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Climate Update 2021

Victoria

Pathways to decarbonise the Australian economy
and the role of state governments in driving
private sector investment

About us



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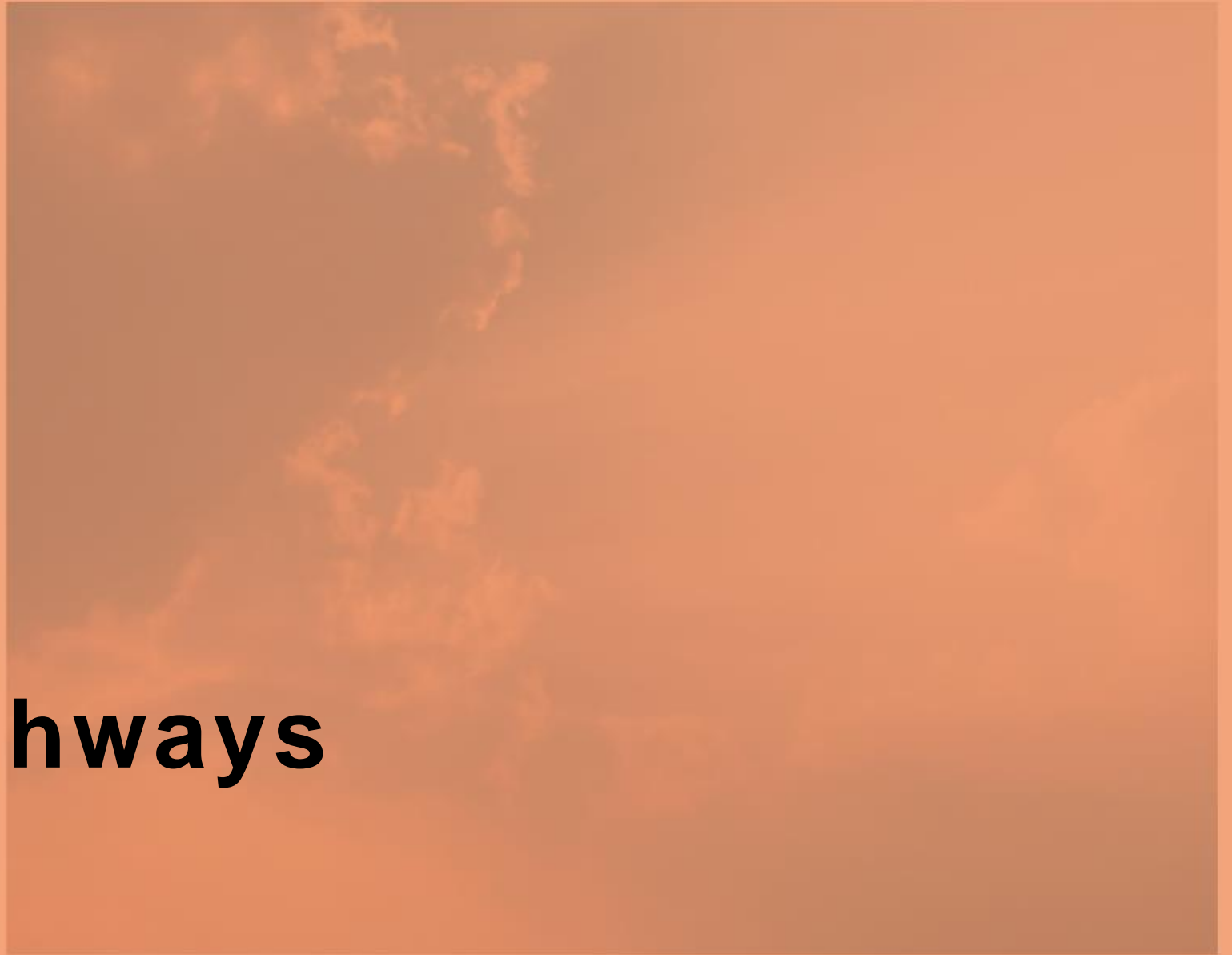


