AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Paris Agreement

Frank Jotzo

Centre for Climate Economics and Policy

Crawford School of Public Policy

Australian National University

Contributed presentation at the 60th AARES Annual Conference,
Canberra, ACT, 2-5 February 2016

Copyright 2016 by Author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Australian National University

Paris Agreement

AARES, 6 Feb 2016

Frank Jotzo

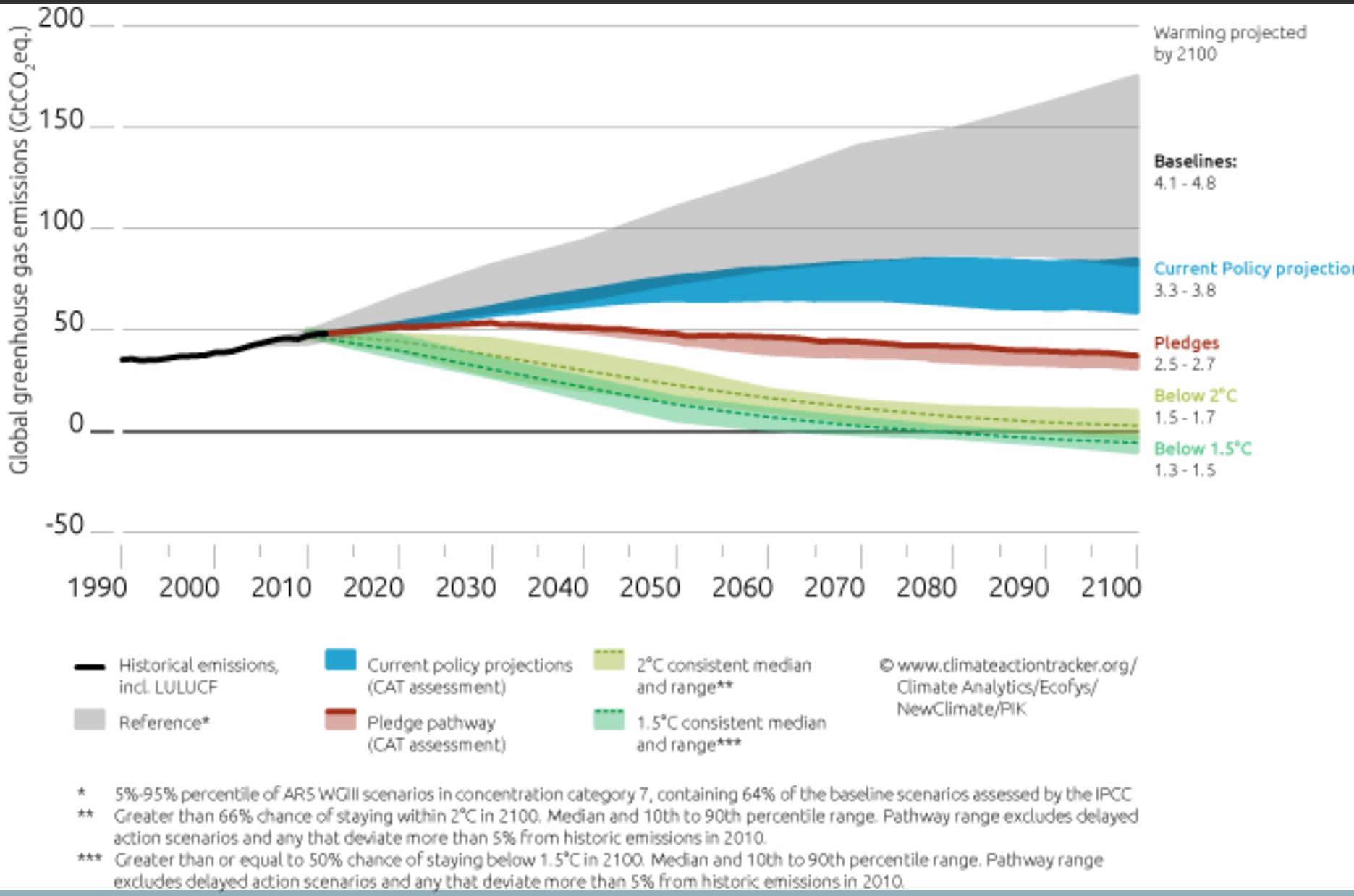
Centre for Climate Economics and Policy

Crawford School of Public Policy

Australian National University


STOP
BLA
BLA
BLA !!!

