ICT Digital Core

Business Case

25 January 2024

Part of the Energy Queensland Group

CONTENTS

1 EXECUTIVE SUMMARY

Title	Non-Network ICT – Digital Core
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 The following needs have been identified: • Maintain sustainable and secure Digital Core solutions and business capabilities, through prudent and efficient ICT Asset Management and continuous improvement. • Improved productivity of back-office operations, which are critical to efficient internal operations, and essential in supporting customer-facing parts of Energy Queensland. • Improved decision making for operational risk and sustainability outcomes.
Benefits	This business case realises three benefit categories: improved core solution security and role-based access provisions, improved productivity of back-office operations and improved decision making for operational risk and sustainability outcomes. There are no direct realisable financial benefits associated with this business case.
Summary of recommended option	Option 2 'Improve access provisioning and improve ERP, Operational Risk and Emissions Reporting' maintains the effectiveness of the existing business capabilities at the current level at pace with the industry transition. Option 2 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 minor improvements, they are intended to maintain Energy Queensland's existing business capabilities and efficiency outcomes.
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]	75.9

[1] All financial figures have been rounded and shown in dollars million ($M) throughout this document, shown using the costing approach for non-network ICT expenditure described in the Non-network ICT Plan 2025-30, section 7.1.

2 DOCUMENT BACKGROUND

2.1 Purpose of Document

The purpose of this document is to outline Energy Queensland's proposed non-network Information and Communication Technology (ICT) program of work pertaining to Digital Core business capabilities 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
25/01/2024	All other non-network ICT business cases (Attachments 5.8.02 to 5.8.08)	Documents

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/s	Signature	Date
Approver: General Manager GM Enterprise & Information Platform Services			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

Energy Queensland's Digital Core capabilities support critical internal back-office functions. These functions operate together to enable and support the delivery of secure, safe, reliable, and affordable electricity network services to Energy Queensland's customers and stakeholders.

Approximately 75 applications enable Energy Queensland's Digital Core business capabilities. The most significant applications are Finance (SAP S/4HANA), Human Resources (SAP SuccessFactors), Payroll (Workforce Software), Procurement (SAP Ariba), Safety (SAP Health, Safety, and Environment), Records (OpenText Enterprise Content Management) and Governance, Risk, and Compliance (SAP S/4HANA).

The SAP and OpenText Enterprise Content Management (ECM) applications were implemented in the 2020-25 regulatory control period, as part of a major transformation to align Energy Queensland's business processes. These will need to be continuously upgraded through regular cycles in 2025-30 (we refer to this as 'Evergreening'), along with prudent ICT asset management of all the applications. Energy Queensland prudently paused the Enterprise Resource Planning (ERP) and Enterprise Asset Management (EAM) continuous improvement during the major transformation. This will be reinstated.

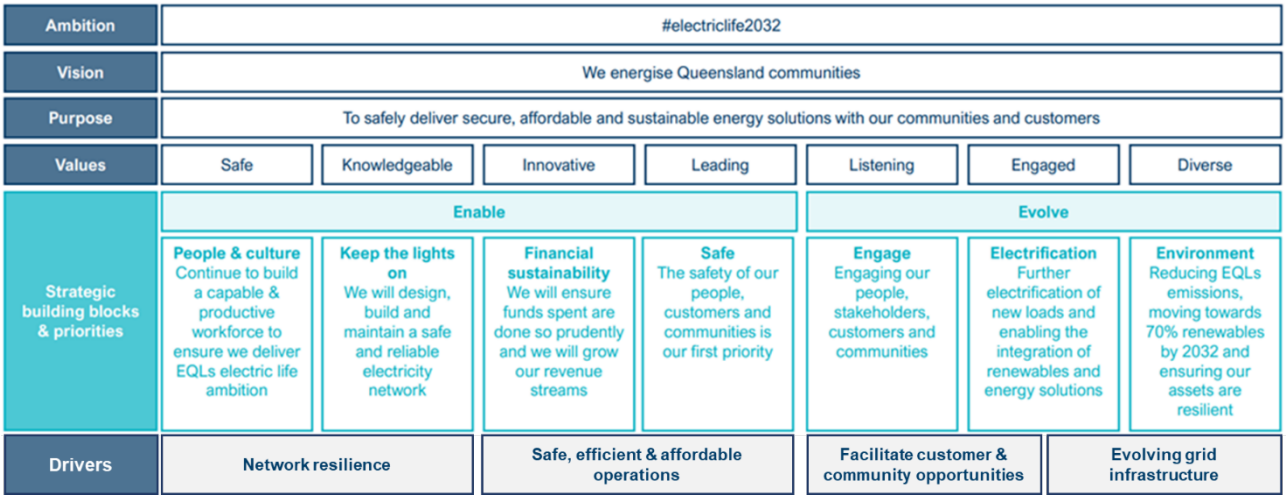
The energy transition, which will continue throughout the 2025-30 regulatory control period, is driving significant industry and regulatory change. It is crucial that the capabilities of Energy Queensland's Digital Core systems are maintained, uplifted and continuously improved to respond to these ongoing changes. It is also crucial that Energy Queensland meets regulatory and compliance obligations within its Digital Core business capabilities in relation to its corporate non-network ICT systems. Considering these requirements, the primary business objective of the Digital Core business case is to ensure Energy Queensland has a continuing and fit-for-purpose set of Digital Core capabilities.

To meet this business objective, the Digital Core business case proposes ongoing recurrent and non-recurrent investment to enable applications and technologies relevant to Digital Core business capabilities to stay on secure supported versions, remain up to date with regulatory and compliance requirements, and maintain existing business capabilities to keep pace with the industry transition.

