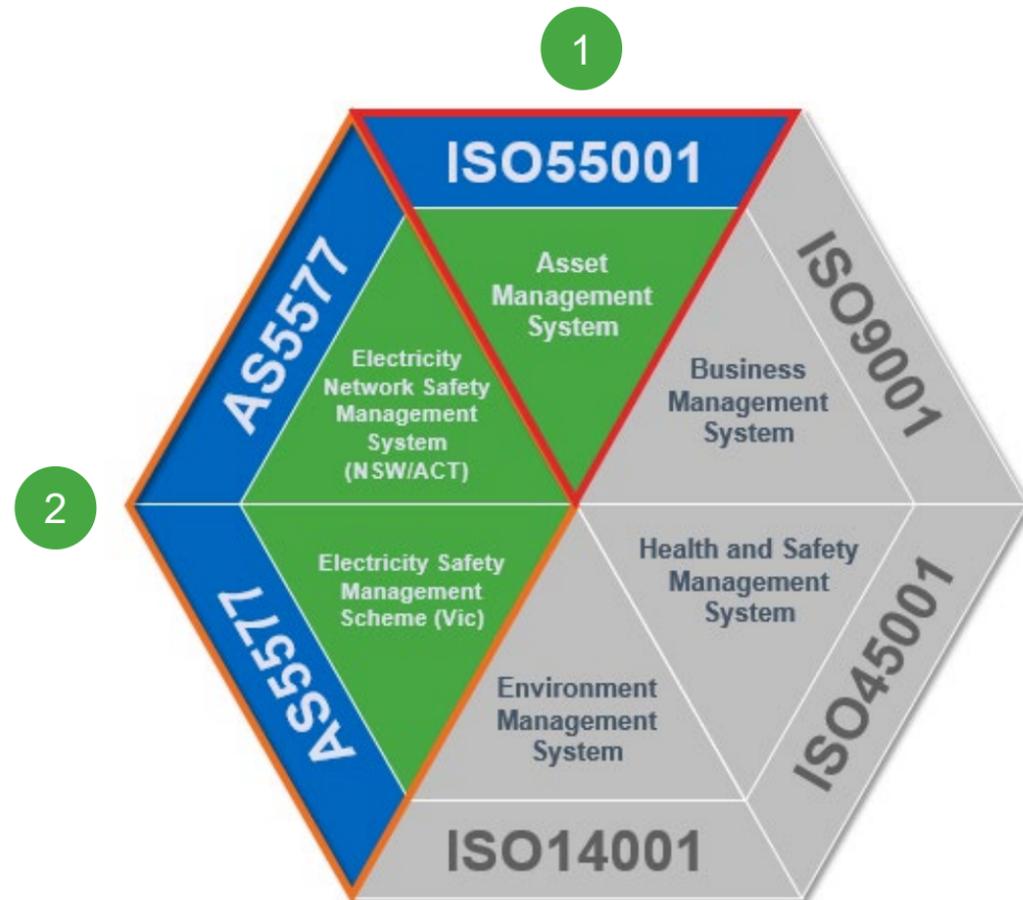




AEMO Briefing Asset Management

Lance Wee, GM Asset Management
13 November 2023

Risk Management Obligations



"Overall, the AMS is operating as a mature system and is delivering high value asset management outcomes to meet organisational objectives. Active ongoing effort is occurring to further develop asset management capability, meet business environment changes and capture performance improvement opportunities."

AMCL, November 2022

1 ISO55001 – Asset Management

- Certified compliance with ISO55001 is a mandated requirement of Transgrid's Operating Licence.

2 AS5577 – Electricity Network Safety Management System

- Compliance with AS5577 is a mandated requirement of electricity safety regulations in all States we operate.

Our ENSMS/ESMS requires management of safety risk As Low As Reasonably Practicable 'ALARP'
- Our AMS/ENSMS/ESMS are aligned to the Corporate Risk Framework and Risk Appetite Statement.

Transgrid has a very low tolerance for Health and Safety events that may cause injury or loss of life and Environment actions that may cause damage to sensitive environments and sites.