Paris 2030 pledges: the commitment gap



* 5%-95% percentile of AR5 WGIII scenarios in concentration category 7, containing 64% of the baseline scenarios assessed by the IPCC

** Greater than 66% chance of staying within 2°C in 2100. Median and 10th to 90th percentile range. Pathway range excludes delayed action scenarios and any that deviate more than 5% from historic emissions in 2010.

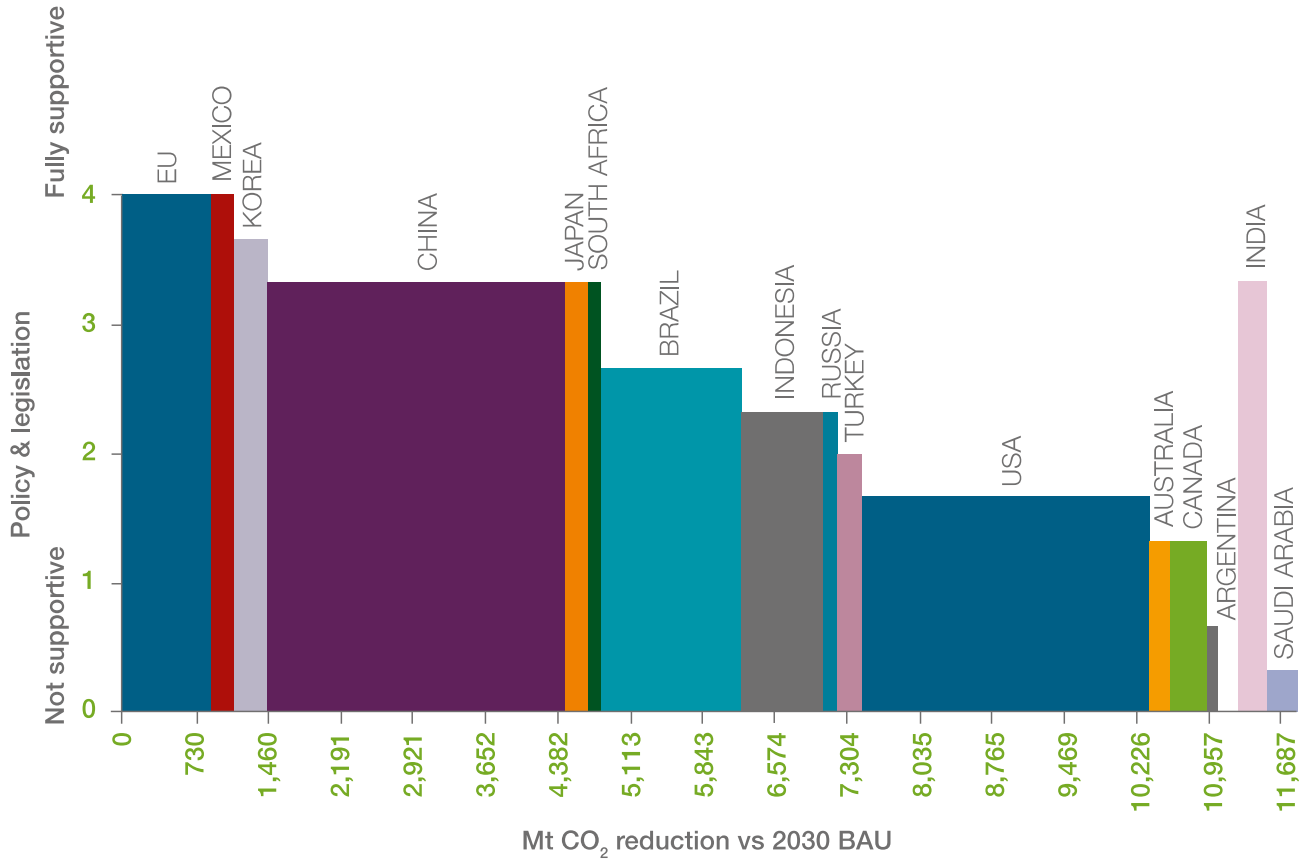
*** Greater than or equal to 50% chance of staying below 1.5°C in 2100. Median and 10th to 90th percentile range. Pathway range excludes delayed action scenarios and any that deviate more than 5% from historic emissions in 2010.