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 1, and these are reflected in our 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 1: Energy Queensland's Strategic Framework

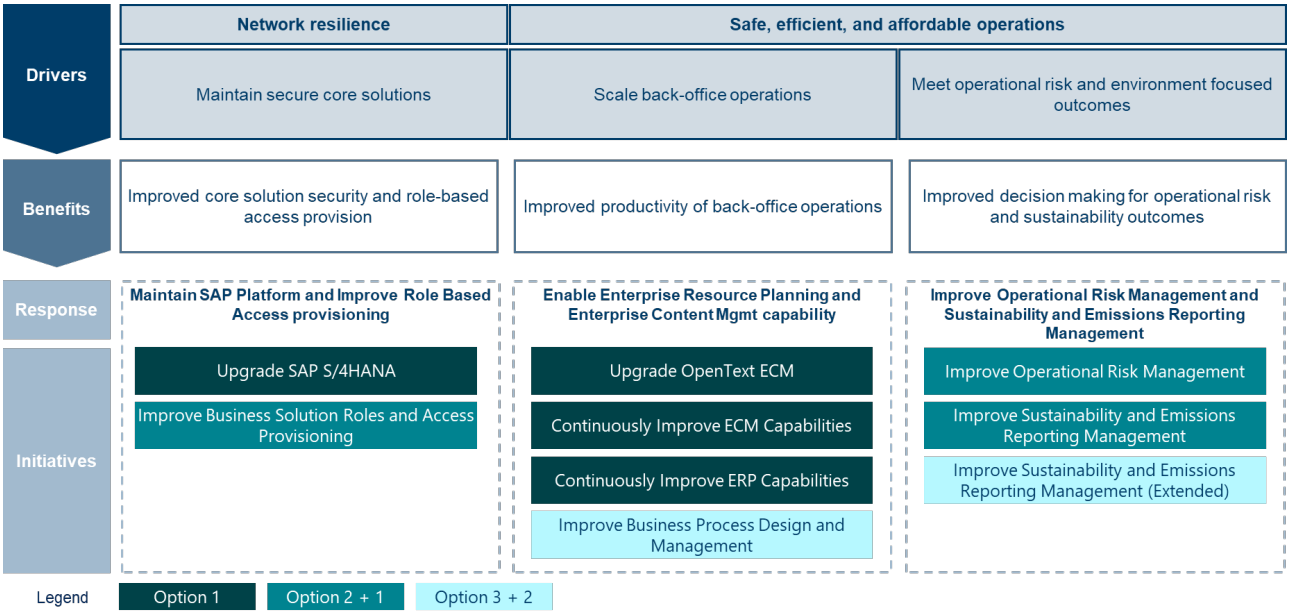


This business case addresses the non-system ICT investment required to support the drivers 'Network resilience' and 'Safe, efficient and affordable operations'. Energy Queensland is committed to:

- Maintaining secure Digital Core solutions, as risk of cyber-attacks is a persistent concern.
- Maintaining sustainability of Digital Core platforms and business capabilities, through prudent and efficient ICT asset management and continuous improvement.
- Improved productivity of back-office operations, which are critical to efficient internal operations, and essential in supporting customer-facing parts of Energy Queensland.
- Improved decision making for operational risk and sustainability outcomes.

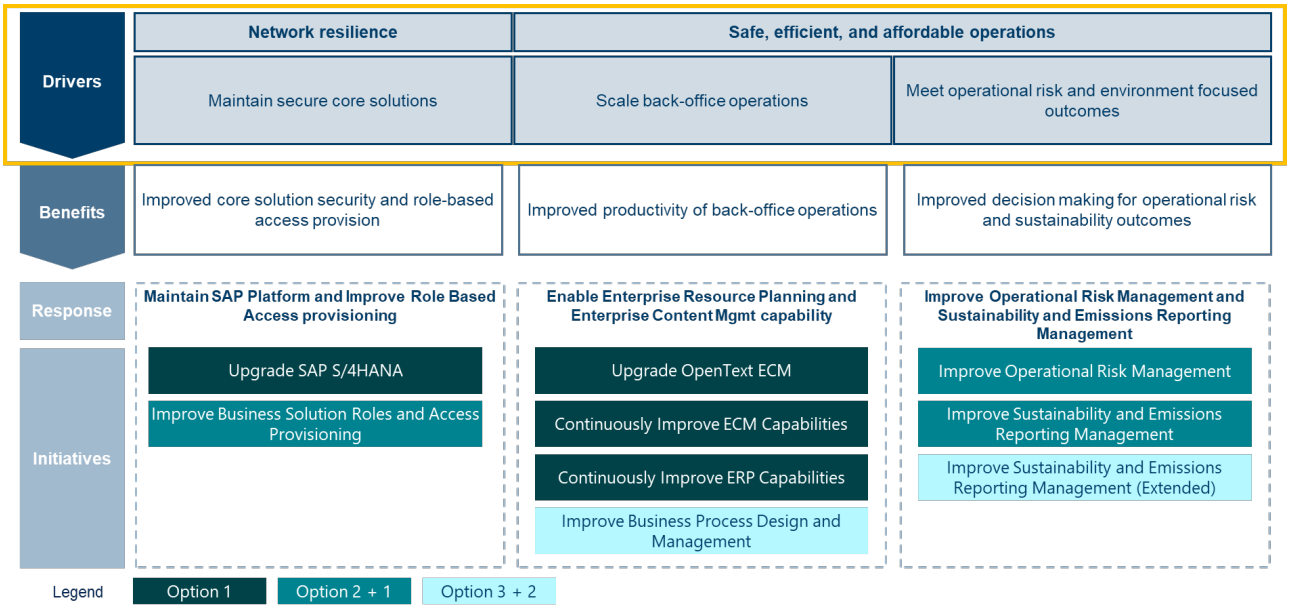
Within these drivers, are sub-drivers, each with a unique set of identified challenges for investment, the benefits that can be realised, and the objectives that can be met and outcomes achieved through delivery of a strategic response (i.e., programs).

Figure 2: Investment Logic Map for Digital Core Business Case



3.3 Drivers and Challenges

Figure 3: Investment Logic Map Identifying Three Key Drivers for Digital Core Business Case



The key drivers applicable to this business case are ‘Safe, efficient and affordable operations’ and ‘Network resilience’.

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

- **Maintain secure core solutions.** The risk of cyber-attacks is a persistent concern across a variety of industries and businesses and poses potential threats to the security and privacy of Energy Queensland's data.