THE MYER
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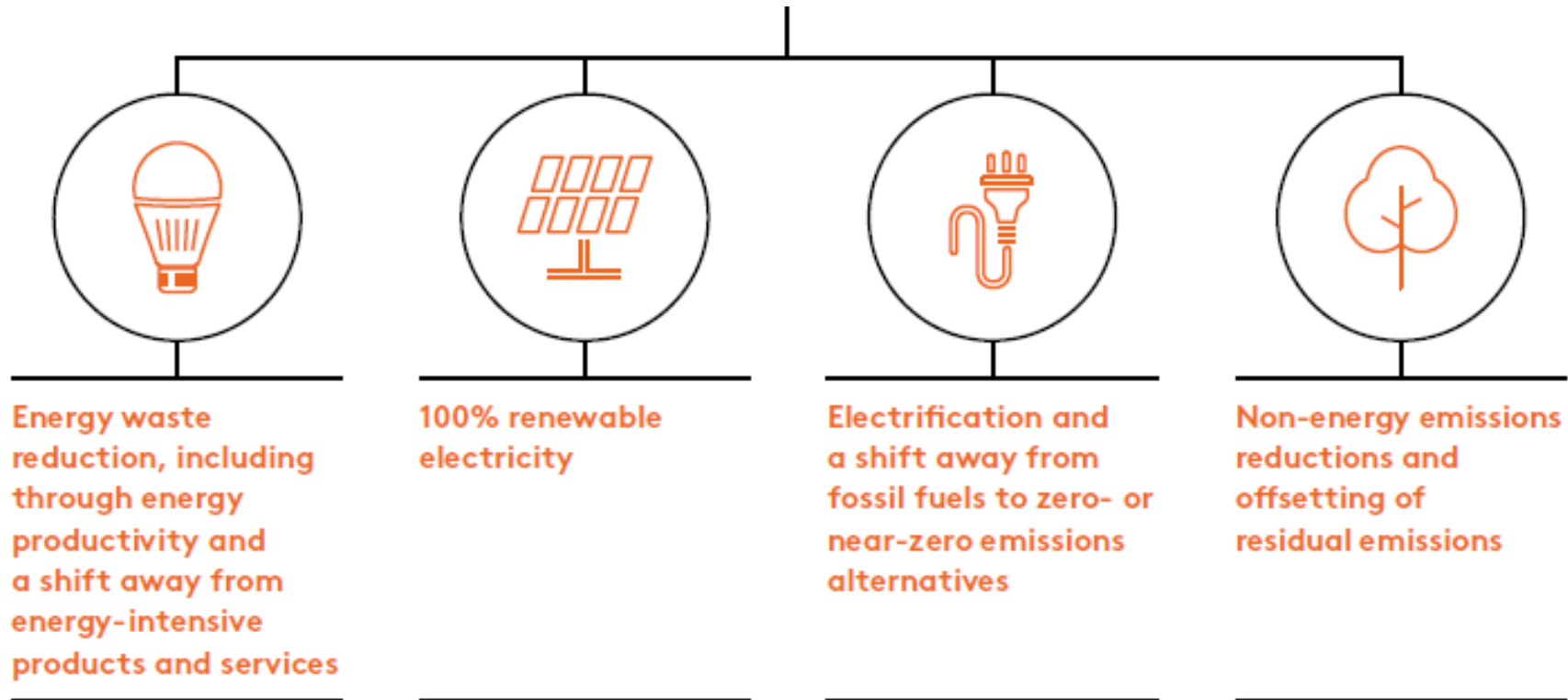
- + An independent non-profit driving climate action across Australia, Southeast Asia and the Pacific

We advise governments and industry on net zero emissions pathways, and facilitate action

Net zero pathways








Achieving net zero emissions relies on 4 pillars



SOURCE: ClimateWorks Australia, Decarbonisation Futures (2020)