Source: Climate Action Tracker

Australian National University

Are the promised emissions cuts credible?

Figure 8. Climate change policy and legislation

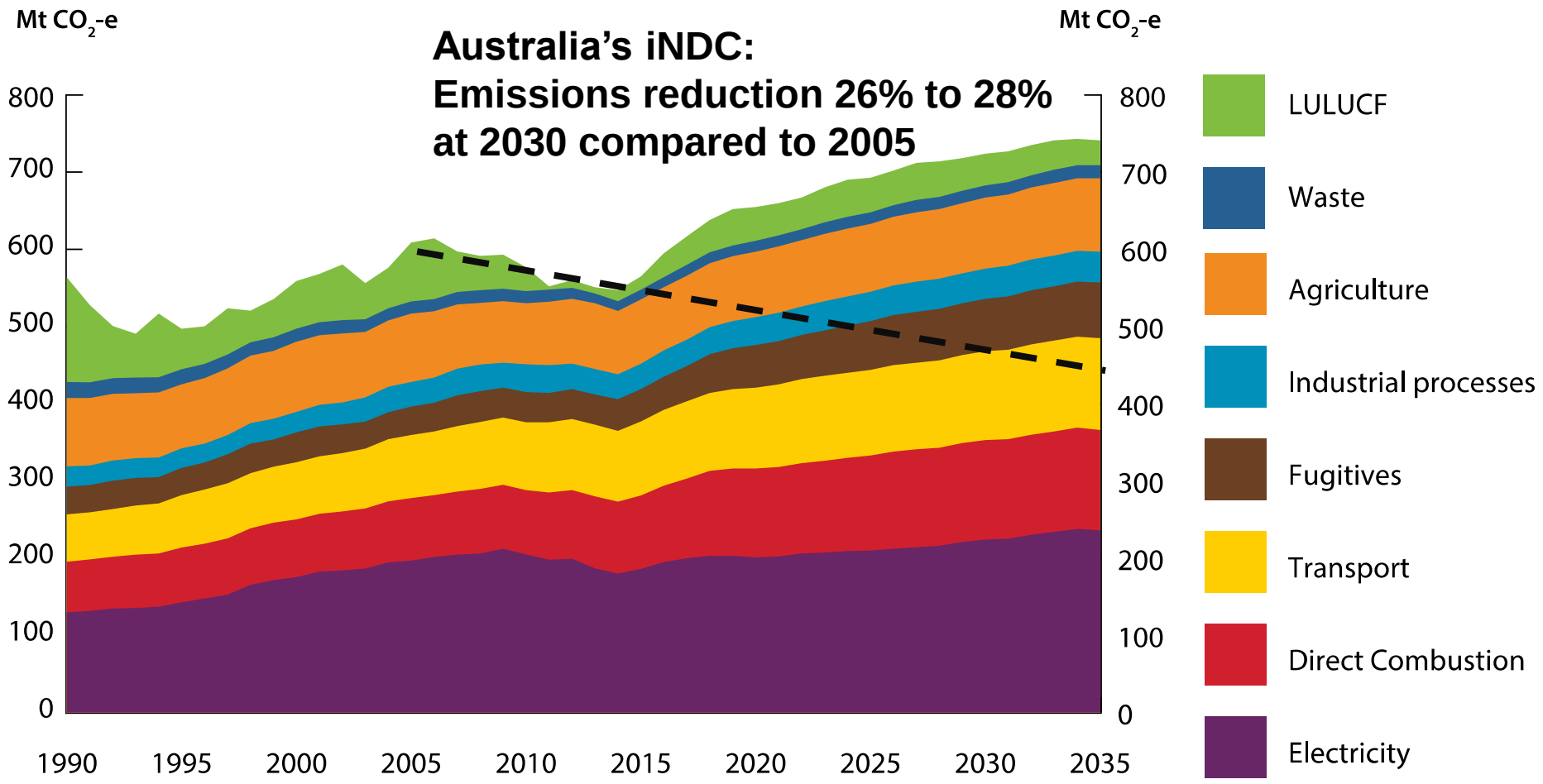


Scale: 0-0.5: not supportive of credibility; 0.5-1.5: slightly