

Australia's response to rising carbon pollution

Erwin Jackson, Deputy CEO

Overview

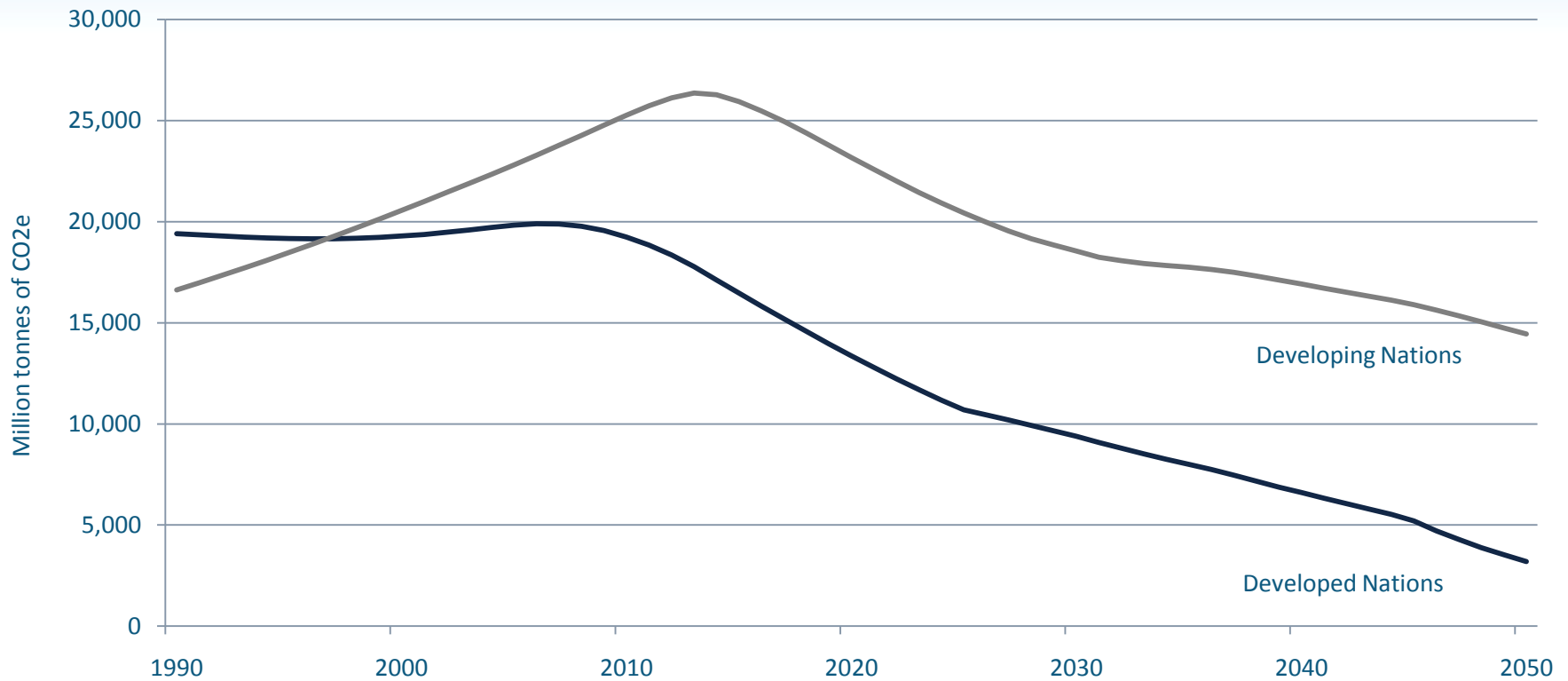
- Mega-trends
- Reducing dependence on pollution
- Delivering transformation and ambition
- Conclusions

