Submission form: Victoria's draft 30-year infrastructure strategy

Your details

Name:	Chris Champion
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About you

Please tell us which best describes you:

☐ Victorian resident

☐ Victorian business owner/operator

☒ Industry professional

☒ Community organisation representative

☐ Local government representative

☐ State government representative

☐ Researcher

☐ Other (please specify): Click or tap here to enter text.

Your focus areas

Select the topics or regions you are providing feedback on (select all that apply):

Topics	Regions
☒ Across sectors	☒ Regional Victoria
☐ Circular economy	☒ Urban growth areas
☒ Cities	☒ Melbourne
☒ Climate change	
☒ Community infrastructure	
☐ Education	
☐ Energy	
☐ Freight	
☐ Health	
☐ Housing	
☒ Infrastructure for Victoria's First Peoples	
☒ Transport	
☐ Water	

Your feedback

Add as many sections as you need to provide all your feedback in this submission.

Topic/area:	High productivity and circular economy
Recommendation name:	**Recognise and manage green infrastructure as essential infrastructure**
Recommendation number:	**New Recommendation I**
1. Do you support this topic or recommendation?	☒ Yes ☐ No ☐ In part
2. Tell us why	Green infrastructure must be recognised alongside built infrastructure to ensure equitable investment and structured lifecycle management. Without explicit naming, green infrastructure remains a planning afterthought rather than core service delivery.
3. Share any supporting evidence or examples	Green infrastructure generates over $730 million in annual economic benefits (e.g. Birrarung/Yarra), delivers $5+ ROI on adaptation, and saves $80–200 million in health costs per year. Current strategies reference it, but without structural mechanisms to support action.
4. Include proposed changes and improvements	Add a new recommendation that formally recognises green infrastructure as essential. Require its inclusion in investment pipelines, asset management strategies and sector plans, using IIMM and the LFA 3x3 Framework.

Topic/area:	High productivity and circular economy
Recommendation name:	**Mandate Minimum Green Infrastructure Provision in Private Developments**
Recommendation number:	**New Recommendation II**
1. Do you support this topic or recommendation?	☒ Yes ☐ No ☐ In part
2. Tell us why	Private developments must be required to incorporate a minimum percentage of green infrastructure to meet climate resilience, biodiversity and urban cooling goals. Current planning systems are inconsistent and allow green infrastructure to be deprioritised.
3. Share any supporting evidence or examples	LFA proposes a 30–40% minimum green infrastructure site coverage for residential and mixed-use developments, with design standards and compliance mechanisms. This approach aligns with global best practice and delivers measurable public benefits.

4. Include proposed changes and improvements	Create a new recommendation requiring all new developments to include a minimum green infrastructure provision. Support delivery via planning regulations and performance targets.

Topic/area:	Thriving natural environment
Recommendation name:	Reduce greenhouse gas emissions from infrastructure
Recommendation number:	Recommendation 24
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Natural systems such as urban forests and wetlands act as carbon sinks, providing significant sequestration capacity alongside multiple co-benefits. Recognising green infrastructure as a tool for emissions reduction strengthens the State's net-zero strategy and helps embed nature-based solutions into infrastructure planning and investment decisions.
3. Share any supporting evidence or examples	Urban greenery reduces the need for energy-intensive cooling infrastructure and sequesters CO_2. Investment in urban forests can reduce urban heat island effects while contributing to Victoria's net-zero goals. LFA supports recognition of these systems in infrastructure emissions assessments and reporting.
4. Include proposed changes and improvements	Explicitly include carbon sequestration benefits of green infrastructure in Recommendation 24. Integrate nature-based assets into carbon accounting for public infrastructure projects.

Topic/area:	Thriving natural environment
Recommendation name:	Better use government land for open space and greenery
Recommendation number:	Recommendation 26
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Green infrastructure should be framed as core infrastructure, not just as public amenity or recreation. It provides essential services such as urban cooling, stormwater management, and improved air quality, which support health and environmental goals.
3. Share any supporting evidence or examples	Framing green infrastructure as core infrastructure ensures prioritised investment, lifecycle funding and integration in infrastructure planning. Victoria's commitment to 30% canopy cover should be linked to structured delivery mechanisms.

4. Include proposed changes and improvements	Reframe Recommendation 26 to recognise green infrastructure as delivering essential, multi-functional infrastructure services. Align open space initiatives with structured asset management and ecosystem service evaluation.

Topic/area:	Resilience to climate change and other risks
Recommendation name:	Better prepare infrastructure for climate change
Recommendation number:	Recommendation 27
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Green infrastructure provides scalable, low-carbon and cost-effective adaptation to extreme weather, heat, flooding, and fire. Nature-based solutions can reduce long-term damage costs while improving community resilience.
3. Share any supporting evidence or examples	Rain gardens, wetlands and canopy cover reduce flood risk and heat vulnerability. For every $1 invested in green infrastructure adaptation, more than $5 in benefits can be returned. This is supported by LFA and IPWEA research.
4. Include proposed changes and improvements	Designate dedicated funding for green infrastructure adaptation projects under Recommendation 27. Embed nature-based adaptation as a priority pathway for infrastructure climate resilience.