supportive; 1.5-2.5: moderately supportive; 2.5-3.5: largely supportive; 3.5-4: fully supportive

Source: Authors' calculations; for emission data see Annex 2

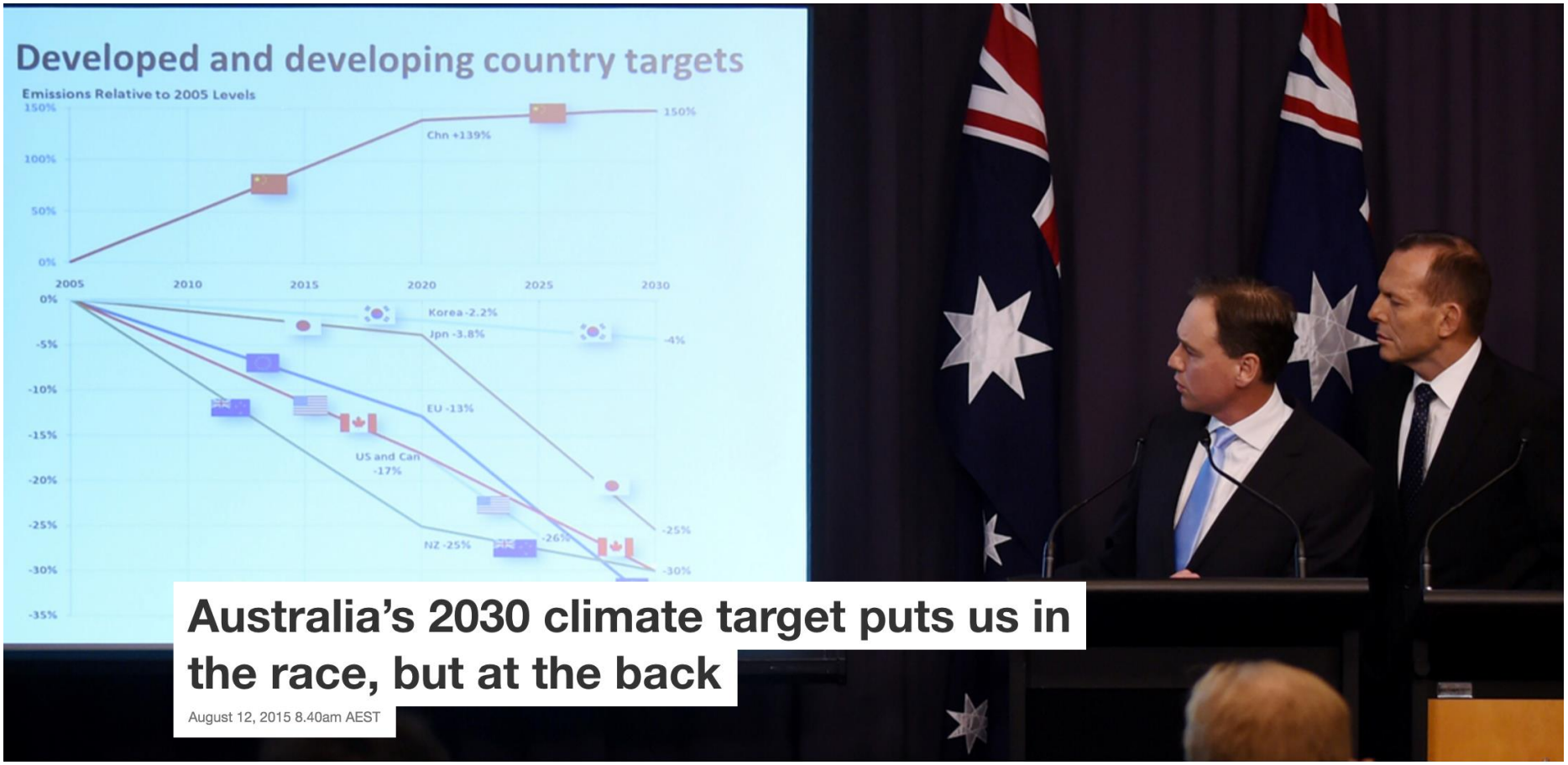
Source: Averchenkova and Bassi 2016, Grantham Institute