First principles

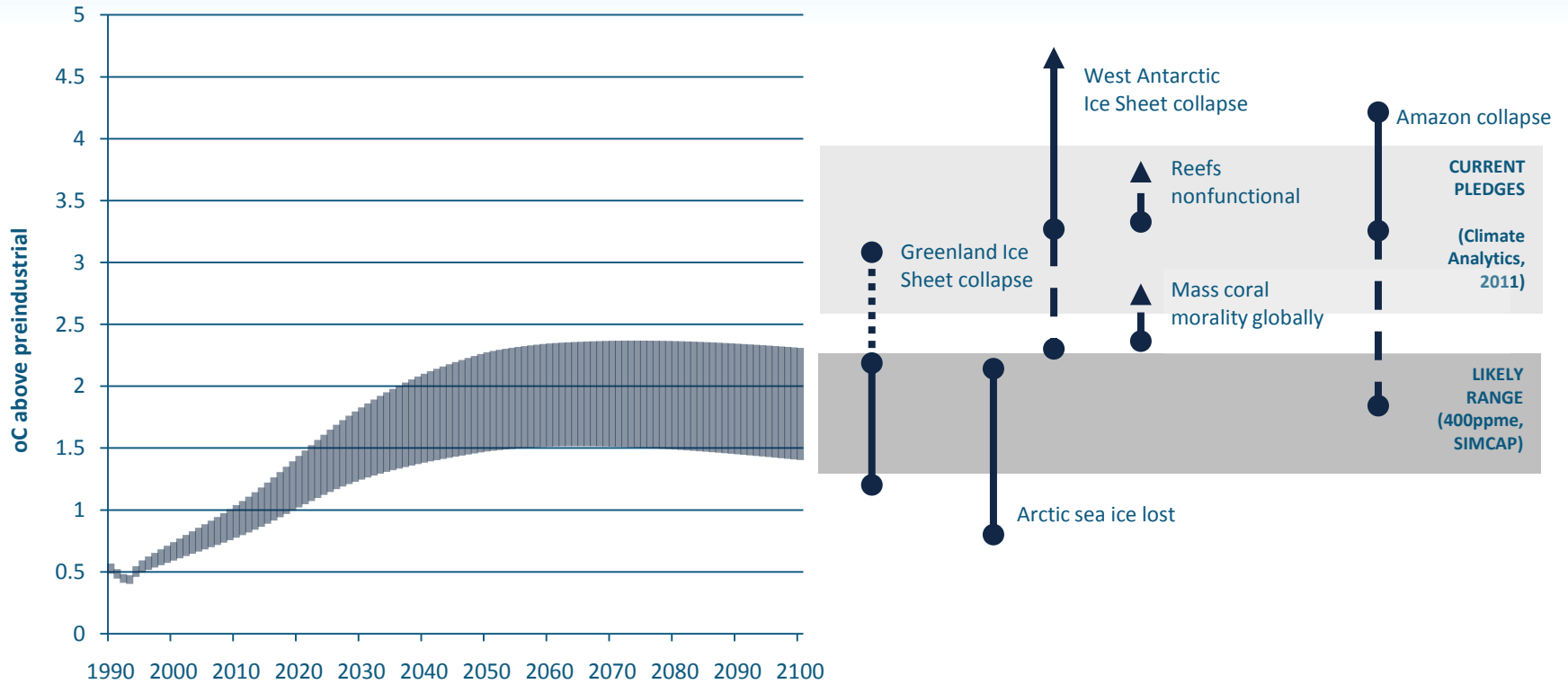
“... Australia’s national interest will be best served by a comprehensive global agreement to stabilise atmospheric concentrations of greenhouse gases at around 450 parts per million of carbon dioxide equivalent (ppm CO₂-e) or lower.”

Australian Government, 2009

The Challenge



Global risks



Country commitments

Country or region	Target type	Cancun commitments	Garnaut estimates of fair allocations	
			3°Cscenario	2°Cscenario
Australia	Absolute reduction in pollution (O2O target on 2000 levels)	-5% to -25%	-10%	-25%
Canada		-13%	-33%	-45%
EU		-12% to -23%	-14%	-30%
Japan		-33%	-27%	-41%
USA		-16%	-12%	-28%
Weighted average of developed countries		-10% to -16%	-12%	-28%
		Cancun commitments	Garnaut estimates for fair allocation	
China	Reductions in pollution intensity (ratio of pollution to GDP, 2005-2020)	-40% to -45%	-35%	
India		-20% to -25%	-43%	

Based on Garnaut, 2011

Global talks

- Legally binding outcome is end game:
 - reduces short-term ambition but builds longer-term confidence
- Little chance of treaty in short-term
 - Overemphasis of UNFCCC as proxy for action is dangerous
 - countries are acting on politically binding commitments: China, India, EU and Australia
 - competitive instincts will play an increasingly role

