



REPORT SUMMARY

# APPROVED: HOW AI AND DATA CAN TRANSFORM AUSTRALIA'S ENVIRONMENTAL APPROVALS

2026

IN PARTNERSHIP WITH **technology1**

# APPROVED: HOW AI AND DATA CAN TRANSFORM AUSTRALIA'S ENVIRONMENTAL APPROVALS



Approvals sit at the centre of Australia's economy

 **\$278 billion** in construction pipeline

### Efficient approvals

- ✓ Safeguard the environment
- ✓ Are guided by community
- ✓ Support economic growth

### The approvals process is complex and costly

Referrals we analysed had

Up to	
<b>8500</b>	<b>32</b>
pages of documentation	technical annexes
<b>4300</b>	<b>26</b>
public submissions	legislative instruments

**More than \$250,000** time cost for one referral review

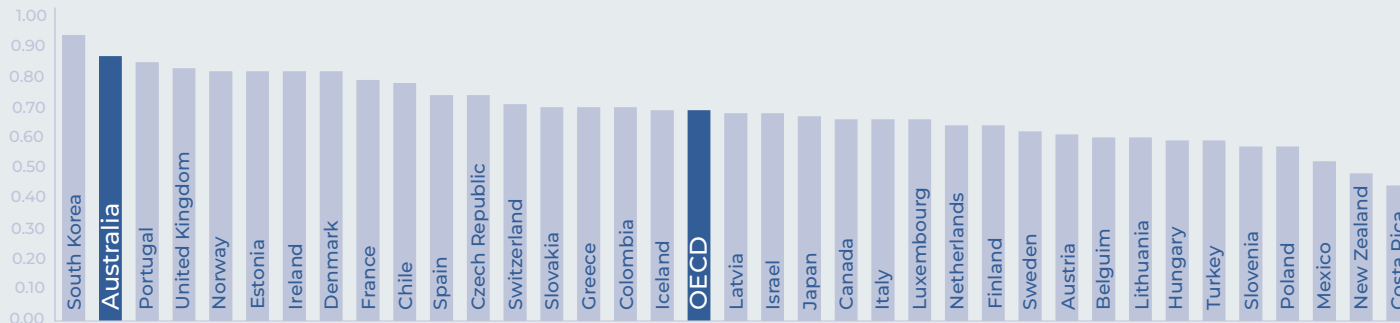
### How AI and data are helping globally

**66%** improvement in comment processing time

**15%** reduction in technical survey costs

**\$80 million** in time savings annually

### Australia is well-placed for broader adoption of AI in government



OECD Digital Government Index

### CEDA's recommendations for how Federal Government can support AI-enabled approvals



Establish an environmental approvals innovation taskforce



Ensure data and information standards mandate information sharing from private parties

# EXECUTIVE SUMMARY

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As governments across Australia show increasing appetite to revisit and reform our environmental and planning regimes, there is a rare opportunity to seize this moment of change and leverage new technologies to accelerate progress even further.

New tools powered by artificial intelligence are demonstrating huge potential both at home and abroad. Heightened access to information and AI support for government officials is generating millions of dollars in savings annually. At the same time, new technology is redefining how the public can engage with and understand the impacts that development has on them and their environment, supporting deeper transparency and participation.

But the pace of change and breadth of options available to policymakers and agencies is overwhelming. And while there is no shortage of general advice on technology adoption or artificial intelligence, there is little guidance that considers the sensitivities unique to the approvals process, much less so in an Australian context.

