COVID-19 fiscal recovery pathways: stimulus to win on both economics and climate

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How could COVID-19 fiscal recovery packages accelerate progress on climate change?

(Hepburn et al. 2020)

Reviewed **+400 stimulus policies** from 2009 Global Financial Crisis
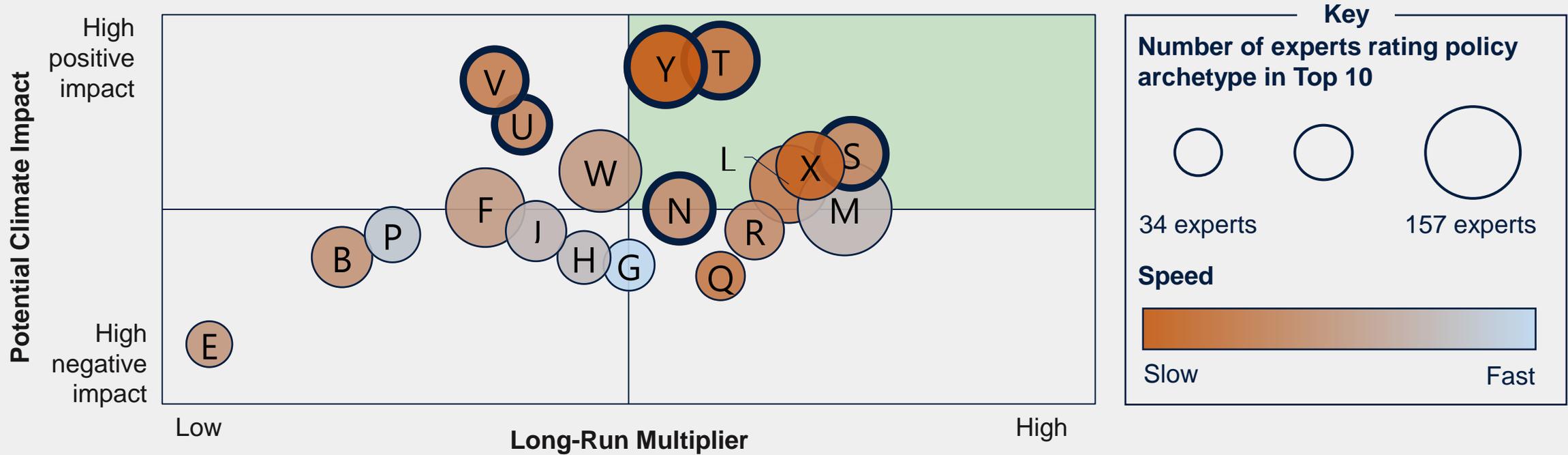
Surveyed **+230 leading economists** (covering all G20 countries)

Analysed past **clean policy studies** (both public and private)

Global survey identifies a subset of policies that perform well on both economic and climate metrics

Policy archetypes

B Assisted bankruptcy (super Chapter 11)	M Healthcare investment	T Clean energy infrastructure investment
E Airline bailouts	N Worker retraining	U Buildings upgrades (energy efficiency)
F NFP, education, research, health bailouts	P Rural support policies	V Green spaces, natural infra investment
G Reduction in goods & services taxes	Q Traditional transport infra investment	W Disaster preparedness, capacity building
H Income tax cuts	R Project-based local infrastructure grants	X General R&D spending
J Business tax relief for strategic adj.	S Connectivity infrastructure investment	Y Clean R&D spending
L Education investment		

Three key findings for policy makers

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Recovery policies can deliver both climate and economic goals – five emerge above others

1. **Clean physical infrastructure investment**

2. **Building efficiency spending**

3. Education and training investment

4. Natural capital investment

5. **Clean R&D spending**

Co-benefits are ripe for the picking and include social, environmental, health and political benefits

The devil is in the detail – green policy success/failure can be determined by the details

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Global recovery pulse check shows a subset of nations leading the pack

We've seen significant green spending in the past months…

State		AUD clean recovery stimulus (% of total recovery stimulus)[1]	Clean policy highlights (abridged)
EU		>$400bn (30%)	Renewables, retrofits, hydrogen, Just Transition Fund
Germany		~$51bn (21%)	Hydrogen, electric vehicles, aviation, shipping
France		~$52bn (34%)	Connectivity, hydrogen, circular economy
Sth Korea		>$37bn (42%)	Natural capital, renewables, worker retraining
UK		~$16bn (32%)	Retrofits, clean heavy industry, CCS

