefit	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Efficient Scaling of Processes without Productivity Loss	**Fully Realised** Option 1 does not keep pace and fails to take advantage of newer technologies to scale processes	**Fully Realised** Option 2 keeps pace and takes advantage of newer technologies to scale processes	**Fully Realised** Option 3 keeps pace and takes advantage of newer technologies to scale processes
Carbon Footprint Reduction through Cloud Migration	**Partially Realised** Option 1 somewhat keeps pace by introducing newer, more efficient hardware but fails to realise the potential of cloud technologies	**Fully Realised** Option 2 keeps pace by enabling newer cloud technologies to continue the shift to cloud	**Fully Realised** Option 3 keeps pace by enabling newer cloud technologies to continue the shift to cloud. This option also has the potential to better organise office attendance for staff hence further carbon footprint reduction is possible
Secure Digital Capability and Service Delivery for Workforce Changes	**Not Realised** Option 1 does not keep pace and fails to take advantage of the efficiencies afforded by on-demand cloud technology and an integrated toolset to manage the delivery of the ICT program of work	**Fully Realised** Option 2 keep pace by enabling on-demand cloud technology and creating an integrated and connected toolset to manage the delivery of the ICT program of work	**Fully Realised** Option 2 keep pace by enabling on-demand cloud technology and creating an integrated and connected toolset to manage the delivery of the ICT program of work
Keeping Pace with Ongoing Regulatory and Compliance Changes	**Fully Realised** Modern, scalable, performant and secure ICT infrastructure is a key enabler to meet Energy Queensland's regulatory and compliance obligations	**Fully Realised** Modern, scalable, performant and secure ICT infrastructure is a key enabler to meet Energy Queensland's regulatory and compliance obligations	**Fully Realised** Modern, scalable, performant and secure ICT infrastructure is a key enabler to meet Energy Queensland's regulatory and compliance obligations

Costs associated with option

This criterion assesses the quantitative non-recurrent and recurrent (capital and operating) costs associated with each option. The table below outlines the assessment against the three options.

Table 12: Costs associated with Options ($M, real December 2022)

Costs category	Option 1 - Minimum sustainment of existing foundation capability	Option 2 - Enable office and field worker collaboration and modernise cloud capabilities	Option 3 - Modernise digital foundations for future operations
Recurrent capital expenditure	**105.0** Relating to sustaining minimum capability, through software updates, hardware, and infrastructure refreshes	**105.0** Relating to sustaining minimum capability, through software updates, hardware, and infrastructure refreshes.	**105.0** Relating to sustaining minimum capability, through software updates, hardware, and infrastructure refreshes
Non-recurrent capital expenditure	**5.0** Relating to sustaining minimum capability through ongoing software updates, hardware and infrastructure refreshes.	**32.5** Enabling the maintenance, renewal and continuous improvement of existing Digital Foundations systems.	**43.5** Relating to enhanced remote connectivity, smart building capability and digital foundations cloud maturity.
Operating expenses	**-**	**-**	**-**
TOTAL	**110.0**	**137.5**	**148.5**

6.3 Alignment with the National Electricity Rules

Table 13: Recommended Option's Alignment with National Electricity Rules

NER capital expenditure objectives	Rationale
A building block proposal must include the total forecast capital expenditure which the DNSP considers is required in order to achieve each of the following (the capital expenditure objectives):	
6.5.7 (a) (1) **meet or manage the expected demand for standard control services over that period**	The recommended option focusses on the continuous maintenance of Energex and Ergon Energy Network's Digital Foundations infrastructure and end-user devices, along with keeping pace with the industry transition and evolving customer needs and expectations with respect to the quality, reliability and security of supply. This foundational digital capability enables our staff to adequately perform the functions required to provide safe and reliable electricity supply for our customers, including meeting our regulatory and safety obligations.
6.5.7 (a) (2) **comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;**	
6.5.7 (a) (3) **to the extent that there is no applicable regulatory obligation or requirement in relation to:** (i) **the quality, reliability or security of supply of standard control services; or** (ii) **the reliability or security of the distribution system through the supply of standard control services,** **to the relevant extent:** (iii) **maintain the quality, reliability and security of supply of standard control services; and** (iv) **maintain the reliability and security of the distribution system through the supply of standard control services**	
6.5.7 (a) (4) **maintain the safety of the distribution system through the supply of standard control services.**	
NER capital expenditure criteria	**Rationale**
6.5.7 (c) **the AER must be satisfied that the total forecast capital expenditure for the regulatory control period reflects each of the following capital expenditure criteria:**	
(1) **the efficient costs of achieving the capital expenditure objectives;** (2) **the costs that a prudent operator would require to achieve the capital expenditure objectives; and** (3) **a realistic expectation of the demand forecast, and cost inputs required to achieve the capital expenditure objectives.**	The recommended option meets the regulatory capital expenditure objectives. An options and cost-benefit analysis provides sufficient evidence for Energex and Ergon Energy Network's preference for the recommended option. Costs were estimated using historical costs, knowledge of recent market procurement for equivalent services and products, as well as specialist advice from subject matter experts.