Topic/area:	High productivity and circular economy
Recommendation name:	Reform infrastructure contributions
Recommendation number:	Recommendation 36
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Reforming contributions is a key opportunity to fund green infrastructure systematically, ensuring development offsets its impacts on natural assets and liveability. Without inclusion, funding gaps will remain.
3. Share any supporting evidence or examples	Developer contributions often exclude green infrastructure, leading to under-provision. Integrating these into contribution models can improve outcomes in densifying suburbs and urban renewal areas.

4. Include proposed changes and improvements	Explicitly require that infrastructure contributions include green infrastructure delivery and lifecycle maintenance funding. Mandate percentage-based green infrastructure requirements.

Topic/area:	High productivity and circular economy
Recommendation name:	Improve asset management of all government infrastructure
Recommendation number:	Recommendation 37
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Green infrastructure must be subject to the same structured asset management as built infrastructure. Without explicit inclusion, it risks remaining poorly managed and underfunded across Victoria.
3. Share any supporting evidence or examples	Local governments manage most green assets but lack AM frameworks or training. LFA and IPWEA's 3x3 Asset Management Framework provides a tested, fit-for-purpose model to embed green infrastructure in AM Plans.
4. Include proposed changes and improvements	Add a specific directive to include green infrastructure in Recommendation 37. Promote the IIMM and LFA's 3x3 Framework as tools. Provide implementation support and mandate uptake by 2035.

Topic/area:	High productivity and circular economy
Recommendation name:	Use digital technologies to better design, build, operate and maintain government infrastructure
Recommendation number:	Recommendation 39
1. Do you support this topic or recommendation?	☐ Yes ☐ No ☒ In part
2. Tell us why	Digital tools such as GIS, remote sensing, and digital twins can enhance green infrastructure management. These tools are underused in nature-based infrastructure but offer high return on investment and better service outcomes.
3. Share any supporting evidence or examples	City of Melbourne's digital urban forest management system has improved monitoring, maintenance and investment prioritisation. Adopting digital technologies improves transparency and supports climate goals.

4. Include proposed changes and improvements	Include green infrastructure management applications in the scope of digital infrastructure pilots. Extend training and capability programs to natural asset management teams.

More feedback (optional)

The Landscape Foundation of Australia is a national not-for-profit charity dedicated to advancing the role of the natural environment and green infrastructure in building sustainable, resilient and healthy communities. Our mission is to promote evidence-based policy, planning, and practice that embeds natural systems thinking and living infrastructure into all aspects of the built environment.

The Landscape Foundation of Australia (LFA) welcomes the opportunity to contribute to Infrastructure Victoria's Draft 30-Year Strategy. We strongly support the Strategy's vision for a resilient, liveable and sustainable Victoria.

Victoria's infrastructure strategy would be significantly strengthened by explicitly recognising green infrastructure as essential infrastructure requiring the same structured asset management approach as traditional built infrastructure.

Two standalone new recommendations are proposed. Stand-alone recommendations are justified for several compelling reasons:

1. **Structural Significance**: The strategy includes distinct recommendations for different infrastructure types (transport, education, water). Green infrastructure similarly warrants dedicated attention as it constitutes a fundamental infrastructure system with unique management requirements.
2. **Strategic Gap**: The draft strategy acknowledges green infrastructure's benefits (p. 81-82) but lacks the structural mechanisms to ensure its systematic integration into Victoria's infrastructure framework.
3. **Policy Alignment**: A dedicated recommendation would align with broader Victorian policy objectives, including climate resilience and biodiversity protection while providing clear accountability mechanisms.
4. **Economic Imperative**: As demonstrated throughout this submission, green infrastructure delivers exceptional return on investment and requires specialised asset management approaches that differ from traditional infrastructure.
5. **Implementation Clarity**: A distinct recommendation would provide clear direction to departments, agencies, and local governments on incorporating green infrastructure into planning, funding, and asset management processes.

Why Green Infrastructure Must Be Recognised in the Strategy

Green infrastructure delivers a broad range of infrastructure services that align directly with Victoria's long-term goals for climate resilience, health and wellbeing, liveability, and economic prosperity. Its recognition as essential infrastructure is not simply an environmental policy priority but a **strategic economic and infrastructure investment imperative**.