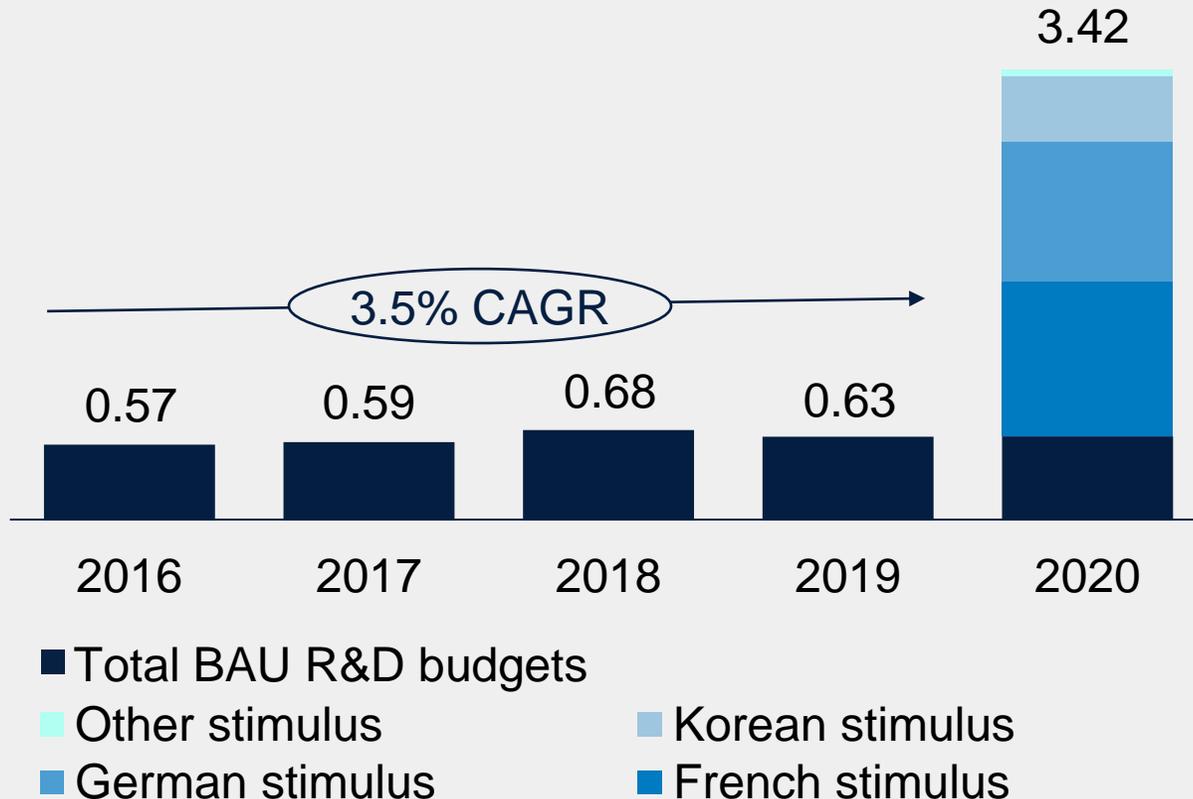## …although many nations are yet to announce major recovery plans

and many more…

1. Based on Smith School tracking and original analysis.

Asymmetric global spending could reshape future industry and threaten Australian competitiveness

Global[1] public hydrogen R&D spending
(AUD, billions)

3.5% CAGR

2016	2017	2018	2019	2020
0.57	0.59	0.68	0.63	3.42

- ■ Total BAU R&D budgets
- ■ Other stimulus
- ■ German stimulus
- ■ Korean stimulus
- ■ French stimulus

Drivers and Implications

1 Sudden acceleration of interest in emerging clean technologies driven by economics, reframed technologies, and recession

2 Investment today likely to bring significant competitive advtg in controlling future markets

3 Failure of incumbents to invest today could mean the forfeiture of natural endowment advtg

1. Excludes China. Annual BAU 2020 spending taken as 3-year average (2017-2019), which is likely to be an underestimate. So far, Germany has committed USD10.7bn (by 2030), France USD2.4bn (by 2022), and Korea USD0.5bn (by 2021). The EU has finalised an H_2 strategy that expects investments of USD3bn to USD18bn. Sources: IEA and Smith School Stimulus Tracker.

What about the Lucky Country?

Rich clean energy resources

Relatively strong skills base

Economy distressed but not in tatters

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Our perspectives on select recovery options in Australia

Initiative	Overall Assessment	Considerations
Transmission infrastructure	*Key renewables enabler*	- AEMO ISP identifies projects to unlock cheap renewables - Very high expected national income multiplier - No regrets policy
Building efficiency retrofits	*"Fruit on the ground"*	- Comparatively low skill requirements - Very high expected national income multiplier - Economic impacts can be effectively targeted
Clean R&D (hydrogen focus)	*Unlocking future industries*	- If output captured, can stimulate multi-decadal growth - Very high long-term national income multiplier - Essential role as longer-acting stimulus in package
Direct cash payments	*Great rescue policy, poor recovery policy*	- Effective for keeping people alive - Ineffective for new domestic growth unless highly targeted
A 'gas-led' recovery	*Ridiculous fiscal policy*	- New turbines not needed until 2030 - Drilling and transport should not be govt-subsidised

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Highest value initiatives

Job analysis in briefing notes aligns with our findings

Program type	Economic impact	Timeliness and ease of implementation	Alignment with energy transition	Jobs per $1 million of public investment
Renewable energy infrastructure	●	◗	●	**6-12**
Building efficiency retrofits	●	◗	◕	**5-8**
Ecosystem improvement	◖	●	●	**6.7**
Sustainable transport infrastructure	◖	◕	◕	**6.0**

Clean recovery spending clearly makes sense in Australia but key questions need to be answered pronto

Core Clean Spending

1 Which clean initiatives suit Aus best? (confirm hypotheses)

2 How can initiatives be regionally-targeted and class-targeted?

3 How much should be allocated to each initiative?

+

Requisite Enablers

What new **governance structures** could help and where would they sit? (NB CSIRO)

What **financing mechanisms** will maximise private capital crowd-in? (NB ClimateWorks Australia)

What **advisory supporting structures** are necessary?

How can we **partner with other nations**?

Urgently requires accelerated analysis to form actionable recommendations

Questions and discussion

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