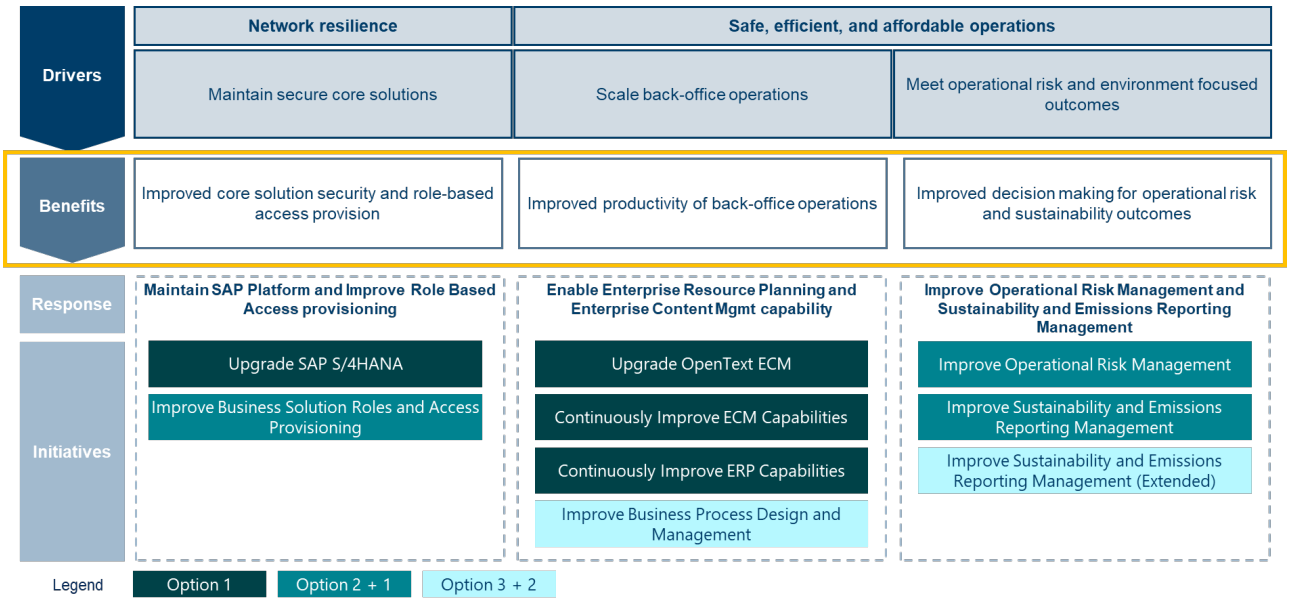
  While the Cyber Security business case contains investment in technology capabilities to reduce the likelihood of adverse cyber security scenarios, this business case supports cyber security through keeping our largest core digital business platform current and improving the roles and access provisioning capabilities within this specific platform.

- **Improved productivity of back-office operations.** Energy Queensland's Digital Core consists of corporate applications upon which internal back-office functions are built. These capabilities support internal functions such as finance, human resource processes, employee payroll, and records management. While critical to efficient internal operations, Digital Core capabilities are also essential in supporting customer-facing parts of Energy Queensland. Functions such as customers' financial transactions and processing purchases of goods and services rely on Digital Core capabilities.

- **Improved decision making for operational risk and sustainability outcomes.** The improvement of Energy Queensland's operational risk management capabilities supports meeting health, safety, and environment requirements. Additionally, uplifting sustainability and emissions reporting management capabilities is required to effectively manage emissions reporting requirements and support Energy Queensland's Low Carbon ambitions.

3.4 Way Forward and Benefits

Figure 4: Investment Logic Map Identifying Three Benefit Categories that Address the Drivers

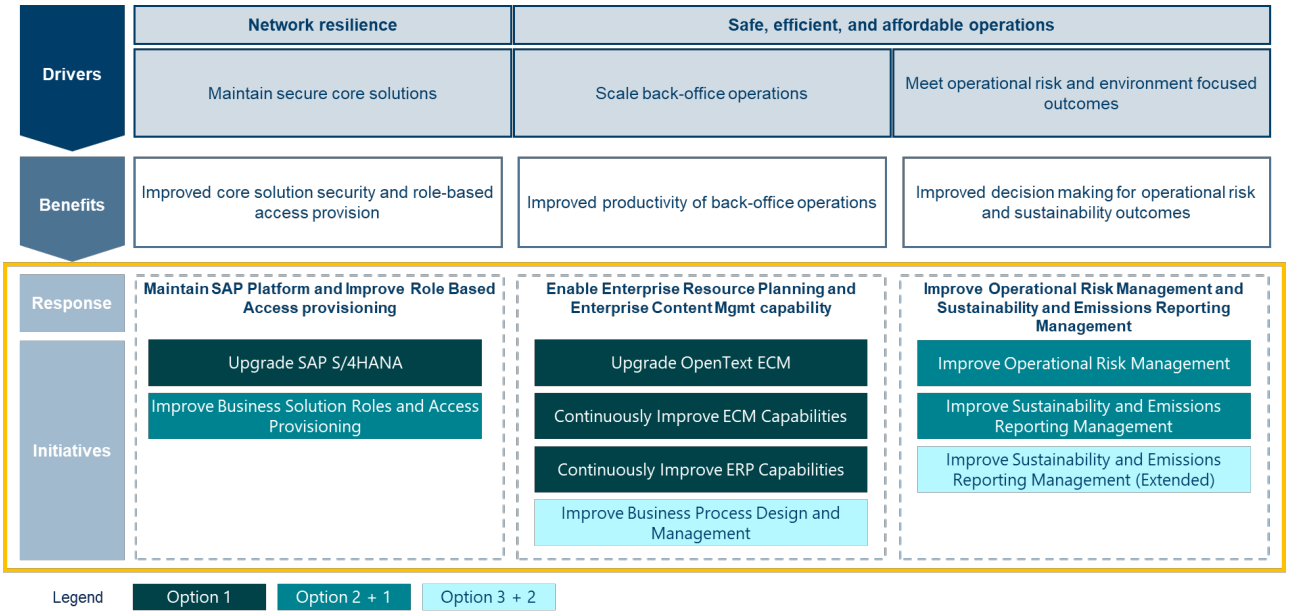


We have identified the following benefit categories that can be realised in response to the identified drivers. Please refer to Section 6.2 for an analysis of the qualitative benefits associated with the investment.

- **Improved core solution security and role-based access provisions.** This benefit category provides heightened cyber security resilience by keeping core platforms updated, patched and with access to vendor support for current versions of software. The list below provides information on the benefits.
    - Consistent and Compliant Regulatory Changes: Keep pace with a predictable, regular level of ongoing regulatory and compliance change in line with requirements under the *Security of Critical Infrastructure Act* 2018 (SoCI Act), as listed in Section 6.1.
    - Cyber Security Resilience: Keep pace with emerging Cyber Security vulnerabilities and compliance requirements under the SoCI Act through keeping systems on supported versions and patched.
    - Vendor Support Access: Able to access vendor support for Digital Core solutions for reliable and timely troubleshooting and updates, and delivery of the required functionality with minimal disruptions to operations.
- **Improved productivity of back-office operations.** This benefit category boosts back-office productivity by providing sustained access to latest enabling technology functionality. The list below provides information on the benefits.
    - Sustained Operational Productivity: Support the business to maintain current operational productivity as the industry transitions.
    - Adaptability to Evolving Systems: Keep pace with ongoing changes in other systems, capabilities, and processes.
    - Meeting Industry Transition Expectations: Keeping pace with stakeholders' expectations in the expected industry transition.
- **Improved decision making for operational risk and sustainability outcomes.** This benefit category enables improved decision making for operational risk and sustainability outcomes by improving register capabilities and ensuring efficient emissions and sustainability reporting. The list below provides information on the benefits.
    - Improved Operational Risk Management: Enhanced operational risk register capabilities for management of day-to-day Health, Safety, and Environment (HSE) operational risks and tracking of HSE corrective actions.
    - Efficient Emissions and Sustainability Reporting: Avoided business resource uplift for manually compiling and due diligence over emissions and sustainability reporting.