Australia's GHG emissions: historical, government's BAU projection and 2030 target



Source: Dep of Environment (2015), Australia's emissions projections 2014–15

Australian National University



Australia's 2030 climate target puts us in the race, but at the back

August 12, 2015 8.40am AEST

Environment minister Greg Hunt and Prime Minister Tony Abbott announce Australia's 2030 climate target. AAP Image/Lukas Coch

Email
Twitter 102
Facebook 44
LinkedIn 1

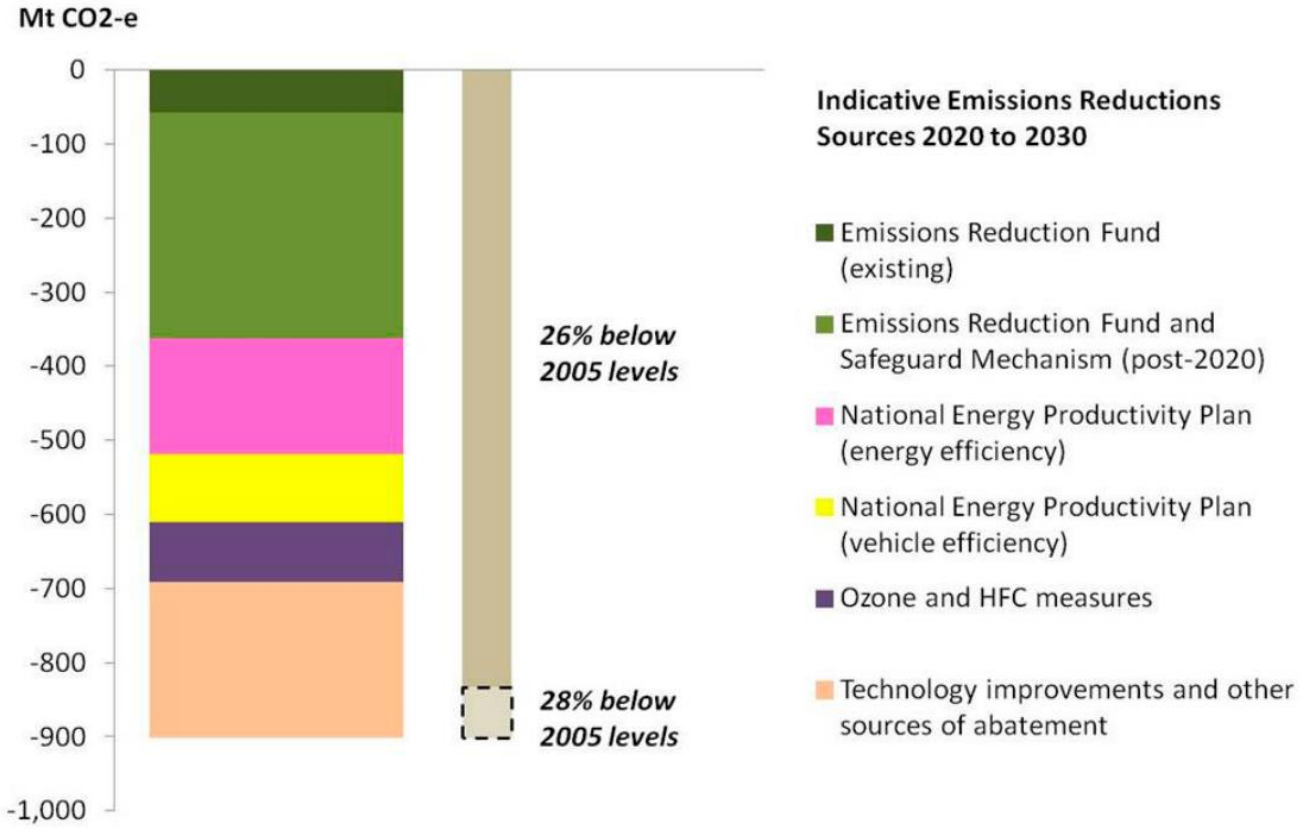
Australia's new emissions target is not "squarely in the middle of comparable economies" as the PM claimed. Towards the bottom of the pack of comparable countries, on key indicators. But Australia is coming to the party, and that counts for a lot.

