



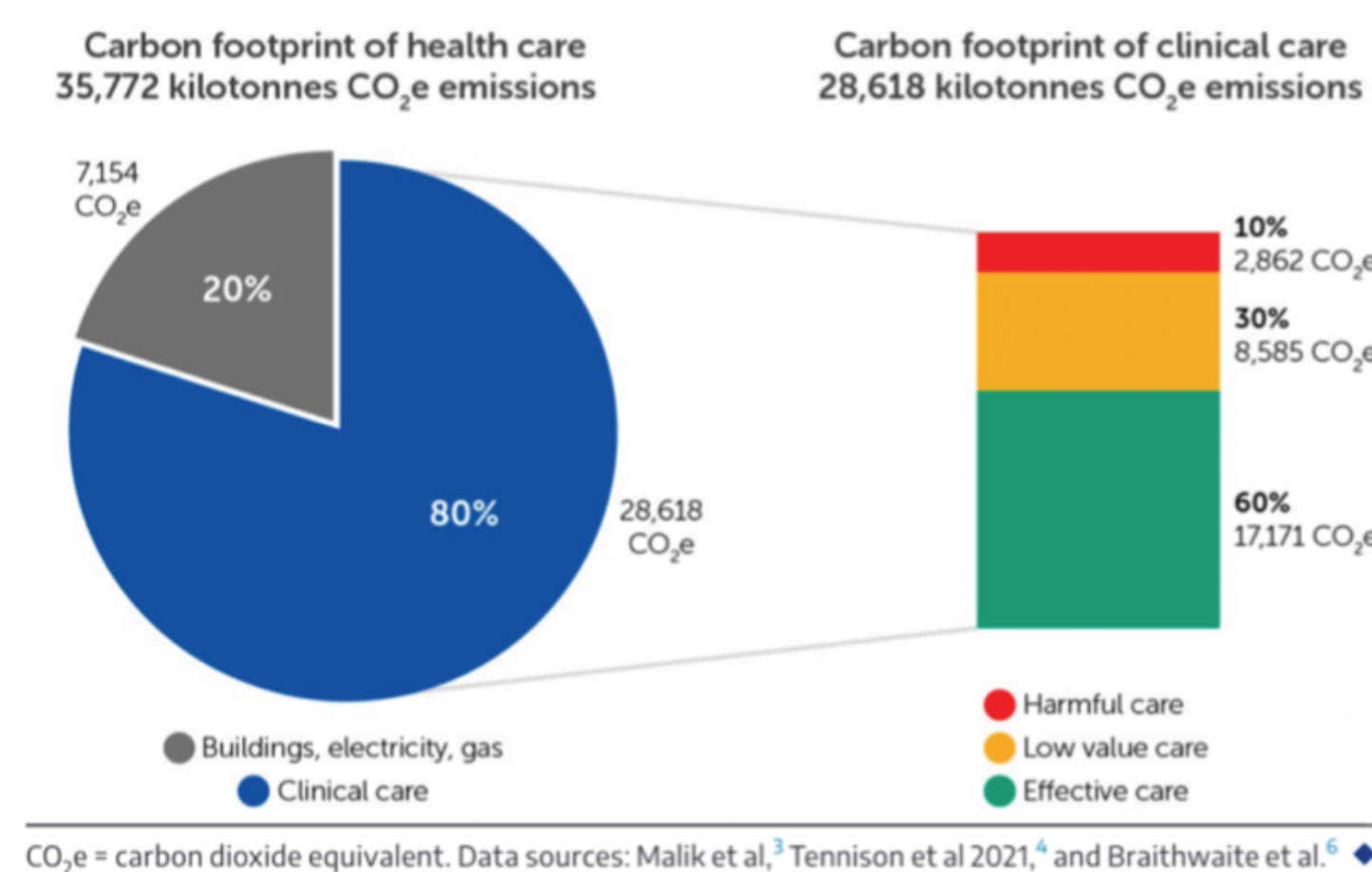
THE UNIVERSITY OF
MELBOURNE

Transforming Environmental Sustainability in Hospitals: A Toolkit to Facilitate Change

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Healthcare is responsible for 7% of Australia's overall greenhouse gas emissions whereby 80% of healthcare's greenhouse gas emissions are from clinical care delivery. Approximately 45% of these emissions are from hospitals.