3.5 Initiatives and Outcomes

Figure 5: 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 SAP platform and improve Role Based Access provisioning.** The initiatives will maintain SAP platform through two major upgrades and improve the capabilities to provision secure and relevant access for users. The initiatives within this response include:
    - Upgrade SAP S/4HANA: There are two major version upgrades scheduled within the 2025-30 regulatory control period for the SAP S/4HANA suite, including SAP Master Data Governance and a number of interrelated applications.
    - Improve Business Solution Roles and Access Provisioning: Improvement of Business Solution Roles (BSR) and access provisioning, to improve efficiency of application security within the systems. The scope of this initiative for the 2025-30 regulatory control period is for all the SAP related components. Initiatives in future regulatory control periods may expand this capability to other solutions.
- **Enable ERP and ECM capability.** The initiatives will enable Energy Queensland to improve ECM, ERP (including onboarding and recruitment) capabilities. The initiatives within this response include:
    - Upgrade OpenText ECM: OpenText ECM system major upgrades, aligned with the S/4HANA major version upgrades.
    - Continuously Improve ECM Capabilities: This includes a level of predictable conservative level of change (including regulatory, compliance and internal change), with a focus on minimum sustainment of the effectiveness of the existing business capabilities at the current level in a continuously changing environment. This

initiative scope includes all applications within the ECM platform, not just the OpenText ECM suite.

- Continuously Improve ERP Capabilities: Reinstatement of continuous improvement expenditure paused during the replacement of these major solutions. This includes a predictable, conservative level of change (including regulatory, compliance and internal change), with a focus on minimum sustainment of the effectiveness of the existing business capabilities at the current level. This initiative scope includes all applications within the ERP platform, not just the SAP S/4HANA interrelated components. Within this continuous improvement of ERP capabilities there are specific activities which we have identified:
    - Replacement of the legacy unsupported Financial Planning and Budget system with a contemporary solution.
    - Replacement of the legacy Electronic Timesheet system with a contemporary solution.
    - Replacement of the legacy unsupported Mobile Inventory Management system and devices (used by Depots) with a contemporary solution.
    - Replacement of the legacy unsupported Mobile Warehouse Management system and devices with a contemporary solution.
    - Continuous improvement of our Pay and Reward capabilities as regular compliance changes and the enterprise bargaining agreements evolve.
    - Replacement of the legacy Onboarding and Recruitment system with a contemporary solution.
- Improve Business Process Design and Management: This initiative would extend the initial effort made in process governance to establish an Energy Queensland-wide Operating Model to support end-to-end process governance and management. This includes the development and publication of policies, frameworks, and standards to manage business processes to ensure ongoing compliance with Energy Queensland's evolving legislative and regulatory obligations as distribution network service providers (DNSPs). The investment would establish capabilities, processes and procedures to identify, manage, and govern business processes, evolve process governance and management capabilities across the organisation, as well as federation of an enterprise-wide operating model to support and optimise these business processes.

  Key capabilities include Process Management (Registry, Governance, Monitoring, Design, Business Rules). The focus of the initiative for 2025-30 would be within the scope of the SAP solutions used by the ERP and EAM. Initiatives in future regulatory control periods may expand this across other solutions.

- **Improve Operational Risk Management and Sustainability and Emissions Reporting Management.** These initiatives will enable Energy Queensland to make corporate improvements to operational risk management and sustainability and remissions reporting capabilities. The initiatives within this response include:
    - Improve Operational Risk Management: Use the Operational Risk management capability for management of day-to-day operational risks and tracking of corrective actions. This is driven by the HSE part of the business. This is distinct from

corporate risks which are done in the Governance Risk Compliance module. This is also distinct from the Operational Risk Assessment in the Asset and Works Management business case continuous improvement initiative.

- Improve Sustainability and Emissions Reporting Management: Implementation of a sustainability and emissions reporting management solution (to replace manual processes and spreadsheets), to effectively manage emissions reporting requirements as per the International Sustainability Standards Board's (ISSB's) drafted legislation for Environment, Social, and Governance (ESG) reporting and to support Energy Queensland's low carbon ambitions.
- Improve Sustainability and Emissions Reporting Management Extended: Scope extension of the Improve Sustainability and Emissions Reporting Management initiative to include distribution network scope 1 emissions.