Author

Frank Jotzo
Director, Centre for Climate Economics and Policy, Australian National University

How to meet the 2030 target??

Figure 3 Indicative emissions reductions sources, 2020 to 2030



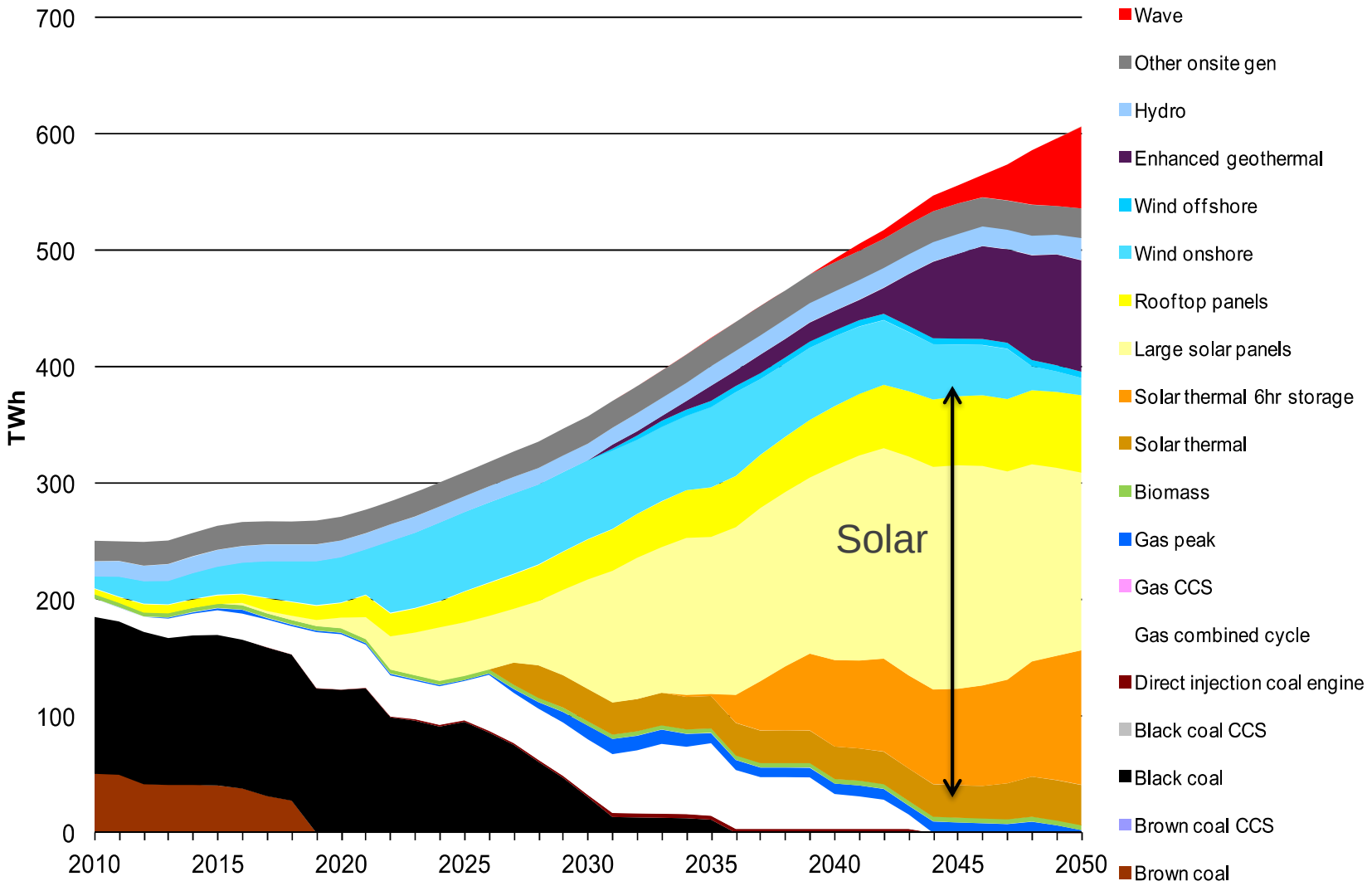
Australia's 2030 target is achievable using Direct Action approaches. 'Technology improvements and other sources of abatement' include technology innovation and breakthroughs, and other action by businesses, governments and the community.