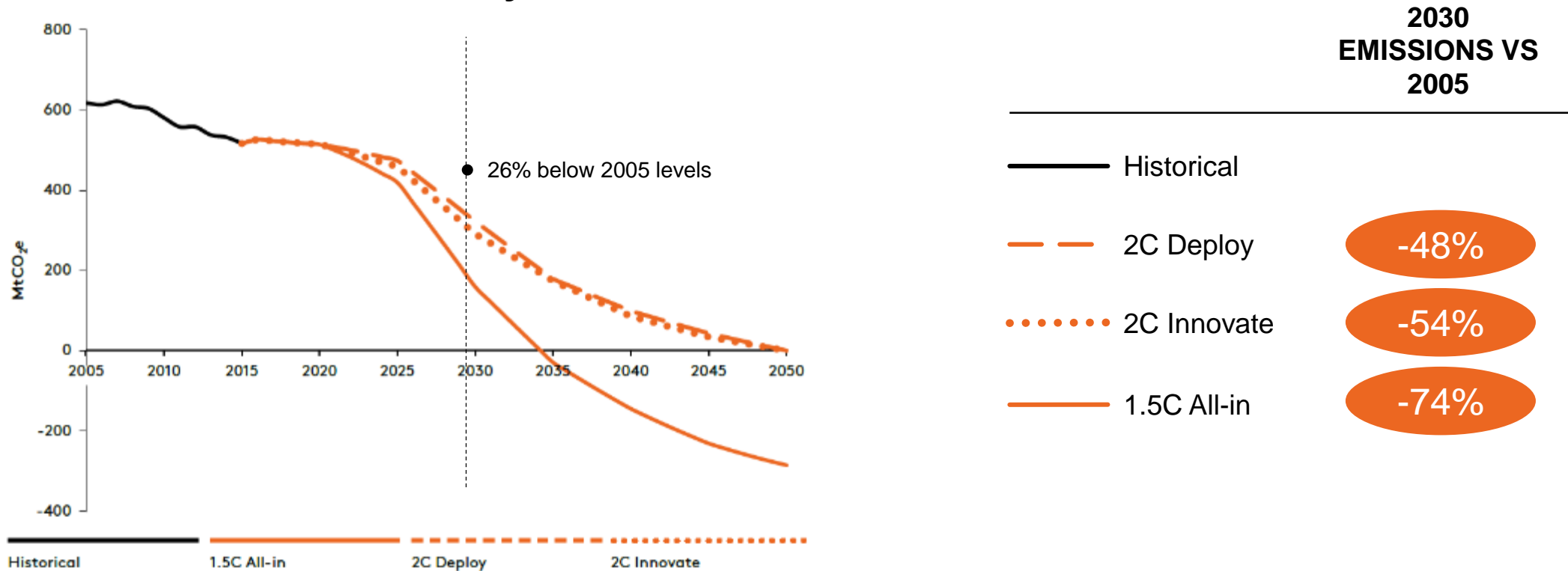
Technology progress in past five years makes achieving zero emissions possible in all sectors

		DEMONSTRATED + MATURE SOLUTIONS	EMERGING SOLUTIONS
	ELECTRICITY	100% renewables, storage (including batteries), demand management	<i>There are sufficient demonstrated and mature solutions to decarbonise these sectors. However, emerging solutions could decrease costs and aid deployment at scale.</i>
	BUILDINGS	Deep energy efficiency, electrification	
	TRANSPORT	Electric and fuel-cell vehicles for light road transport	Biofuels, synfuels, electrification, ammonia or hydrogen for other transport
	INDUSTRY	Energy efficiency, circular economy, proven electrification, bioenergy and bio-feedstocks, industrial CCS	Material substitution, high grade heat electrification, solar thermal, hydrogen
	AGRICULTURE + LAND	Sustainable agriculture practices, plant-based substitutes, fertiliser management, carbon forestry	Lab food, enteric fermentation treatments (such as livestock vaccines)

SOURCE: ClimateWorks Australia, Decarbonisation Futures (2020)

Our scenario analysis shows that Australia can achieve trajectories compatible with the global 1.5°C and 2°C goals