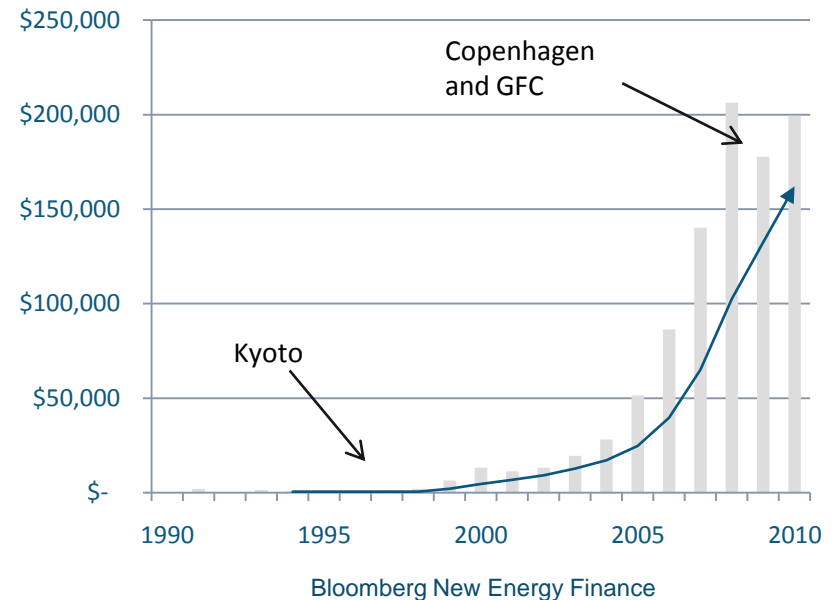
Cooperation or competition

- Are in early stages of a “race” in cleantech
 - Key is the credible promise of future regulation
 - China better placed in this respect
 - EU are trying to position themselves
- Emerging markets have scale, and greater incentives to win
- China’s action is striking (and self-interested)

Renewable trends

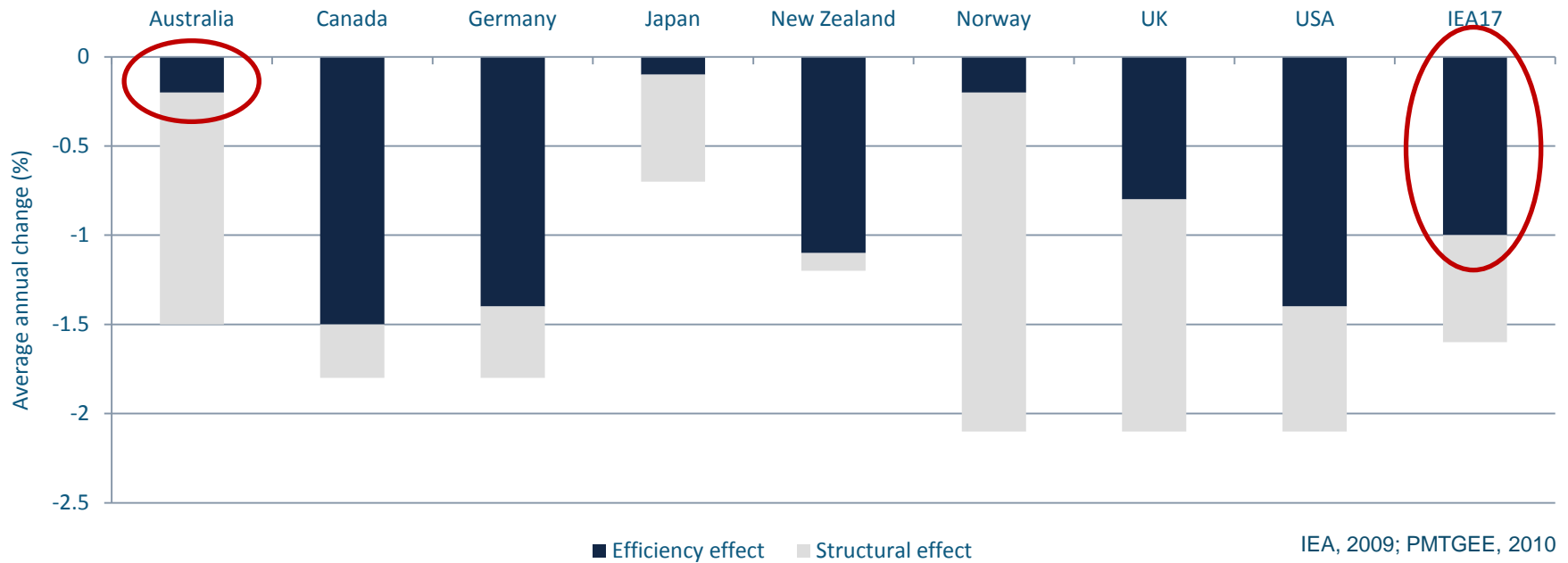
- >100 countries have renewable support policies
- 2008-09: 46% of new global electricity capacity
- Employs up to 3 million

