

Climate policy developments in Australia and China: what role for carbon pricing?

University of Bath, I-SEE, 10 Dec 2013

Frank Jotzo

Centre for Climate Economics & Policy, ccep.anu.edu.au Crawford School of Public Policy Australian National University

"There will be no carbon tax under a government I lead" (PM Gillard)





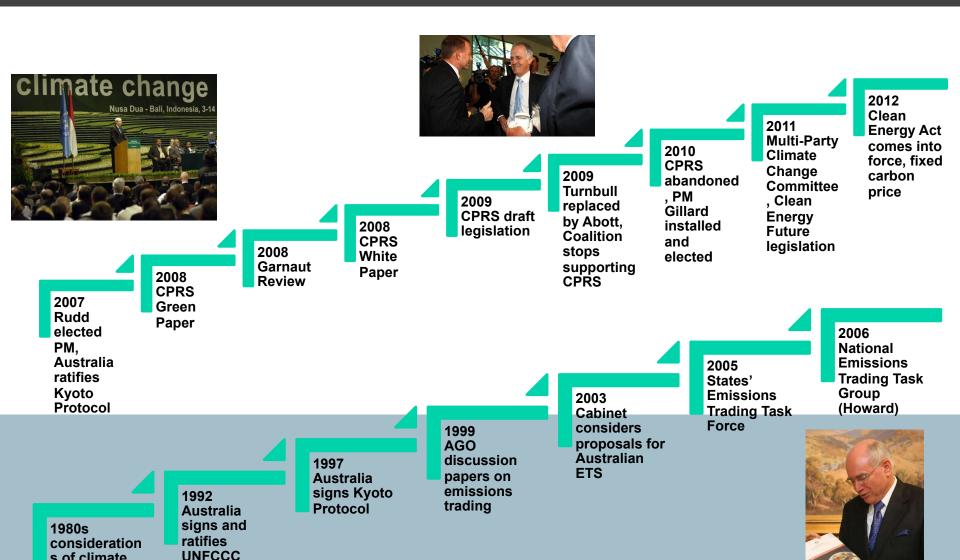




s of climate policy, carbon

tax

History of Australia's climate change policy



Australia's fixed price scheme

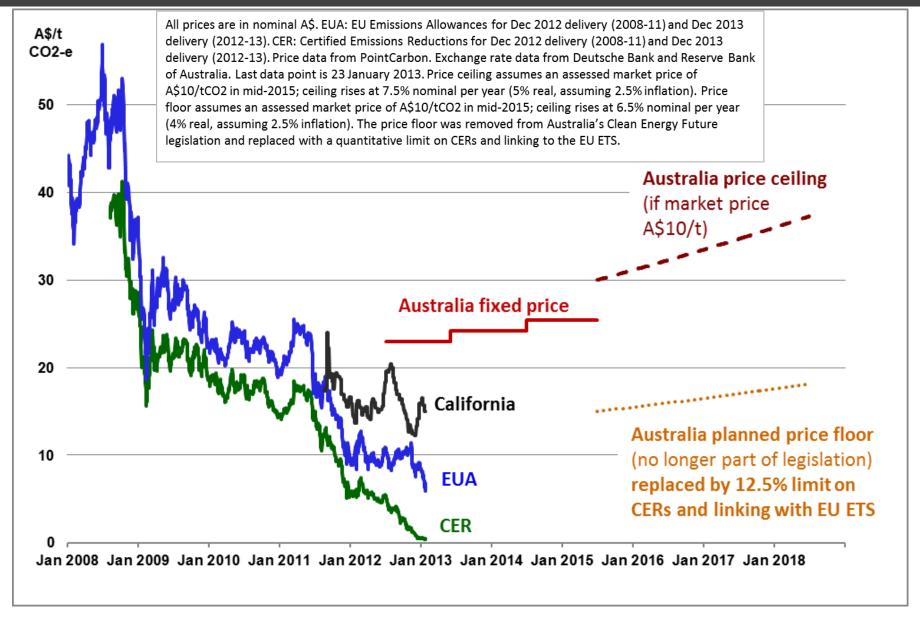
Is it a tax? Is it a trading scheme?