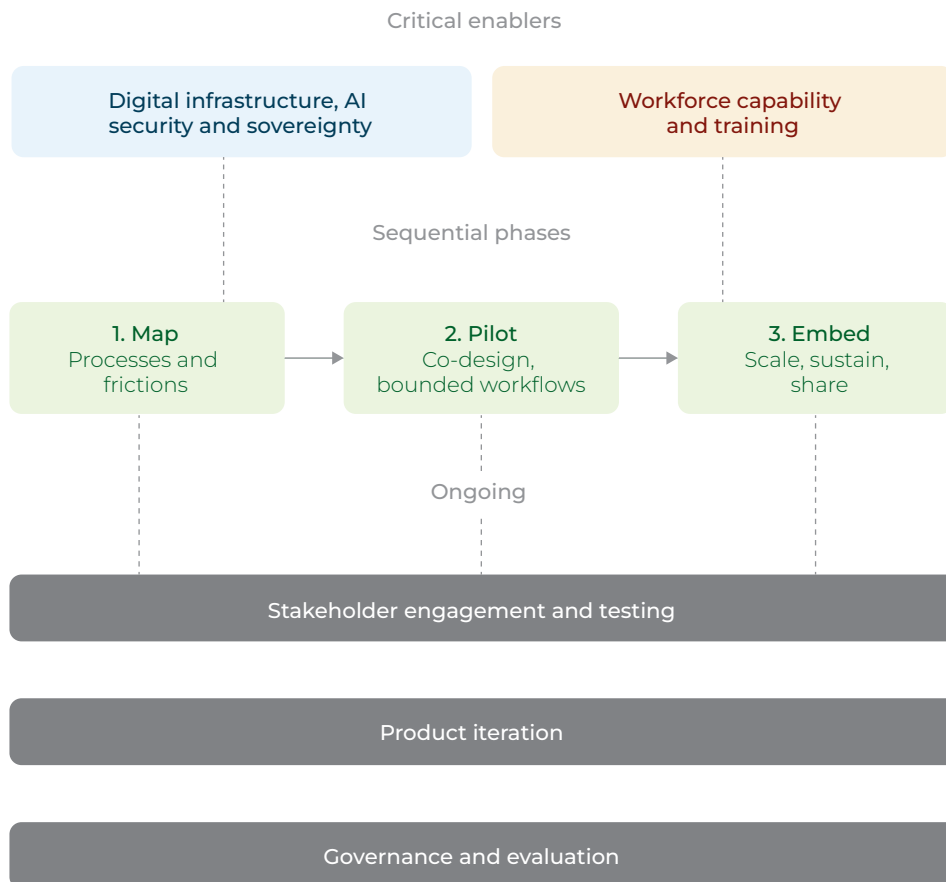
This report fills that gap, tailoring advice specifically to approvals use cases. It identifies what's possible, what's emerging and what to do about it.

Technology moves fast. Implemented well, it can help our approvals system move faster too.



# RECOMMENDATIONS

## A BLUEPRINT FOR REGULATORS AND AGENCIES



## HOW FEDERAL GOVERNMENT CAN SUPPORT AI-ENABLED APPROVALS



### Establish an environmental approvals innovation taskforce

A dedicated taskforce can provide guidance that is tailored to the unique demands and sensitivities faced by approvals teams, reduce duplication of efforts and support greater harmonisation of processes and capabilities across jurisdictions.

The tenure of the taskforce could be time-limited, providing guidance to agencies and regulators at the beginning of their AI journeys and winding down as they become more mature.

The taskforce should sit within the Digital Transformation Agency.



### Ensure data and information standards mandate information sharing from private parties

The data and information standards currently being drafted as part of the overhaul of federal legislation should establish public sharing of baseline environmental information as the default. Information should be provided in standardised, reusable formats to enable greatest compatibility with AI applications.

Legislative changes should allow flexibility for exceptions in special circumstances. These could include instances where making environmental information public could cause harm to certain species, create risks to safety or cultural heritage.

# HOW THE FEDERAL GOVERNMENT CAN SUPPORT AI-ENABLED APPROVALS

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For the promise of new AI tools to be realised, there are two areas where the federal government can play a critical leadership role.

## *Establish an environmental approvals innovation taskforce*

It is unrealistic to expect that departments and agencies already under immense strain keeping up with current workflows will have the bandwidth to undertake the rigorous organisational analysis, stakeholder engagement and technology mapping exercises necessary to realise the benefits of a rapidly changing technology landscape.

The federal government can provide support by establishing a national environmental approvals innovation taskforce. This function would most logically sit within the Digital Transformation Agency, which is already playing a leading role in distributing AI guidance within the public sector.