**Renewable Energy Asset Finance
(\$m)**



Energy efficiency

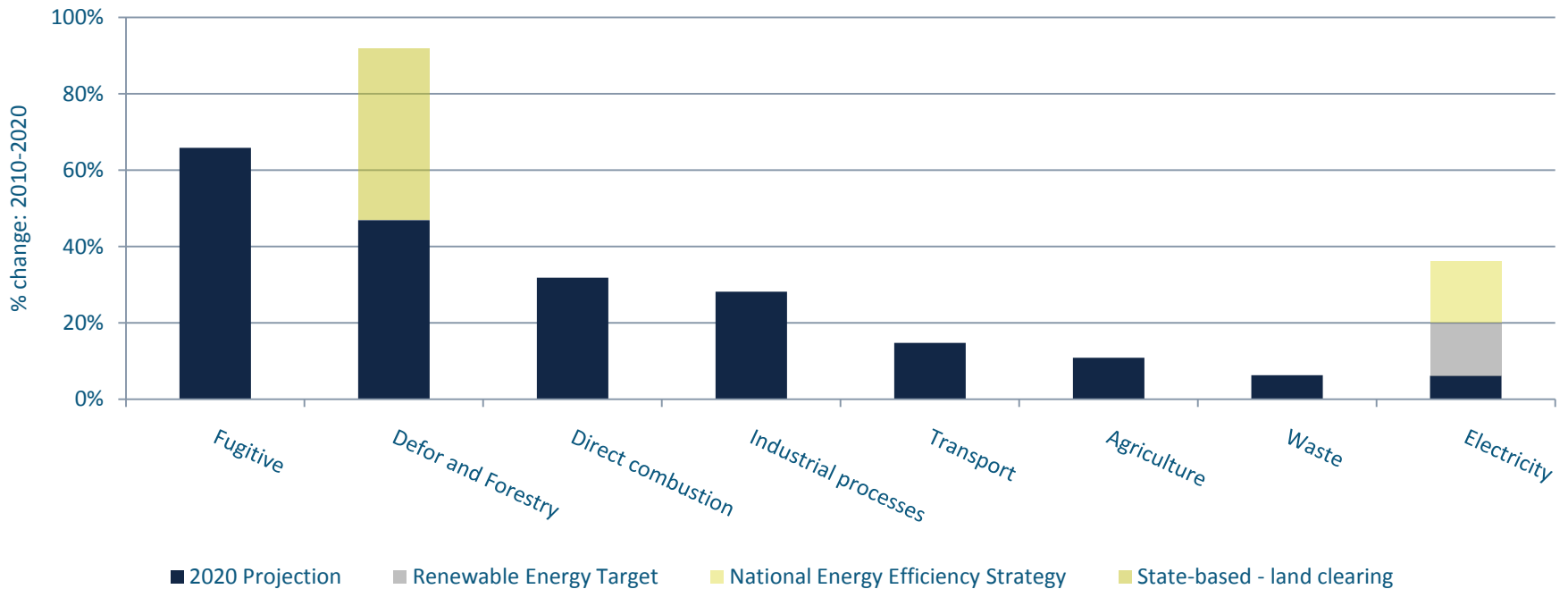
Change in energy intensity, 1990-2006



Australia's pollution profile

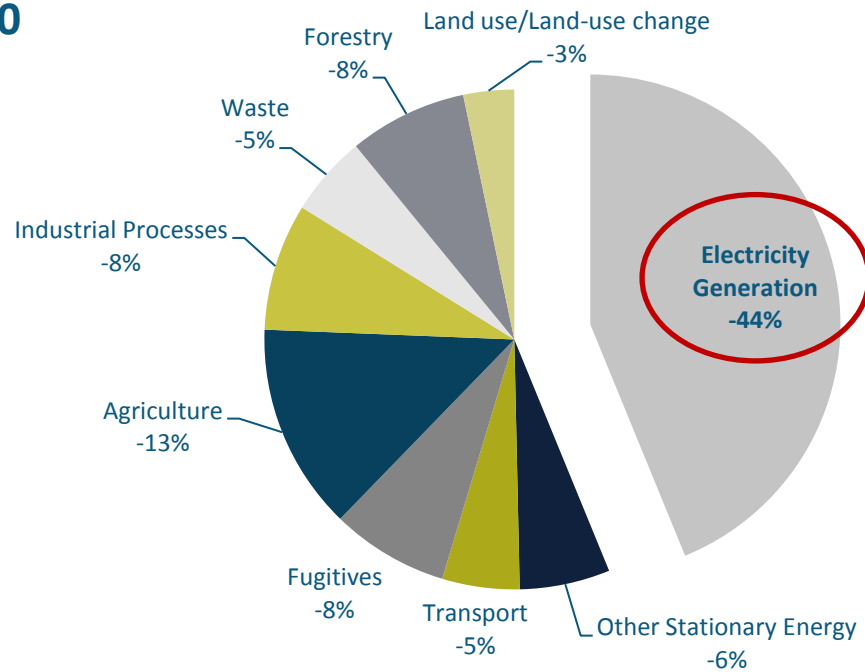
Pollution projections: 2010-2020

DCCEE, 2011



Future efforts

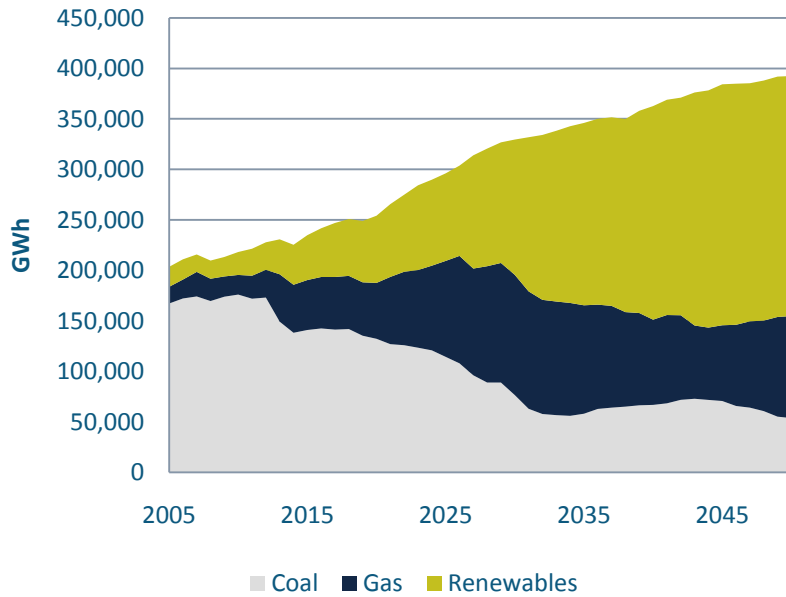
Abatement to 2050



Treasury, 2009