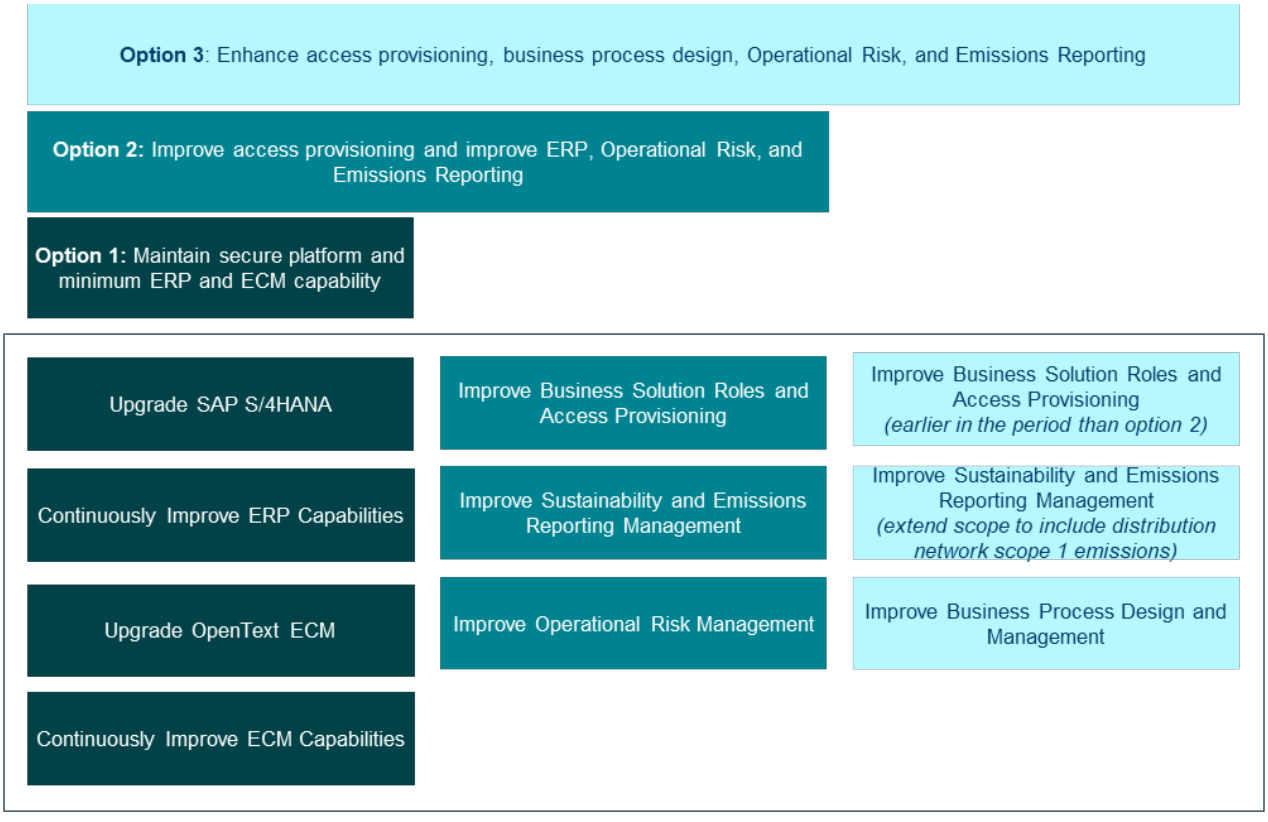
4 INVESTMENT OPTIONS

4.1 Options Description

Three options were considered by Energy Queensland to address the drivers outlined in Section 3.3 and deliver on the benefits described in Section 3.4.

- Option 1: Maintain secure platform and minimum ERP and ECM capability.
- Option 2: Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting.
- Option 3: Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting.

Figure 6: Initiatives Mapped to Options



Note. each consecutive option includes initiatives from the previous option

Option 1: Maintain secure platform and minimum ERP and ECM capability

The focus of this option is to maintain overall Digital Core business capabilities including improvements to the ERP and ECM platforms.

Option 2: Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting

The focus of this option is improved role-based access provisioning, enable ERP, ECM and operational risk capabilities and uplift emissions reporting.

Option 3: Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting

The focus of this option is to further improve access provision, business process design and management, operational risk, and onboarding capability.

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's 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: Maintain secure platform and minimum ERP and ECM capability	Option 2: Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting (Recommended)	Option 3: Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting (Discounted)
Risk mitigation associated with the investment	**Medium risk mitigation.** Option 1 includes non-recurrent and recurrent investment to ensure Energy Queensland maintains secure ERP and ECM capabilities; however, partially mitigates the risk of not keeping pace with partner, supplier, and customer expectations over time. Additionally, Option 1 partially mitigates the risk of inefficient planning, scheduling, and financial planning due to limited data quality.	**High risk mitigation.** Option 2 mitigates all risks associated with investment.	**High risk mitigation.** Option 3 mitigates all risks associated with investment.
Financial benefits associated with the investment	No financial benefits associated with Option 1.	No direct realisable financial benefits are associated with Option 2. Non-financial benefits from avoided resource uplifts for manual emissions and sustainability reporting and onboarding and recruitment are associated with Option 2.	No direct realisable financial benefits are associated with Option 3. Non-financial benefits from avoided resource uplifts for manual emissions and sustainability reporting and onboarding and recruitment are associated with Option 3.

Criteria	Option 1: Maintain secure platform and minimum ERP and ECM capability	Option 2: Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting (Recommended)	Option 3: Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting (Discounted)
Non-financial benefits associated with the investment	**Partial benefit realisation across all categories.** Non-financial benefits associated with Option 1 include: • Keeping pace with emerging cyber security vulnerabilities • Keeping pace with ongoing changes in other systems • The ability to access vendor support • Keeping pace with regulatory and compliance	**Full benefit realisation across all categories.** Non-financial benefits associated with Option 2 include: • All non-financial benefits associated with Option 1. • Keeping pace with stakeholders' expectations in the expected industry transition. • Enhanced operational risk register capabilities.	**Full benefit realisation across all categories.** Non-financial benefits associated with Option 3 include: • All non-financial benefits associated with Option 2. • Maturity uplift in Energy Queensland's process management capabilities.
Costs associated with the investment ($M)	*Total Expenditure: $65.9M* • Recurrent capex: $29.4M • Non-recurrent capex: $36.5M	*Total Expenditure: $75.9M* • Recurrent capex: $31.0M • Non-recurrent capex: $44.9M	*Total Expenditure: $90.3M* • Recurrent capex: $31.1M • Non-recurrent capex: $54.9M • Opex: $4.3M
Commercial NPV ($M)	($55.7M)	($64.4M)	($76.9M)
OVERALL ASSESSMENT	**Not Recommended**	**Recommended**	**Not Recommended**

4.4 Recommended Option

The primary objective of the digital core operation is to maintain secure core solution, enable improvement of back-office operations, and enable the visibility of operational risk and environment focused outcomes.

Option 2 ‘Improve access provisioning and improve ERP, Operational Risk and Emissions Reporting’ is the most prudent and efficient option.

Option 1 ‘Maintain secure platform and minimum ERP and ECM capability’ is the base case for minimum sustainment of the existing business capabilities at the current level in a continuously changing environment. Option 1 mitigates risks associated with non-compliance with regulatory and legislative obligations, critical ICT systems and cyber risks. Option 1 ’Maintain secure platform and minimum ERP and ECM capability’ lacks initiatives to keep pace with the changes in the industry transition.

Option 2 ‘Improve access provisioning and improve ERP, Operational Risk and Emissions Reporting’ maintains the effectiveness of the existing business capabilities at the current level at pace with the industry transition. Option 2 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 minor improvements, they are intended to maintain Energy Queensland’s existing business capabilities and efficiency outcomes.