Establishing a dedicated taskforce recognises the economic significance of approvals processes and that generalised advice about AI adoption is necessary but not sufficient to achieve the step-change needed within our approvals system.

A dedicated resource can provide guidance that is tailored to the unique demands and sensitivities faced by approvals teams, minimise the need to engage external consultants, reduce duplication of efforts and support greater harmonisation of processes and capabilities across jurisdictions.

The tenure of the taskforce could be time-limited, providing guidance to agencies and regulators at the beginning of their AI journeys and winding down as they become more mature.

This approach has been adopted in the US, with its own permitting innovation centre bringing together agencies across all levels of government to raise awareness of innovative approaches, share lessons learned and help spread successful strategies for digital transformation within an environmental approvals context.<sup>59</sup> The initiative also helps agencies to jointly develop tools, collaborate on codebases, share procurement best practice, and save money by utilising shared services.

In France, the Ministry of Ecological Transition's dedicated public innovation lab (Fabrique à projets) recently launched Sofia, a conversational agent that streamlines access to the organisation's scientific and technical knowledge.<sup>60</sup> The lab's integration within the ministry enabled a deeper understanding of constraints specific to ecological information accessibility and led to a tool specifically tailored to meet these challenges.

## *Ensure that the new data and information standard mandates information sharing from private parties*

Robust, accessible and interoperable data is essential both for the performance of new AI tools and more broadly, a deeper understanding of our natural environment.

But CEDA repeatedly heard that costly analysis is duplicated and development timelines are extended because information about our environment is withheld due to commercial arrangements. These arrangements benefit the few at the expense of the many by obscuring our understanding of natural systems, delaying productivity-enhancing investments, and increasingly, curtailing our ability to leverage emerging AI applications.

The data and information standards currently being drafted as part of the overhaul of federal legislation should establish public sharing of baseline environmental information as the default. This includes information on areas like biodiversity, water quality, soil status, habitat condition and vegetation. Information should be provided in standardised, reusable formats to enable greatest compatibility with AI applications.

Legislative changes should allow flexibility for exceptions in special circumstances. These could include instances where making environmental information public could cause harm to certain species, create risks to safety or cultural heritage.

# CONCLUSION

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Governments at all levels are currently grappling with the need to reform approvals processes to deliver on a wide range of policy goals, from affordable housing to energy. Separately, there is a growing desire among policymakers to seize the exciting possibilities brought by artificial intelligence and other emerging technologies.

Yet today these efforts remain largely siloed. Bringing them together offers a rare chance to make approvals not just faster, but fundamentally better for communities, developers and the environment.

Across the approvals lifecycle, a growing body of evidence makes clear that targeted technology adoption can deliver meaningful gains in efficiency, consistency and transparency. From helping proponents access the information they need when they need it, supporting assessment officers navigating thousands of pages of technical documentation, to enabling more inclusive public engagement, small changes can add up to sizeable productivity gains in this critical area.

But realising these benefits will be no small feat. Departments and agencies must address foundational gaps in digital infrastructure and workforce capability before pursuing more advanced applications, carefully map where technology can genuinely add value, and design pilots with clear pathways to scale.

These teams cannot achieve success alone. Government support has a critical role to play in delivering this transition, through dedicated institutional support and stronger data-sharing requirements.

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CEDA is Australia's leading member-driven think tank. Our purpose is to achieve sustainable long-term prosperity for all Australians.

Our trusted independence, and a deep and broad membership base that extends across all sectors, states and territories, enables us to bring diverse perspectives and insights to guide and advance policy debate and development in the national interest.

We aim to influence future economic, social and environmental outcomes by:

- Promoting public discussion of the challenges and opportunities facing Australia;
- Enabling members to shape future outcomes through policy and their own actions;
- Partnering and collaborating to tackle emerging opportunities and entrenched challenges; and
- Advocating for policy change based on our independent research insights.
- Our work is overseen by our independent Board of Directors and our research is guided and approved by an independent Research and Policy Committee whose members are leading economists, researchers and policy experts.

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