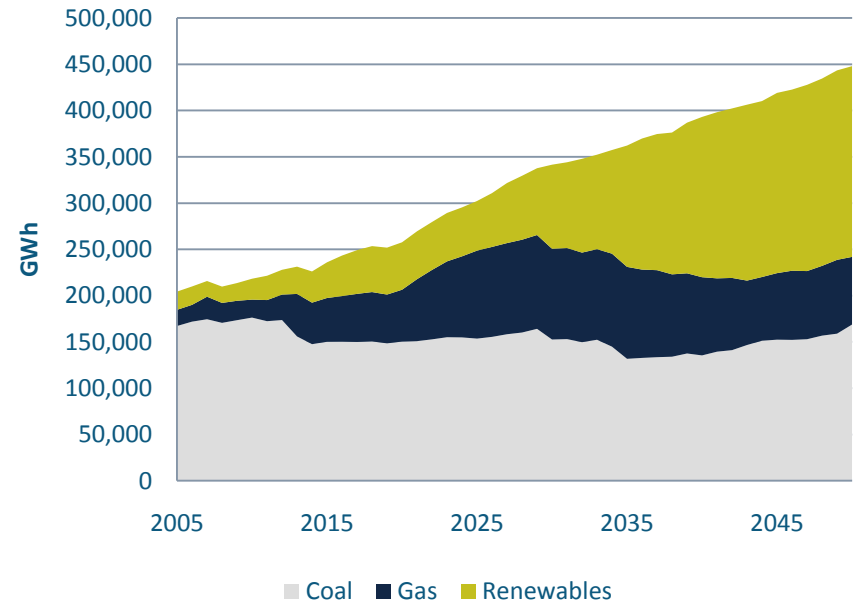
Generation mix will change

No CCS



With CCS

SKM-MMA, 2011



Delay costs

- Investment uncertainty:
 - \$1-2 billion/year to 2020, \$5 billion/year in 2025 in higher electricity costs (ACIL Tasman, AGL, Deloitte)
- Higher adjustment costs, competitive risks and lost innovation
- Toxic impact on international process