Option 3 ’Enhance access provisioning, business process design, Operational Risk and Emissions Reporting‘ is differentiated from other options as it includes an additional maturity increase in Business Process Design & Management and extended scope for ’Improve Sustainability and Emissions Reporting Management‘. 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, and so has limited analysis.

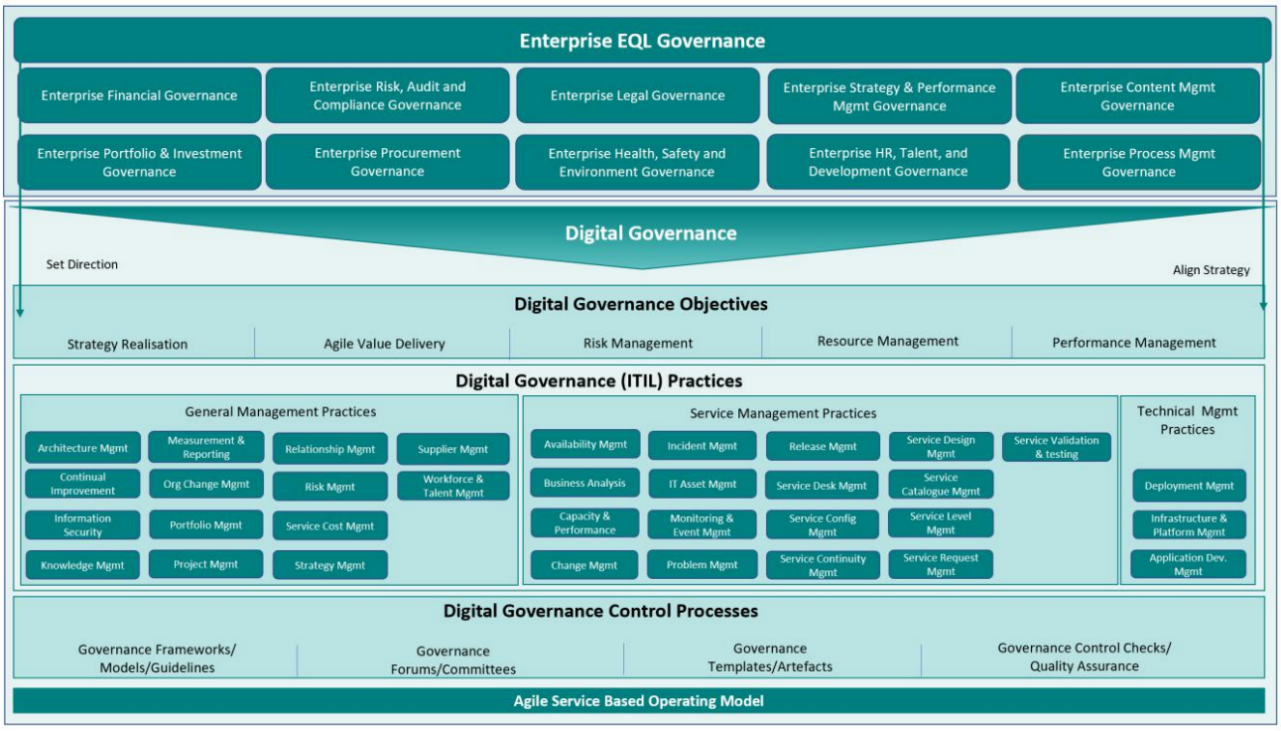
5 IMPLEMENTATION OF RECOMMENDED OPTION

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

Each major application (such as the ERP, EAM and ECM) has a dedicated business governance forum which manage application roadmaps, along with change management and business readiness. These are owned and managed by the business capability owners, and Digital are key supporting members. The Business Readiness Network contains Business Readiness Champions, Local User Experts, Subject Matter Experts, Super Users, Functional Administration and Technical Analysts.

Many of the initiatives (in Options 1 and 2) of this business case are focussed on keeping the existing business capabilities current. Therefore, the change impact is on upgrading / replacing /

continuously improving the application and technologies used, rather than significant business capability change.

The larger initiatives in this business case (for example, the upgrades of SAP S/4HANA and OpenText ECM) will have a larger change impact and require more change management. They are therefore expected to be managed through the independent waterfall projects part of the Agile Service based Operating Model. The same business governance forums and business readiness networks are expected to be used.

The initiatives in this business case, which introduce new business capability (in the Keeping Pace with the Industry Transition option), will have a medium change impact and require more change management. Therefore, the same independent waterfall projects processes, business governance forums and business readiness networks are expected to be used.

These business capabilities are used widely across the organisation, so all workforces are affected by changes to them. The main parts of Energy Queensland directly affected by these initiatives are:

- Finance groups
- Human Resources and Payroll groups
- Records Management groups
- Warehouse groups.

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 areas that will have ownership of each of the initiatives with joint accountability for delivery between Digital 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 Core for Recommended Option 2

For information on the *Digital ways of working* refer to the Non-network ICT Plan – Non-network ICT Portfolio Development and Governance section.

5.4 Investment Benefits

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

There are no financial benefits associated with Option 2 for Digital Core. All non-financial benefits are listed and described in Section 6.2.

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]	**31.0**	**26.2**
ICT capex	Non-recurrent	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**44.9**	**38.2**
ICT opex	N/A	-	-	-	-	-	-	-
TOTAL		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**75.9**	**64.4**

5.6 Financial Summary

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

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

Net Present Value	Type	Option 2
ICT capex	Recurrent	(26.2)
ICT capex	Non-recurrent	(38.2)
ICT opex	N/A	-
Benefits	N/A	-
Commercial NPV		**(64.4)**

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

Net Present Value	Discount Rate		Benefits	
	+1%	-1%	125%	75%
Recommended option (Option 2)	(61.5)	(67.4)	(64.4)	(64.4)

6 APPENDICES

6.1 Applicable Compliance Requirements

Energex and Ergon Energy Network is required to meet regulatory and compliance obligations within Digital Core capabilities in relation to its corporate non-network ICT systems as set out below.