Bushfire

Public Safety

Reliability

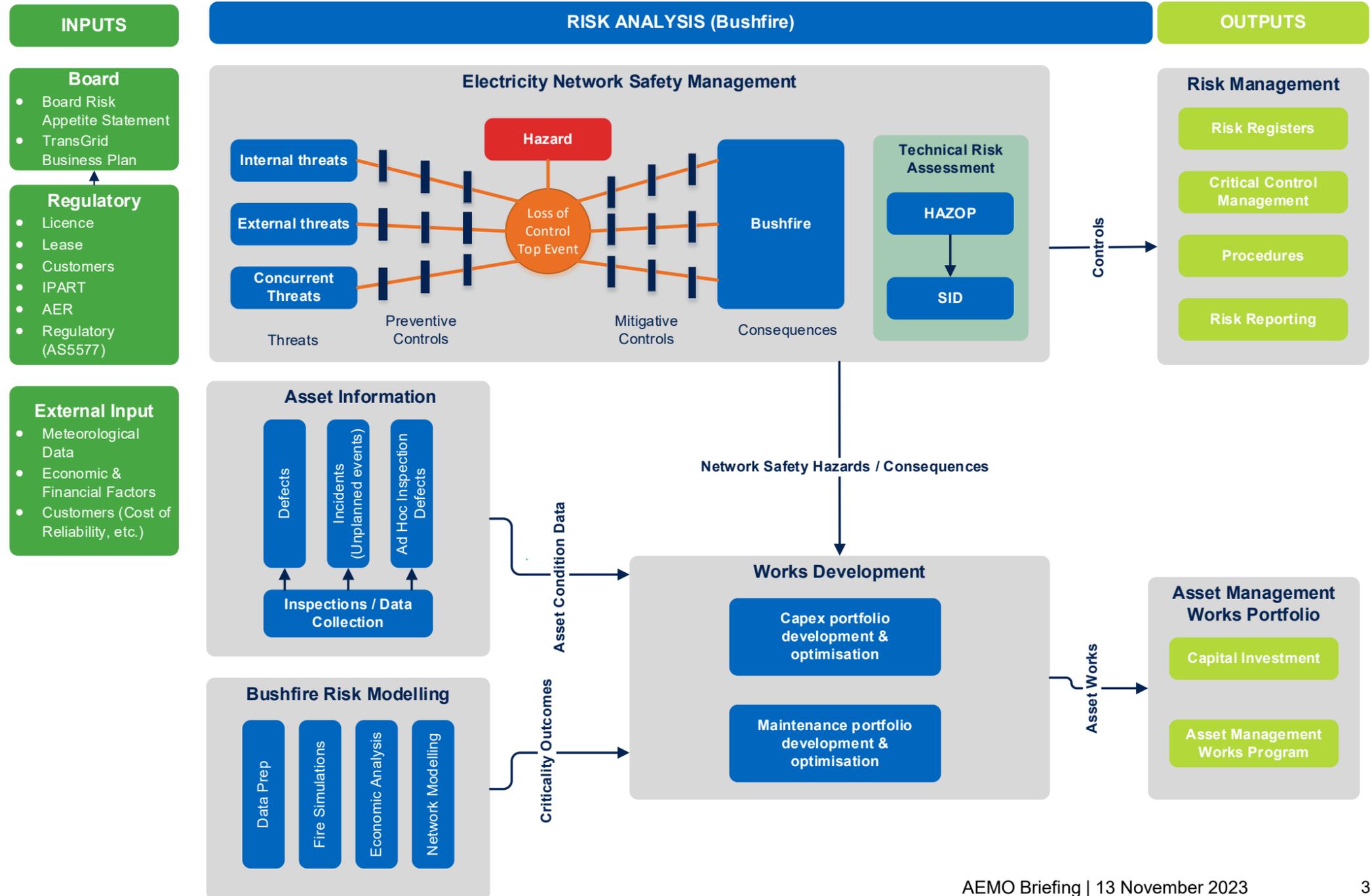
Worker Safety

Property & Environment

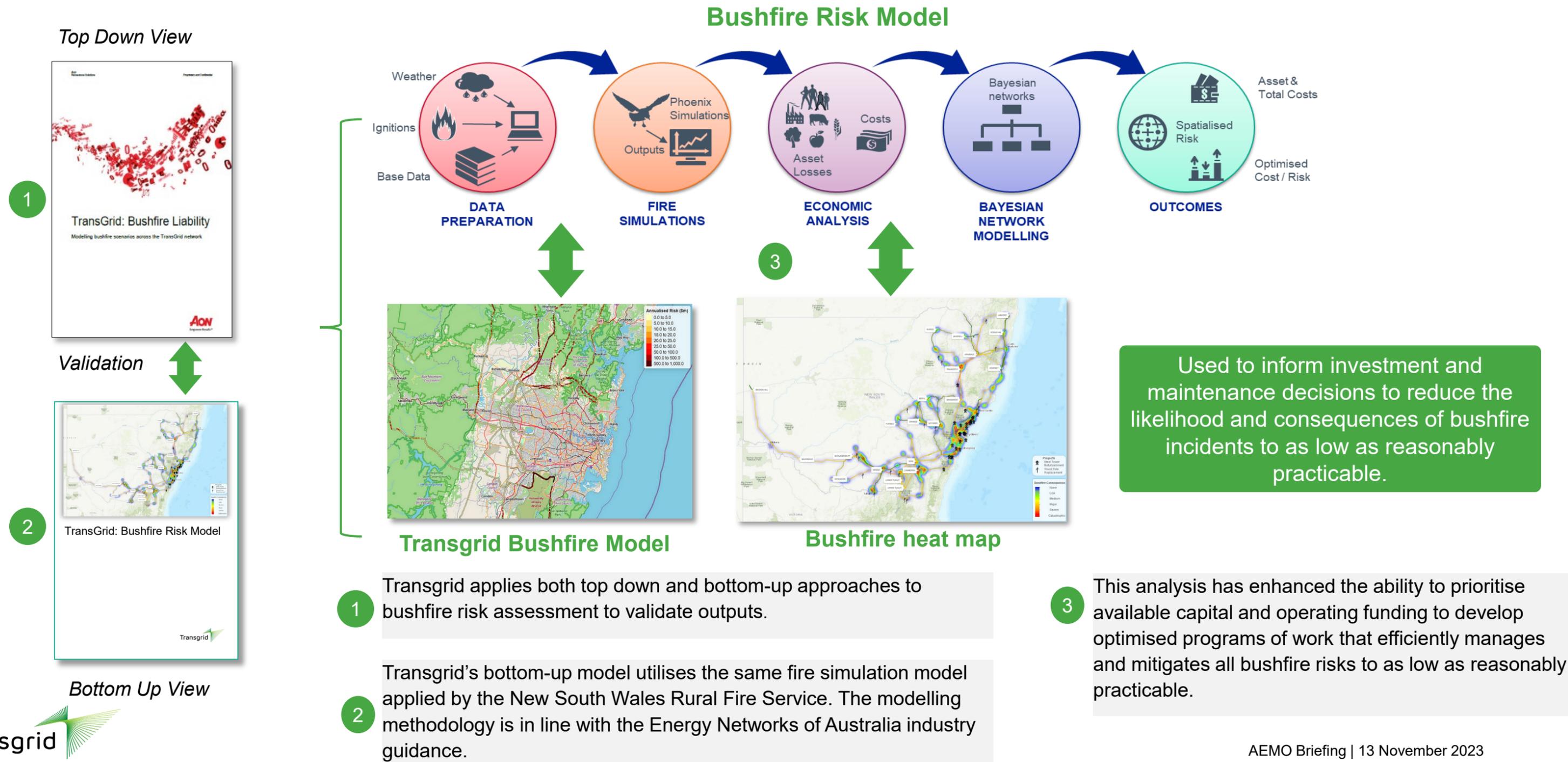
Bushfire Risk Management

Transgrid utilises a mature risk-based system to manage and mitigate bushfire risk to **as low as reasonably practicable**. The Management System:

- Incorporates appropriate **oversight and reporting committees** for performance tracking and continuous improvement.
- System effectiveness is frequently assured through internal and external **auditing**.