Source: Department of the Environment; chart represents indicative estimates. Actual emissions reductions will depend on final policy design, and the amount of emissions reductions required to meet Australia's 2030 target will depend on future emissions trends.

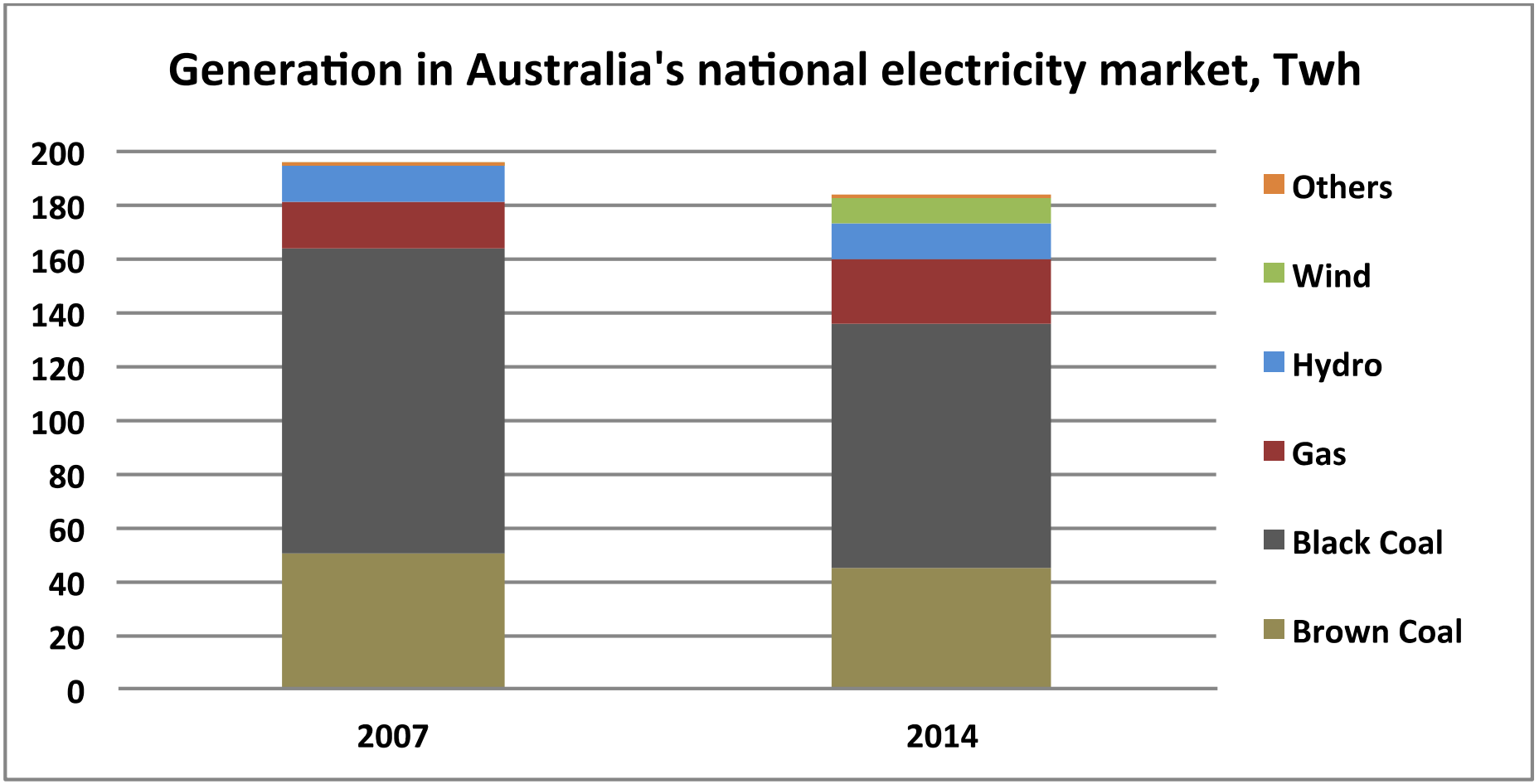
Source: Dep of Environment, Australia's abatement task: tracking to 2020 (Nov 2015)