A permit scheme where for the first three years government sells permits at a predetermined price, without a cap -- "acts like a tax"

- No int'l trading, no banking/borrowing
- Instruments and legal structure of permit trading easy transition
- Industry assistance as free permits like tax thresholds (NOT tax exemptions)
- From 2015, cap and variable price, linking to EU ETS planned

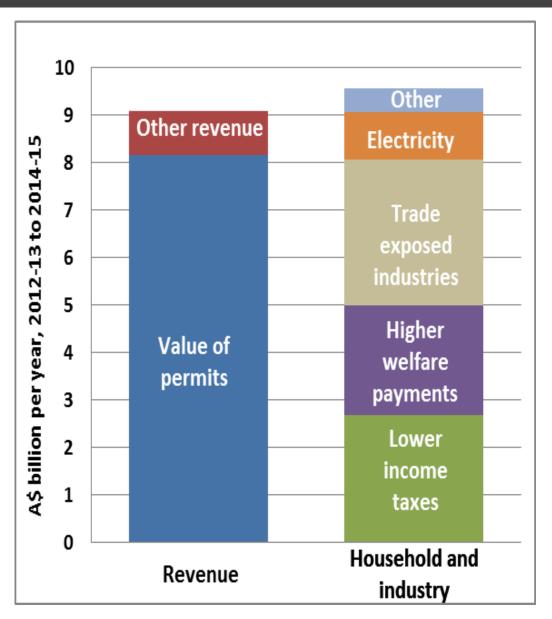


Australia's carbon price in comparison





Australia's revenue recycling



Industry assistance

- Fixed payments to the most emissions intensive power producers, limited to 5 years
- Production-indexed payments to emissions-intensive tradeexposed industries
- EITEs: 94.5% or 66% of process-level benchmark, reducing by 1.3%pa
- Regular assessment and review; reductions possible

Household assistance

- Income tax reductions at lower to middle incomes
- Higher welfare payments
- Large majority of households better off; but majority think they are worse off

Source: Jotzo 2012, Nature Climate Change; data from DCCEE 2011 CEF policy document



Effect of Australia's carbon price on the power sector

Demand side effects

Perhaps very limited

Dispatch / carbon intensity of power system

Reduction in carbon intensity

Investment

Probably very little effect because of policy uncertainty

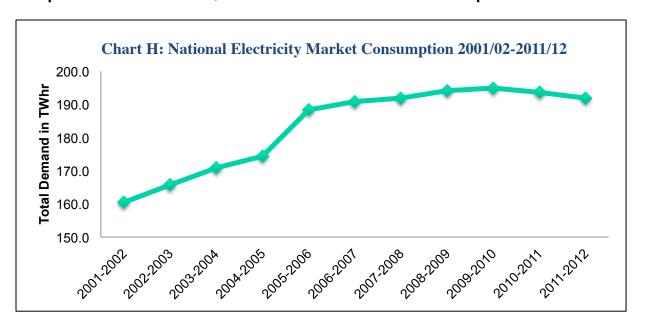
Australia's national electricity market

Demand side effects

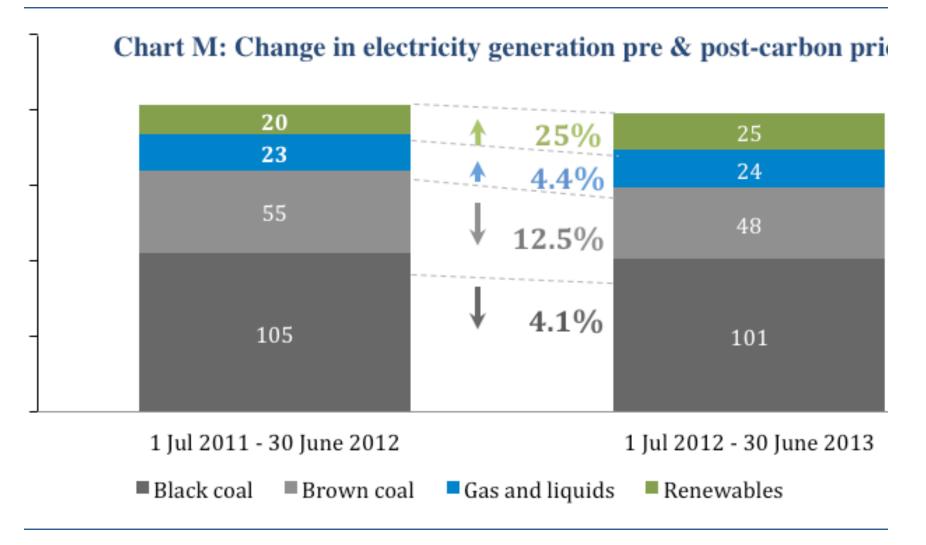
Carbon price added about 9% to regulated end-user electricity tariffs

Comes on top of increases of 30-60% over the last 5 years, mainly due
to higher network costs

Is it the price increase, or the talk about the price increase?!