Australia's total emissions by scenario, MtCO₂e



SOURCE: ClimateWorks Australia, Decarbonisation Futures (2020)

Widespread deployment of mature technologies can achieve much of what is needed this decade but must accelerate today

2030 scenario results



EVs in new car sales

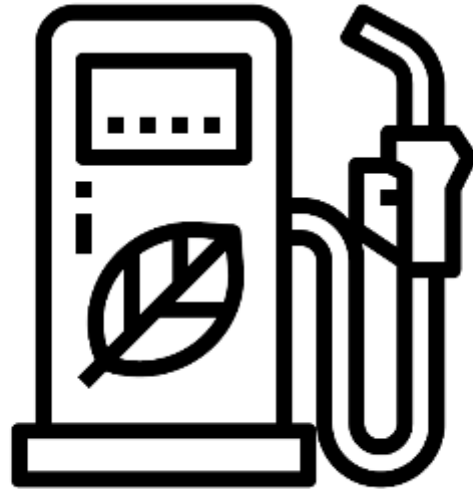


% renewables in electricity generation

	2°C	1.5°C	Government projections
EVs in new car sales	1 in 2	~3 in 4	~1 in 5
% renewables in electricity generation	70-74%	79%	~48%

SOURCE: ClimateWorks Australia, Decarbonisation Futures (2020)

Remaining sectors need investment in research, development and commercialisation to be on track to zero emissions



SOURCE: ClimateWorks Australia, Decarbonisation Futures (2020)

Net zero emissions by 2050 or earlier is fast becoming the global norm in support of the Paris climate goals

135 countries + EU,
Including 4 out of 5
of Australia's largest
export markets



> 1,500 companies,
representing over
US\$ 11.4 trillion in
revenue and 19.3
million employees

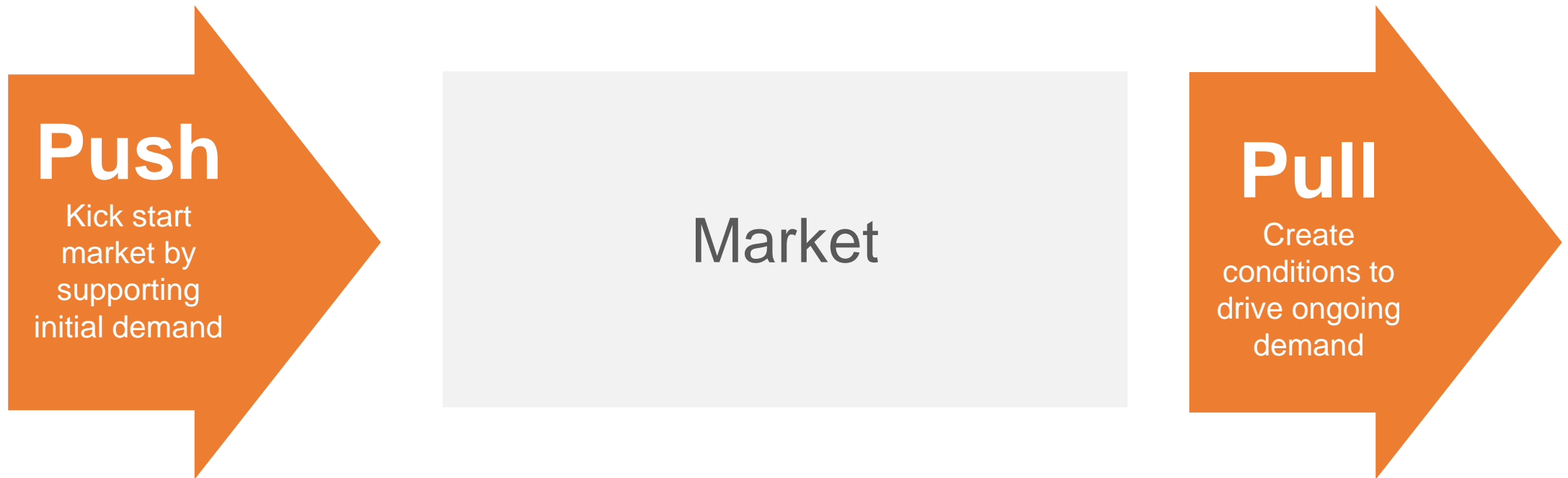
**All 8 Australian
states and territories**