The carbon footprint of Australian health care and the share of its carbon emissions attributable to harmful, low value and effective care



~60% of care is in line with evidence-based guidelines

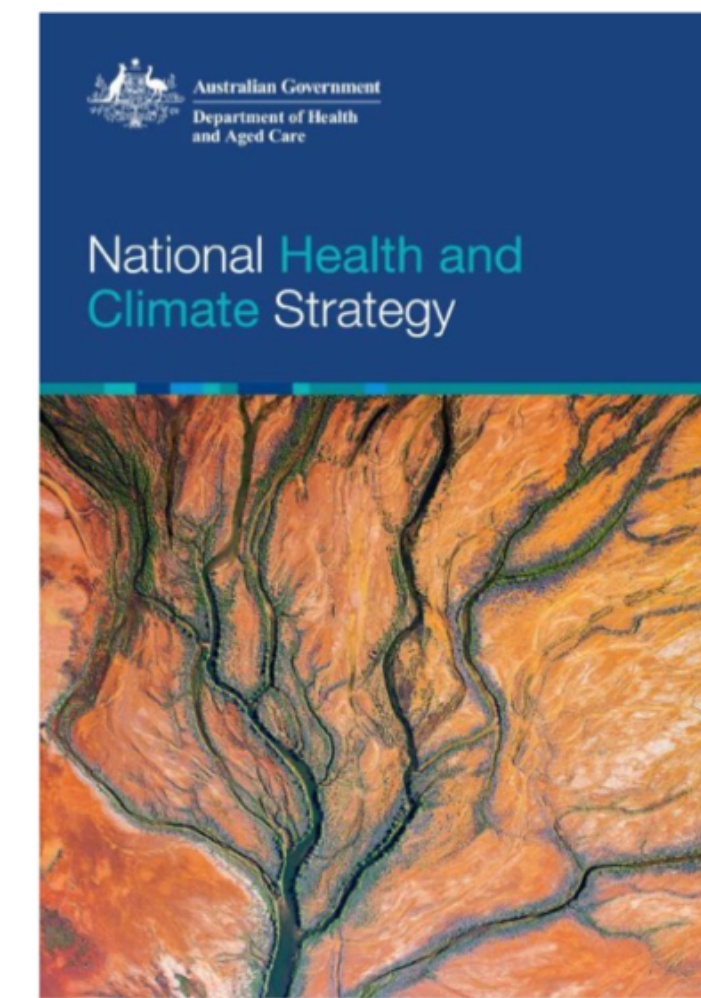
~30% is wasteful or of low value to our patients