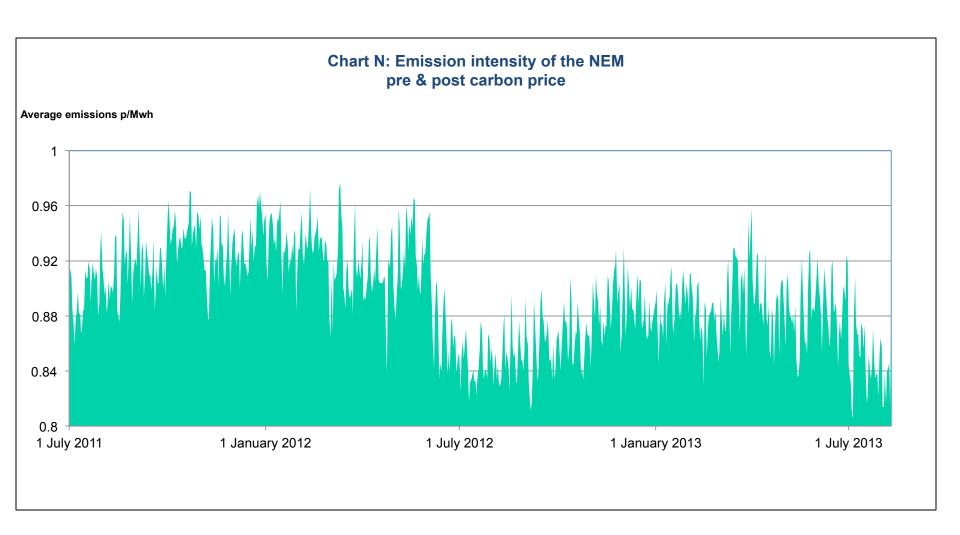


Source: AEMO 2012



Source: AEMO 2013

Emissions intensity of power supply



Source: AEMO 2013



What next in Australia?



Carbon pricing repeal likely

Deal with minor party Senators could be done after 1 July 2014

... but repeat of Western Australian Senate election creates uncertainty

Until then, carbon pricing repeal will not pass Senate

Retrospective repeal?

Budget shortfall

Policy uncertainty an obstacle to investment?



Australia's climate change institutions

Climate Commission

Disbanded as first act of incoming Environment Minister (now private "Climate Council")

Clean Energy Finance Corporation

Shutdown requires legislative change

Climate Change Authority

Shutdown requires legislative change Draft "targets" report released

Government departments

Department of Climate Change abolished, former heads sacked





The Direct Action plan



"Emissions reduction fund"

A domestic baseline-and-credit scheme

...government buying the emissions credits (using general tax revenue)

Emphasis on land-based measures incl soil carbon?

Planned size of fund (\$3.2b over 4 years)

... likely far too small to achieve required reductions

No international purchases to meet 2020 target

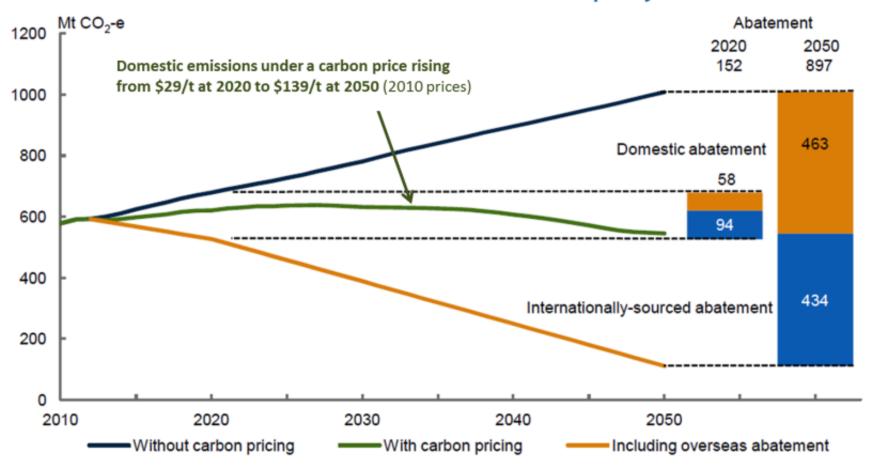
No impact on market prices

"a short term policy"