Bushfire Risk Modelling



Maintenance Activities – Vegetation and Transmission Lines

Our **Bushfire Risk Management Plan** outlines the approach of proactively managing, and appropriately mitigating, our exposure to bushfire risks.

Vegetation Management

- Routine ground easement inspection and vegetation management are based on long term cycles to ensure that sufficient clearance is maintained prior to the next maintenance cycle (3-6 years). This de-risks intra-seasonal (bushfire) vegetation encroachment.
- Annual LiDAR inspections of the network completed prior to bushfire season to provide further assurance that any unexpected growth rates or intrusions are identified and managed in between routine inspections. LiDAR analysis considers maximum operating scenarios and Fast vegetation growth (1.5m buffer) to detect potential vegetation intrusion.
- Off easement hazard tree management is prioritised based on quantified bushfire risk.

Transmission Lines, Substations and Digital Infrastructure

Program designed to identify and correct any high priority defects prior to season commencement. This further reduces and mitigates bushfire risks associated with potential high consequence asset related defects.

- Annual aerial helicopter inspections of network completed prior to bushfire season to identify transmission line asset defects.
- Annual ground-based inspection of the transmission line structures with the highest potential bushfire risk.
- Detailed inspection and routine maintenance tasks to detect defects and to identify longer-term condition-related deterioration of assets.

Recent Benchmarking Performance:

Top quartile result in *outage performance* across our Transmission Lines assets (2021 ITOMS Benchmarking).

Strong bushfire risk management and mitigation is underpinned by asset performance, and therefore having robust asset management practices.

Key Project Activities – Transmission Lines

Transgrid manages and mitigates bushfire and public safety risk to **as low as reasonably practicable** – our capital programs are a key enabler.

Transgrid has a portfolio of capital projects to further mitigate bushfire risk:

- Scope is based on asset condition and relative bushfire and public safety risk at each location on the network.
- These projects involve:
 - targeted replacement/refurbishment of corroded fittings, insulators, steelwork, foundation, and conductor.
 - targeted wood pole replacement with concrete/steel pole due to decay or termite damage.
 - Primary and digital infrastructure replacements

Regulatory Period 2 - Capital projects update

- Tower Refurbishment & Wood Pole replacement program – completed.
- Substations and Digital Infrastructure replacement program – completed.
- 2019/20 Bushfire Damaged assets repair – completed.

Regulatory Period 3 – Capital projects are in development



Organisational Preparedness Assessment – 2023/24 Bushfire Season

Bushfire risk modelling

Phoenix bushfire risk models are current and operational.

Insight: The risk modelling enables enhanced confidence on decision making, and a prioritised effort driven program targeting potential high-risk sections of the network.

Pre-bushfire season maintenance program

Pre-season maintenance activities are forecast to complete pre-bushfire danger period. Oversight committees for corrective maintenance in-place for reporting and assurance.

Insight: Aims to provide a high degree of assurance our assets do not present bushfire risks prior to season commencement.

Detection and monitoring

Network Operations and field crews have adequate situational awareness of emerging fire events.

Insight: Provides good situation awareness to AMC/Control Room Operators, and field staff of potential emerging fire risks.

Emergency Response & Coordination

Emergency and Crisis Management teams are continually trained and exercised a major escalating bushfire scenario in May-23. Relevant stakeholders are actively involved in emergency service and industry coordination forums.

Insight: Business is trained and ready to respond to a developing emergency bushfire situation.

Continuity of Service

Network operating protocols and transmission system capability are robust to manage and mitigate bushfire threats, sufficient critical spares are available and response crews are trained and ready to be deployed if needed.

Insight: Mitigates network consequences from bushfire and ensures we can recover from failures rapidly.

Internal communications

Internal teams aware and ready to widely communicate commencement of bushfire danger periods.

Insight: Provides broad situational awareness to all staff.



Overall Assessment



Q&A