SOURCE: Data-Driven EnviroLab & NewClimate Institute, Accelerating Net Zero (Sept. 2020); WRI, Outcomes and Next Steps from the Climate Ambition Summit (2020)
* China's target is by 2060

The role of state governments

A key role of government is to create the right conditions for business to act in



State and territory government are already showing leadership in some areas



Targeting 50% renewables by 2030



Investment in new low carbon industries



Targeting 100% net renewables by 2030



Targeting 200% renewables by 2040



\$500m Land Restoration fund



Electricity infrastructure roadmap



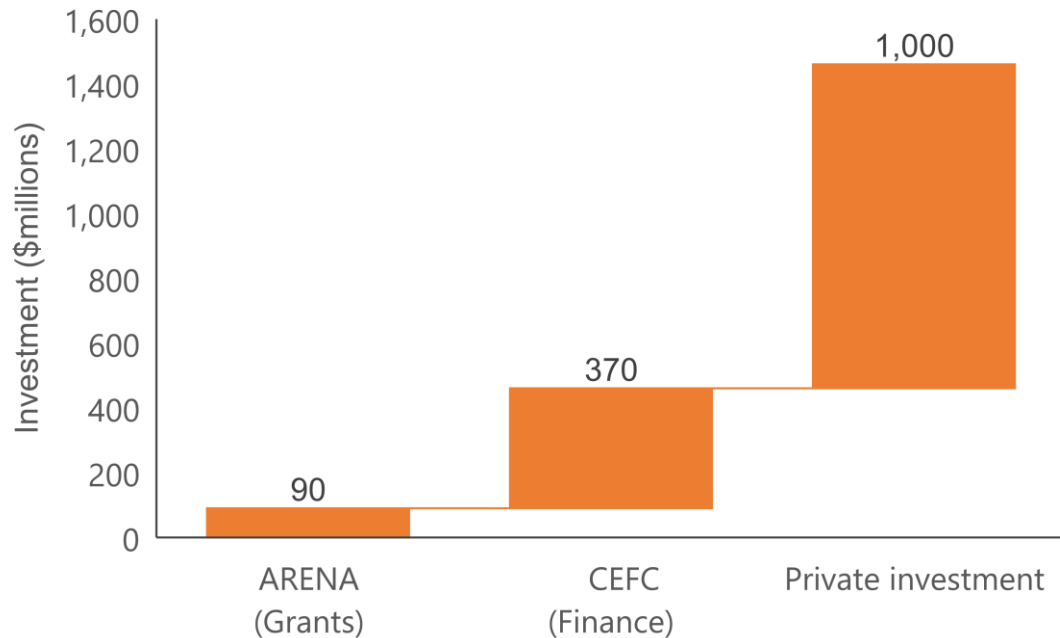
All new vehicle sales electric by 2030



Energy efficiency and REZ funding commitments

A key gap is getting investment at the right scale, which requires leveraging private investment

ClimateWorks' Clean Technology Market-creation
Co-investment Partnership model



Example: second large scale solar round saw costs of technology and delivery **halve in 18 months**

Source: ARENA and CEFC, 2020, Insights from the first wave of large scale solar projects in Australia:
<https://www.cefc.com.au/media/402331/insights-from-the-first-wave-of-large-scale-solar-projects-in-australia.pdf>

In summary,

- Australia can achieve trajectories compatible with the Paris goals
- All Australian states and territories have net zero emissions targets and are increasingly implementing policies to support these goals.
- A key gap is getting investment at the right scale, and leveraging private investment is required.

Thank you for your interest, & action.

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ClimateWorks Australia was co-founded by Monash University and The Myer Foundation and works within the Monash Sustainable Development Institute