Table 8: Applicable Compliance Requirements Overview

Obligation	Description of Requirement
***Electricity Act* 1994, Electricity Regulation 2006 and Electricity Distribution Network Code**	The *Electricity Act* 1994, Electricity Regulation 2006 and Electricity Distribution Network Code collectively govern the operations of Energex and Ergon Energy Network, including technical, operational and service standards.
***Security of Critical Infrastructure Act* 2018 (SOCI Act)**	The SOCI Act applies in managing national security risks relating to critical infrastructure. The Security Legislation Amendment (Critical Infrastructure) Bill (SOLI) 2021 introduces new requirements: • Additional positive security obligations for critical infrastructure assets, including a risk management program, to be delivered through sector-specific requirements, and mandatory cyber incident reporting • Enhanced cyber security obligations for those assets most important to the nation, described as assets of national significance Government assistance to relevant entities for critical infrastructure sector assets in response to significant cyber-attacks that impact on Australia's critical infrastructure assets.
National Electricity Law (NEL) and National Electricity Rules (NER)	The NEL requires Energex and Ergon Energy Network 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. The operating and capital expenditure objectives set out in the NER require Energex and Ergon Energy Network to maintain both the quality, reliability, and security of supply of standard control services and the reliability and security of the distribution network.
Work Health and Safety (Construction Work Code of Practice) Approval 2018	The *Work Health and Safety Act* 2011 and the Work Health and Safety Regulations 2011 (the WHS Regulations) provide Energy Queensland with practical guidance on how to achieve work health and safety standards and effective ways to identify and manage risks.
Model Code of Practice (CoP): Managing electrical risks in the workplace	In line with the CoP, Energy Queensland 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.

Obligation	Description of Requirement
Queensland Government On-time Payment Policy	From 1 July 2020, the On-time Payment Policy ensures that small businesses supplying to the Queensland Government are paid within 20 calendar days. Should the small business not receive payment within 20 calendar days they can submit a claim for penalty interest.
Credit card payment regulations/ payment privacy	Energy Queensland must comply with a number of regulations to ensure the security of credit card payments and payment privacy. The merchant bank sets the terms of service that Energy Queensland must meet. Further, Energy Queensland must meet the obligations under the Australian Privacy Principles in the *Privacy Act* 1988.
ESG reporting requirements within the AASB	ESG reporting requirements are expected to be legislated in Australia by the AASB (Australian Accounting Standard Boards). As of January 2023, there is draft legislation out for consultation from the ISSB (International Sustainability Standards Board). From anything issued by the ISSB, the AASB will need to consider its application in Australia, draft standards applicable to Australia and issues for consultation in Australia before anything can be legislated here.

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 – Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Non-compliance with regulatory and legislative obligations	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure the Energy Queensland Digital Core systems are compliant with regulatory and legislative obligations.	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure the Energy Queensland Digital Core systems are compliant with regulatory and legislative obligations.	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure the Energy Queensland Digital Core systems are compliant with regulatory and legislative obligations.
Legacy systems' cyber and ICT risks grow over time, increasing the risk of performance issues of critical ICT systems and cyber risks due to a lack of security patching	**High contribution to risk mitigation** Includes non-recurrent and recurrent investment to ensure 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.

Risk	Option 1 – Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Adopting a reactive approach to managing Energy Queensland's core corporate functions rather than a proactive approach	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that data used to support critical corporate functionalities is accurate and complete. This will ensure that Energy Queensland has the ability to take a proactive approach to managing critical core functions.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that data used to support critical corporate functionalities is accurate and complete. This will ensure that Energy Queensland has the ability to take a proactive approach to managing critical core functions.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that data used to support critical corporate functionalities is accurate and complete. This will ensure that Energy Queensland has the ability to take a proactive approach to managing critical core functions.
Energy Queensland cannot keep pace with partner, supplier, and customer expectations over time	**Medium contribution to risk mitigation** Partially mitigates this risk by including recurrent and non-recurrent investment to improve systems to support meeting the expectations of customers, partners, and suppliers.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment to improve systems to support meeting the expectations of the customer, partner, and the supplier.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment to improve systems to support meeting the expectations of the customer, partner, and the supplier.
Lack of automation and upgrades may place core transactions such as processing large payment volumes at risk over time, and increase costs associated with recruitment processes, emissions reporting, etc.	**High contribution to risk mitigation** Increases in payment volumes without the necessary enabling systems puts the ability to meet these mandatory payment times at risk. This option includes non-recurrent expenditure to ensure the payment volumes are met.	**High contribution to risk mitigation** Increases in payment volumes without the necessary enabling systems puts the ability to meet these times at risk. This option includes non-recurrent expenditure to ensure the payment volumes are met.	**High contribution to risk mitigation** Increases in payment volumes without the necessary enabling systems puts the ability to meet these times at risk. This option includes non-recurrent expenditure to ensure the payment volumes are met.
Poor quality data leads to inefficient planning, scheduling, and delivery of the Energy Queensland Financial Planning	**Medium contribution to risk mitigation** Partially mitigates this risk by including recurrent and non-recurrent investment in ICT systems to ensure that data used to support enterprise planning is reliable, accurate and complete.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that data used to support critical corporate functionalities is accurate and complete.	**High contribution to risk mitigation** Includes recurrent and non-recurrent investment in ICT systems to ensure that data used to support critical corporate functionalities is accurate and complete.

Risk	Option 1 – Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Outdated and unsupported S/4HANA platform will mean Energy Queensland cannot address critical defects	**High contribution to risk mitigation** Includes investment in the S/4HANA platform which will ensure the platform remains up to date and able to deliver the functions in a reliable and timely manner.	**High contribution to risk mitigation** Includes investment in the S/4HANA platform which will ensure the platform remains up to date and able to deliver the functions in a reliable and timely manner.	**High contribution to risk mitigation** Includes investment in the S/4HANA platform which will ensure the platform remains up to date and able to deliver the functions in a reliable and timely manner.

Financial benefits associated with option

This criterion assesses the financial benefits delivered to Energy Queensland and the broader community from each option. There are no direct realisable financial benefits associated with this business case.

Table 10: Financial Benefits Associated with Options

Benefit category	Option 1 - Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
None	None	None	None

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

Benefits	Option 1 - Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Adaptability to Evolving Systems	**Limited** ERP and ECM upgrades and continuous improvement are included in Option 1; however, it does not include the improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management, meaning Option 1 will not keep pace with evolving requirements.	**Partial** Keeps pace with evolving requirements through Option 1 initiatives, improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management.	**Full** Keeps pace with evolving requirements through Option 2 initiatives. Additionally, Option 3 includes the business process design and management of SAP solutions positioning Energy Queensland in advance of the industry transition.
Vendor Support Access	**Full** System upgrades and continuous improvement to Digital Core systems will result in maintained vendor support access.	**Full** System upgrades and continuous improvement to Digital Core systems will result in maintained vendor support access.	**Full** System upgrades and continuous improvement to Digital Core systems will result in maintained vendor support access.