6.4 Assumptions

The enterprise assumptions on which the need for this business case has been assessed are documented in the 'RDP 2025 Project – Shared Assumptions' document. In addition, assumptions are being made for the preferred Option 2 in this business case.

Table 14 explores the assumptions that are applicable for the recommended option only.

Table 14: Assumptions Overview

Assumption Description	Impact if assumption proved invalid	How will the assumption be assessed?
Enterprise Assumptions on growth / change rate in our business and grid, especially workforce evolution and data / capability growth / support of the energy transition meter penetration).	If the growth / change rates are significantly faster than assumed, the preferred option may not be able to mitigate business risks as effectively as predicted, or expenditure might have to be reprioritised	Changes in scale and business needs will be monitored and identified through our standard processes for requirements identification, prioritisation, and digital delivery
There is a set of network initiatives that provide equivalent levels of risk mitigation and modernisation for Operational Technology (OT) digital capabilities and data, maintaining the overall risk posture of all digital infrastructure across EQL	Overall resilience, stability and security of the integrated digital capabilities might be exposed to greater risk.	Our standard digital delivery and governance approaches as outlined in section 3.3.1, especially cyber security and digital architecture governance, span both ICT and OT.
The proposed funding envelope is sufficient for EQL to be able to respond to relevant changes of foundational technology effectively.	Risks may not be mitigated as well as expected.	Changes in technology requirements and business needs will be monitored and identified through our standard processes for requirements identification, prioritisation, and digital delivery.

6.5 Delivery Risks and Controls

The recommended option (Option 2) has a number of delivery risks and consequences attached. These are detailed below, including associated controls.

Table 15: Delivery risks associated with recommended option

Risk Description	Consequences	Preventative, Detective & Responsive Controls
Control of scope risk	Failure to deliver in line with the intent and commitments within this business case	• Program Delivery Approach (see section 5) includes continuous prioritisation and alignment with interdependent digital programs and risk assessment. It also enables the detection and, if necessary, reprioritisation, of changing or new requirements incurred by changing business requirements. • Incremental, agile delivery method focusses on incremental and continuous value delivery
Delivery of scope risk		• Program Delivery Approach (see section 5) follows our Digital planning, delivery and governance frameworks which put appropriate controls in place for ensuring design quality and delivery
Critical personnel and third-party risk		• Resource planning across technology platforms and delivery teams through our Digital planning and governance approaches.
Business engagement risk **Solution adoption risk**	Failure to deliver in line with the intent and commitments within this business case Failure to deliver expected benefits Negative impact on employee engagement	• The Program Delivery Approach (see section 5) has embedded approaches that ensure continued alignment with supported digital capabilities and business stakeholders. • Adequate approaches for supporting training and adoption will be applied, depending on the nature of an initiative.

6.6 Dependencies

Table 16: Dependencies Overview

Dependency Description	Dependent upon
Cyber Security risk considerations, controls and capabilities will impact all Digital Foundations designs and operations Some investments are particularly closely coupled with achieving Cyber Security benefits and compliance (e.g., Upgrade Compute and Storage Equipment, Upgrade Windows, Digital Device Refresh, Enable Bring Your Own Device (BYOD), and many other initiatives in this business case)	Cyber Security
Mobile device choices, including wearables, to be procured and introduced in line with field application requirements and delivery approaches	Asset & Works Management
Expected large cloud platform and integration growth driver for analytical performance and scale of data, including increased volumes of smart meter data and telemetry	Data & Intelligence, Customer and Network Business Cases for acquisition and management of Smart Meter data and telemetry

6.7 Reconciliation Table

Table 17: Financial Reconciliation ($M)

Capital Expenditure	Entity	FY26	FY27	FY28	FY29	FY30	Total 2025-30
Expenditure in business case $M, real December 2022	Energy Queensland	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**137.5**
Allocation to entity (where applicable)							
$M, real December 2022	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**57.5**
$M, real December 2022	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**76.4**
$M, real December 2022	Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**3.7**
Allocation to SCS capex (DNSP only)							
$M, real December 2022	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**51.7**
$M, real December 2022	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**63.4**
Add escalation adjustments (DNSP only)							
Escalation from $M, real December 2022 to $M, real June 2025	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**58.1**
Escalation from $M, real December 2022 to $M, real June 2025	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**71.2**
Expenditure in AER capex model/Reset RIN $M, real June 2025	**Energex**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**58.1**
Expenditure in AER capex model/Reset RIN $M, real June 2025	**Ergon Energy Network**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**71.2**