Transformation in the energy sector: Deep Decarbonisation Pathways scenario for Australia's power supply

Figure 2.10 – Projected national electricity generation by technology, *100 percent renewable grid*, 2010–2050



Capacity factors of coal plants falling – some may exit
Black or brown?



Jotzo&Mazouz Nov 2015, "Brown coal exit: a market mechanism for regulated closure of highly emissions intensive power stations", CCEP wp, forthcoming in *Economic Analysis and Policy*

Farewell to brown coal without tears: how to shut high-emitting power stations

November 19, 2015 6.11am AEDT

Loy Yang power station in Victoria's Latrobe Valley. Takver/Flickr, CC BY-SA

Email
Twitter 77
Facebook 49
LinkedIn 32
Print

Australia's large brown-coal-fired power stations are among the highest carbon-emitting power plants in the world.

Yet even with increasing amounts of renewable sources added to the electricity network, and more power capacity than we need in the network, these stations are still running.

We have a suggestion for how the problem could be solved, in a way that is cost-effective and should be politically acceptable.

Which coal should bow out?

Authors

Frank Jotzo
Director, Centre for Climate Economics and Policy, Australian National University

Salim Mazouz
Research Associate, Centre for Climate Economics and Policy, Australian National University

Disclosure statement

Proposal:

Competitive bidding process for power station closure

1. Plants bid over the payment they require for closure

   Including site remediation, structural assistance to communities

2. Regulator chooses the most cost effective bid

   $/tCO2 expected to be saved (modelled)

3. The plants remaining in operation pay transfers to the plant that exits

   In line with their future CO2 emissions – a small 'carbon levy'

   Additional incentive for competitive bidding

Accepted Manuscript

Brown coal exit: A market mechanism for regulated closure of highly emissions intensive power stations

Frank Jotzo, Salim Mazouz

PII: S0313-5926(15)30135-1

Australian National University

Centre for Climate Economics and Policy

Crawford School of Public Policy

Australian National University

ccep.crawford.anu.edu.au

frank.jotzo@anu.edu.au