 - Larger longer term climate impacts
 - Summer of extremes: \$9 billion hit on Budget

Transformation and ambition

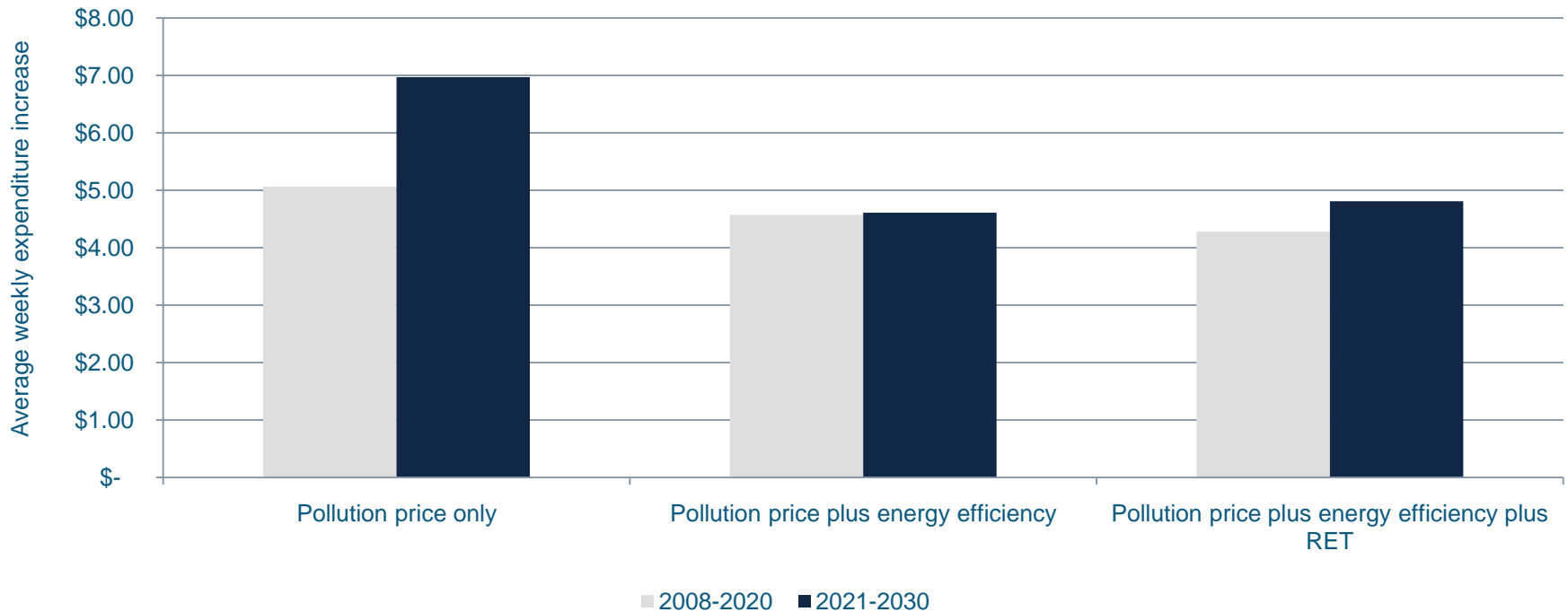
- Domestic transformation
 - pollution price (starting, escalator and floor)
 - industry assistance
 - complementary measures
- Meeting targets
 - cap and coverage
 - international linking