Key benefits include:

- **Cost-effective climate resilience**: Green infrastructure mitigates extreme heat, manages stormwater, buffers against drought and fire, and reduces infrastructure stress during climate events. Research shows that investing in green infrastructure for climate adaptation can return over $5 in benefits for every $1 spent, outperforming many traditional infrastructure solutions.
- **Improved public health and well-being**: Access to green space supports mental health, physical activity, and social cohesion and reduces healthcare costs. As the draft strategy recognises, this saves Victoria $80 million to $200 million in costs from illness each year.
- **Biodiversity and ecosystem health**: Strengthens natural systems and delivers regional-scale connectivity and habitat value.
- **Economic value creation**: Green infrastructure enhances property values, supports tourism and recreation, delivers ecosystem services, and reduces capital and operating costs of grey infrastructure. For example, the Birrarung (Yarra River) provides $730 million in economic benefits each year.
- **Multi-functional infrastructure outcomes**: A single green infrastructure investment can deliver multiple services, including stormwater management, urban cooling, biodiversity protection, recreational space, and community amenities.
- **Cultural and social value**: Green infrastructure supports community identity, place-making, and equitable access to public spaces.
- Increasing value over time: As trees and vegetation mature, green infrastructure delivers growing benefits such as cooling, amenity, carbon sequestration, and biodiversity—enhancing long-term asset value and service outcomes.

Failure to explicitly recognise green infrastructure in the Strategy risks perpetuating systemic underinvestment in infrastructure that supports resilience, equity, and long-term economic value.

Embedding Asset Management of Green Infrastructure

The Victorian Government should require local governments to implement structured asset management for their green infrastructure assets. Local governments manage significant green infrastructure assets but often lack the frameworks, resources, or technical capacity to manage them effectively as infrastructure. Mandating implementation would ensure consistency across Victoria and maximise public benefits from these assets.

Fortunately, industry bodies like IPWEA and the LFA already have established guidelines and capacity-building programs specifically for green infrastructure asset management. Rather than developing new resources, the Victorian Government should support and leverage these existing programs to accelerate adoption across local governments.

Proposed New Recommendation I:

Recognise and Manage Green Infrastructure as Essential Infrastructure

Green infrastructure must be formally recognised as essential infrastructure within Victoria's planning and infrastructure investment frameworks. Without this recognition, green infrastructure continues to be undervalued, inconsistently funded, and excluded from asset management systems.

Green infrastructure, including parks, urban forests, green roofs, wetlands, vegetated swales and natural waterways, delivers a wide array of critical infrastructure services. These include:

- Urban cooling and reduced heat-related illness and mortality
- Stormwater management, reducing flooding and infrastructure damage
- Air purification and carbon sequestration
- Biodiversity support and habitat connectivity
- Social cohesion, mental health benefits and increased physical activity
- Increased property values, tourism, and place-making benefits

The economic case is robust:

- Research shows that for every $1 invested in green infrastructure for climate adaptation, more than $5 in benefits can be realised.
- The Birrarung/Yarra River alone delivers over $730 million in annual benefits.
- Green infrastructure is responsible for an estimated $80–200 million in annual health cost savings through access to green space.

Despite these benefits, Victoria's draft strategy references green infrastructure only as a secondary or supporting measure, without the structural mechanisms needed to ensure its delivery, funding, and management. This perpetuates systemic underinvestment in a vital infrastructure class.

LFA proposes a **standalone recommendation** be added that:

- Explicitly defines green infrastructure as essential infrastructure
- Integrates green infrastructure into infrastructure sector plans, funding decisions, and performance reporting
- Requires structured asset management of green infrastructure using frameworks like IPWEA's International Infrastructure Management Manual (IIMM) and the LFA 3x3 Framework
- Mandates implementation by local governments, supported through existing IPWEA training and capacity-building programs

This recommendation directly supports Strategy Objectives:

- **3** (Victoria is sustainable)
- **5** (Thriving natural environment)
- **6** (Climate resilience)

Proposed New Recommendation II:

Mandate Minimum Green Infrastructure Provision in Private Developments

Victoria's strategy currently lacks a mechanism to ensure private development delivers meaningful contributions to the state's green infrastructure network. LFA proposes a new recommendation mandating that all new residential and mixed-use developments include **30-40% site coverage of green infrastructure**.

This would include tree canopy, permeable surfaces, green roofs and walls, and water-sensitive urban design. These elements deliver critical infrastructure services:

- Urban cooling and reduced energy demand
- Stormwater retention and filtration
- Public health and wellbeing outcomes
- Biodiversity corridors and ecological connectivity
- Liveability enhancements in higher-density environments

Existing recommendations, such as Recommendation 36 (reform infrastructure contributions) and 26 (open space and greenery), do not go far enough. Voluntary guidelines or aspirational targets have failed to consistently embed green infrastructure at the site level, particularly in high-growth urban infill areas.

A mandatory provision will:

- Provide regulatory clarity to developers and councils
- Ensure equitable access to green space across income levels
- Reduce the infrastructure burden on councils by embedding nature-based services into the private domain

- Improve climate resilience and biodiversity across the built environment

The recommendation should be accompanied by:

- Planning scheme reforms to mandate minimum green infrastructure provision
- Design guidance and performance standards
- Compliance frameworks and incentives to support uptake

This proposal aligns with Strategy Objectives:

- **3** (Victoria is sustainable)
- **5** (Thriving natural environment)
- **6** (Climate resilience)

The Landscape Foundation of Australia would be pleased to assist further in the development of Infrastructure Victoria's final 30-year strategy. Please contact us if we can clarify or discuss any of aspect of our submission.