Australia's long term emissions goal and projected emissions trajectory

Chart 5.2: Australian emissions in the core policy scenario

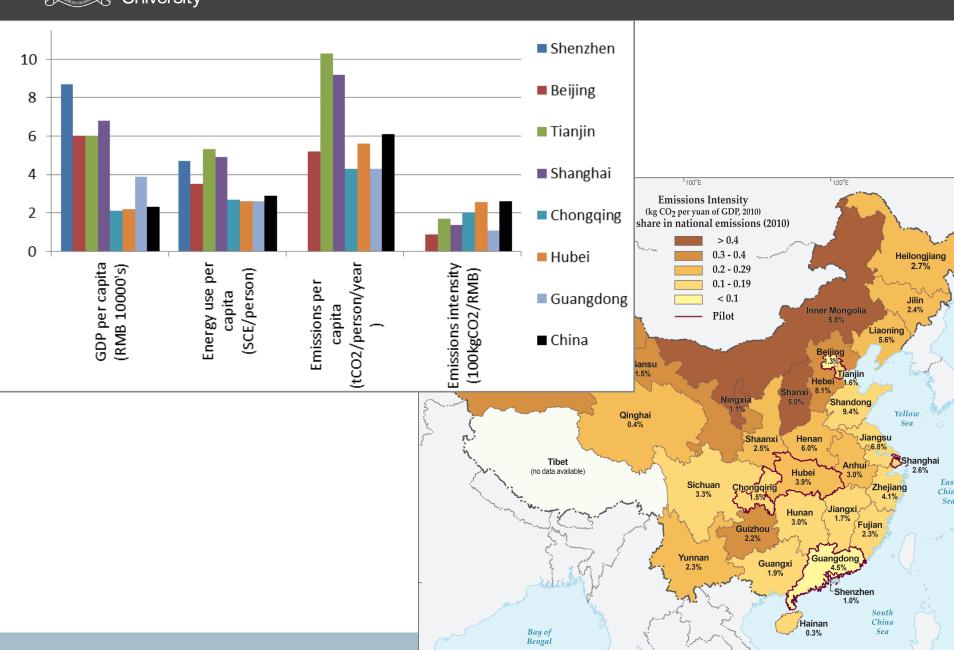


Bending Australia's emissions trajectory will require strong policy interventions: carbon pricing and/or regulation

Source: Treasury 2011 "Strong growth low pollution – modelling a carbon price"



China: 7 pilot emissions trading schemes



Lessons from international schemes

ETS caps/prices may need to be actively managed

EU ETS reform?, Australia fixed price, California price floor

Carbon pricing creates fiscal opportunities

Don't give all permits away for free

Policy interactions matter

Power sector: effects of non-pricing policies, market reform

Policy needs to be predictable and reliable

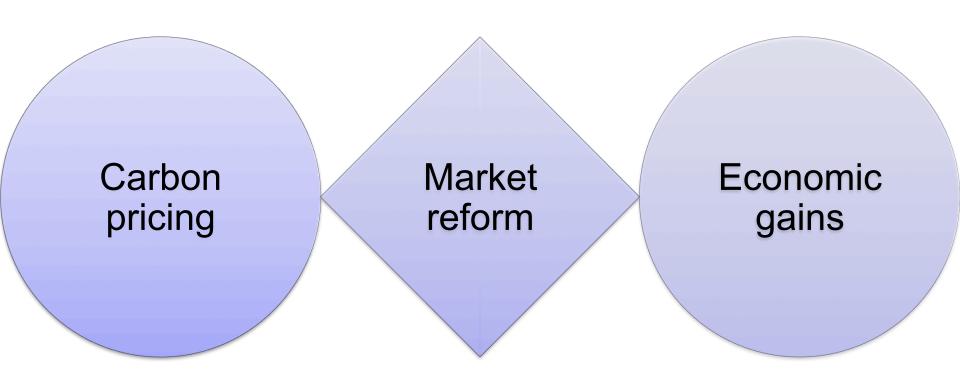
Uncertainty harms investment response



Market reform is the key

Effective carbon pricing requires market reform in energy sector

Carbon pricing may promote market reform ... which yields its own economic gains

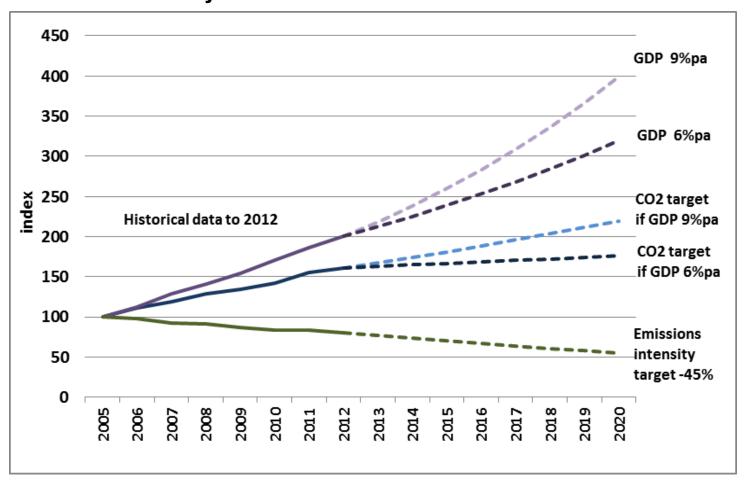




China's emissions intensity target

What does China's emissions intensity target imply for absolute emissions?

Illustrative trajectories for GDP and emissions to meet a 45% reduction in emissions intensity from 2005 to 2020



frank.jotzo@anu.edu.au

Centre for Climate Economics and Policy

Crawford School of Public Policy

Australian National University

ccep.anu.edu.au