~10% is harmful

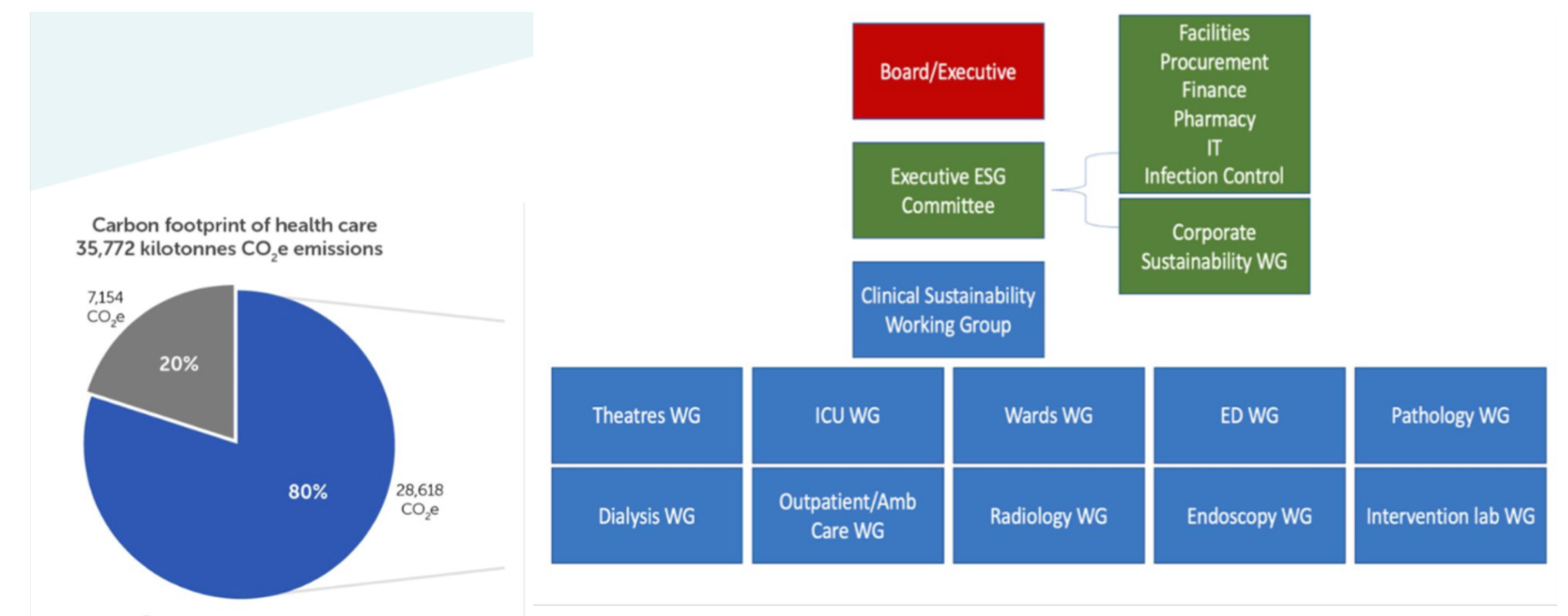
Reducing low value and harmful care is better for our patients and better for our planet

Barratt AL, Bell KJ, Charlesworth K, McGain F. High value health care is low carbon health care. The Medical Journal of Australia. 2022 Feb;216(2):67. Malik A, Lenzen M, McAllister S, McGain F. The carbon footprint of Australian health care Lancet Planetary Health 2;1:27-35

Health service environmental sustainability is in the national spotlight since the introduction of the National Health and Climate Strategy and the Australian Commission for Safety and Quality in Healthcare module that is due to be incorporated into health organisation accreditation standards. Governance and co-ordination of sustainability initiatives across health organisations is often limited.



Governance for Sustainability in Practice



The Toolkit supports and reinforces good sustainability governance and accountability. To tackle the emissions associated with healthcare delivery we need frontline clinicians to be engaged and leading transformational change.

Objective

Determine the acceptability, adoption, appropriateness, and feasibility of implementing the Sustainability Toolkit in six Northern Territory public hospitals.