Complementary measures

- Renewable Energy Target
 - Reduce long-term costs through deployment
- National Energy Savings Initiative
 - Manage price impacts from all causes
 - Build energy productivity
 - Create national consistency
- Carbon Farming Initiative
 - Engage land sector in reductions and innovation

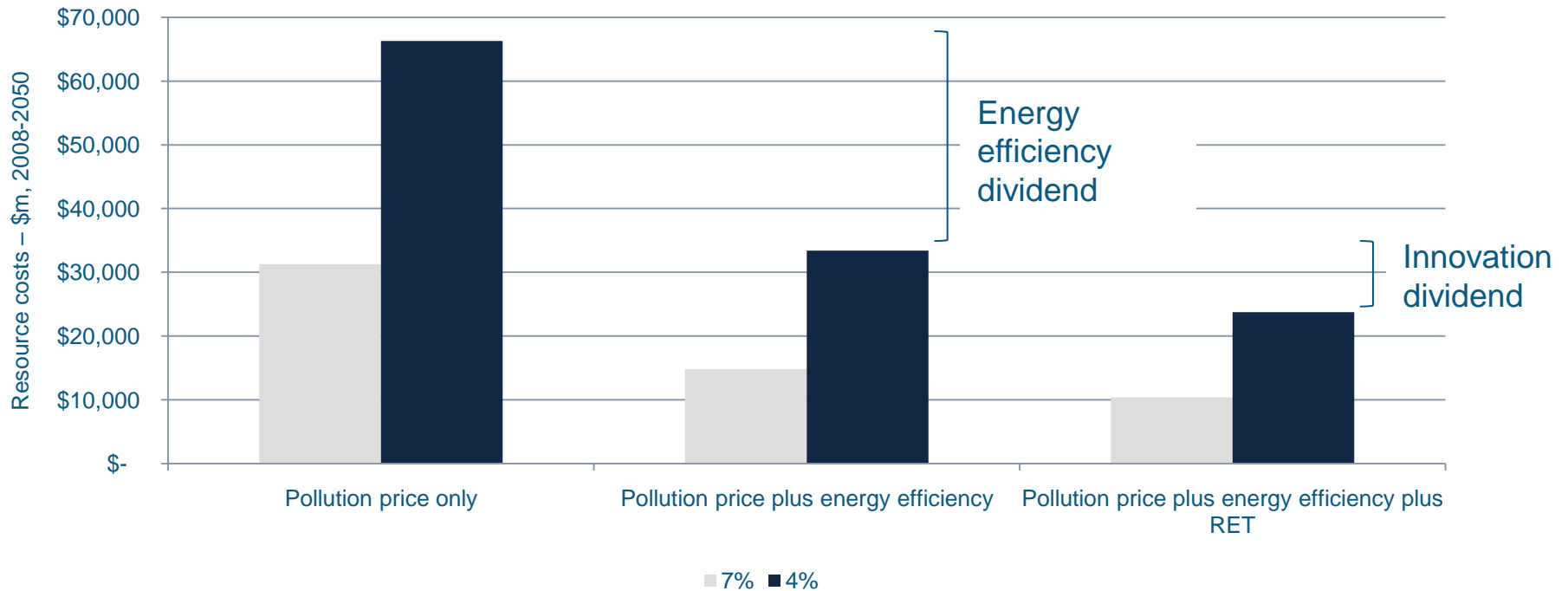
Electricity prices

SKM-MMA, 2009



Early investment dividends

SKM-MMA, 2009



Pollution price revenue

- Assist vulnerable households
 - Direct payments and energy efficiency
- Invest in innovation and transition
 - Clean energy and land sector RD&D
 - Skills and workers
- Targeted, limited and transparent assistance to industry

Conclusions

- National interest lies in strong action
 - Vulnerable to climate impacts
 - High pollution dependence will be liability
- Can take action the hard way or the easy way
- Unrelenting focus needed on:
 - Reducing pollution
 - Delivering transformation