Benefits	Option 1 - Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Consistent and Compliant Regulatory Changes	**Limited** Option 1 somewhat keeps pace with a minimum sustainment level of ongoing regulatory and compliance changes; however, it does not include the improvement of sustainability and emissions reporting and operational risk management.	**Partial** Option 2 keeps pace with a minimum sustainment level of ongoing regulatory and compliance changes as it consists of Option 1 initiatives, plus the improvement of sustainability and emissions reporting and operational risk management.	**Partial** Option 3 keeps pace with a minimum sustainment level of ongoing regulatory and compliance changes as it consists of Option 1 initiatives, plus the improvement of sustainability and emissions reporting and operational risk management.
Efficient Emissions and Sustainability Reporting	**Limited** None.	**Partial** Option 2 avoids the need for business resource uplift for manually compiling and due diligence over emissions and sustainability reporting through the improvement of sustainability and emissions reporting.	**Full** Option 3 avoids the need for business resource uplift for manually compiling and due diligence over emissions and sustainability reporting through the improvement of sustainability and emissions reporting.
Improved Operational Risk Management	**Limited** None.	**Partial** Option 2 improves operational risk register capabilities through the Improve Operational Risk Management initiative.	**Partial** Option 2 improves operational risk register capabilities through the Improve Operational Risk Management initiative.
Meeting Industry Transition Expectations	**Limited** Option 1 does not keep pace with stakeholders' expectations in the expected industry transition as it does not include the improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management.	**Partial** Option 2 keeps pace with stakeholders' expectations in the expected industry transition as it includes Option 1 initiatives, plus the improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management.	**Full** Option 3 advances stakeholders' expectations in the expected industry transition as it includes Option 2 initiatives, plus the business process design and management of SAP solutions.

Benefits	Option 1 - Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Cybersecurity Resilience	**Limited** Option 1 somewhat keeps pace with emerging Cyber Security vulnerabilities through upgrades and continuous improvement to ERP and ECM solutions; however, does not include improvement of BSR and access provisioning.	**Partial** Option 2 keeps pace with emerging Cyber Security vulnerabilities through Option 1 initiatives and the improvement of BSR and access provisioning.	**Partial** Option 3 keeps pace with emerging Cyber Security vulnerabilities through Option 2 initiatives.
Sustained Operational Productivity	**Limited** Option 1 somewhat supports the business to maintain current operational productivity through upgrades and continuous improvement to ERP and ECM solutions; however, does not include the improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management.	**Partial** Option 2 supports the business to maintain current operational productivity as the industry transitions as it includes Option 1 initiatives, plus the improvement of BSR and access provisioning, sustainability and emissions reporting, and operational risk management.	**Full** Option 3 advances the business beyond current operational productivity as it includes Option 2 initiatives, plus the business process design and management of SAP solutions.

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 - Maintain secure platform and minimum ERP and ECM capability	Option 2 – Improve access provisioning and improve ERP, Operational Risk, and Emissions Reporting	Option 3 – Enhance access provisioning, business process design, Operational Risk, and Emissions Reporting
Recurrent capital expenditure	**29.4** Relating to upgrades to SAP S/4HANA and OpenText ECM.	**31.0** Relating to upgrades to SAP S/4HANA and OpenText ECM.	**31.1** Relating to upgrades to SAP S/4HANA and OpenText ECM, along with maturity increase in business process design and management.
Non-recurrent capital expenditure	**36.5** Relating to reinstatement of continuous improvement of ERP and ECM capabilities.	**44.9** Relating to reinstatement of continuous improvement of ERP and ECM capabilities, along with improvement of sustainability and emissions reporting management.	**54.9** Relating to reinstatement of the continuous improvement of ERP and ECM capabilities, along with improvement of sustainability and emissions reporting management to also include distribution network scope 1 emissions, along with maturity increase in business process design and management.
Operating expenses	**-**	**-**	**4.3** Relating to maturity increase in business process design and management.
TOTAL	**65.9**	**75.9**	**90.3**

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 maintains Energex and Ergon Energy Network's Digital Core business capabilities and will serve as the digital building blocks for future enhancements. This 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.**	The recommended option implements and replaces Digital Core non-network ICT capabilities that play a pivotal role in managing safety risks associated with management and maintenance of the distribution network.
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

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

Table 14: Assumptions Overview

Assumption Description	Impact if assumption proves invalid	How will the assumption be assessed?
Major upgrades of SAP S/4HANA suite timing	Altered expenditure profile to reflect actual timing	Continuous planning roadmap refinement

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 9: Delivery Risks for Recommended Option 2

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 integrated design and delivery approach between resources from Digital and business divisions, ensuring shared accountability and focus on the right business and employee outcomes.
Delivery of scope risk **Critical personnel and third-party 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. • Scope of each initiative/release limited to Minimal Viable Solution with any functionality over that threshold treated as continuous improvement.
Business Engagement risk **Solution adoption risk**	Failure to deliver expected benefits Negative impact on employee engagement	• The Program Delivery Approach (see section 5) outlines embedded approaches to collaborative and shared management of change, business readiness and adoption. • Incremental delivery of change and digital delivery governance across platforms will establish healthy change cadence, minimising the need for adopting multiple changes in the same business areas at the same time.

6.6 Dependencies

Table 16: Dependencies Overview

Dependency Description	Dependent upon
Enterprise Intelligence (the reporting component of SAP S/4HANA suite).	Data and Intelligence
Digital Foundations delivers the infrastructure, cloud capabilities, technologies, integration and service management platforms for the delivery and operations of all digital capabilities. A specific dependency for the Digital Core context are the integration components (of the SAP S/4HANA suite).	Digital Foundations
All non-network ICT and network investments are dependent on the investments in the Cyber Security business case.	Cyber Security
SAP/4HANA is also the platform that underpins a large portion of the initiatives included in Asset and Works Management.	Asset and Works Management

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]	**75.9**
Allocation to entity (where applicable)							
$M, real December 2022	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**31.7**
$M, real December 2022	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**42.2**
$M, real December 2022	Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**2.0**
Allocation to SCS capex (DNSP only)							
$M, real December 2022	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**29.2**
$M, real December 2022	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**34.7**
Add escalation adjustments (DNSP only)							
Escalation from $M, real December 2022 to $M, real June 2025	Energex	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**32.9**
Escalation from $M, real December 2022 to $M, real June 2025	Ergon Energy Network	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**39.1**
Expenditure in AER capex model/Reset RIN $M, real June 2025	**Energex**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**32.9**
Expenditure in AER capex model/Reset RIN $M, real June 2025	**Ergon Energy Network**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**39.1**