Methods

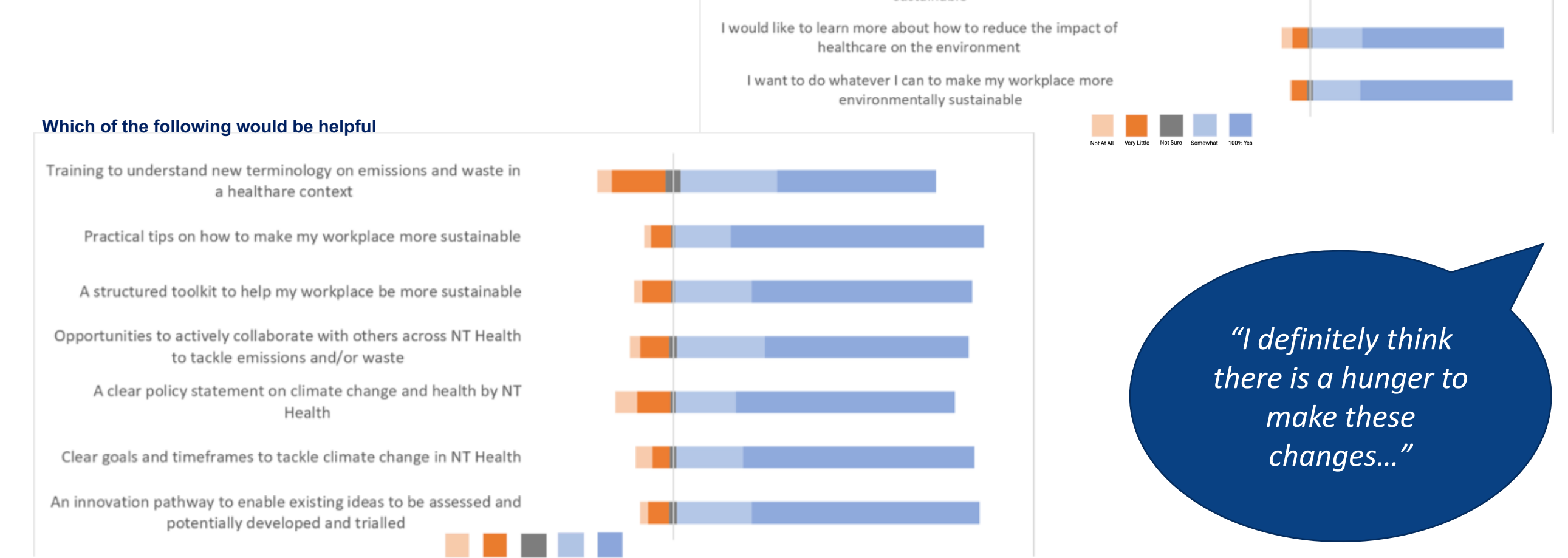
A convergent mixed methods research study was conducted with data from an organisational readiness for healthcare sustainability survey (n=316) and pre-implementation interviews conducted with 5 executives, and 9 Green Champions across 6 NT hospitals to identify barriers and enablers for implementation of the Toolkit

Quantitative data was analysed using Stata 18. Qualitative data was analysed using the framework method, combining both inductive and deductive approaches to identify themes.

The NASSS (non-adoption, abandonment, scale-up, spread, sustainability) 7 domains served as an analytical framework

Survey Results

NT Health staff wanted to be involved in environmental sustainability initiatives but lack education, skills and organisational support.



"I definitely think there is a hunger to make these changes..."

Interview Results

Barriers and enablers to implementing the Hospital Sustainability Toolkit in public hospitals in the Northern Territory according to the NASSS framework

Domain	Aspect	Barrier	Enabler
The condition of illness	The problem		Strong awareness that hospitals could be more sustainable
The technology	Material features		Existing sustainability initiatives
	Knowledge needed to use	Awareness (communication campaign)	Appears user-friendly
The value proposition	Downstream value (to the hospital)		Direction
			Monitoring and reporting sustainability activities and outcomes
The adopter system	Staff (role, identity)	Ongoing motivation	
The organisation	Capacity to innovate	Limited time and capacity	
		Fatigued workforce	
		Shortage of staff	Strong enthusiasm
The wider context	Readiness for this technology/change		
	Wider institutional and sociocultural context	NT health system re-alignment	
		NT political environment	
Embedding and adaptation over time	Organisational resilience		Resilient workforce

Conclusion

Transformational change and implementation of the Hospital Sustainability Toolkit can be strengthened by identification of local barriers and mitigated with relevant strategies.

This phase of the study identified barriers and enablers to successful implementation of the Hospital Sustainability Toolkit in Northern Territory public hospitals. The following strategies are informing the implementation of the Toolkit that is underway.

1. Governance and key stakeholder engagement
2. Training & education
3. Support with engagement strategies
4. Strengthen interprofessional relationships
5. Staged roll out
6. Adapt to local context
7. Leverage off financial benefits and upcoming accreditation changes

This Hospital Sustainability Toolkit serves as a strategic framework for hospitals aiming to improve environmental sustainability, foster staff engagement, and enhance their capacity to deliver sustainability outcomes.