

COVID-19 and a green recovery

Energy Foundation China Economist Dialogue

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Keynesian stimulus: Dig hole, fill it in*

Green stimulus: Dig hole, plant tree, fill it in

*With apologies to Keynes and with thanks to Prof Sam Fankhauser

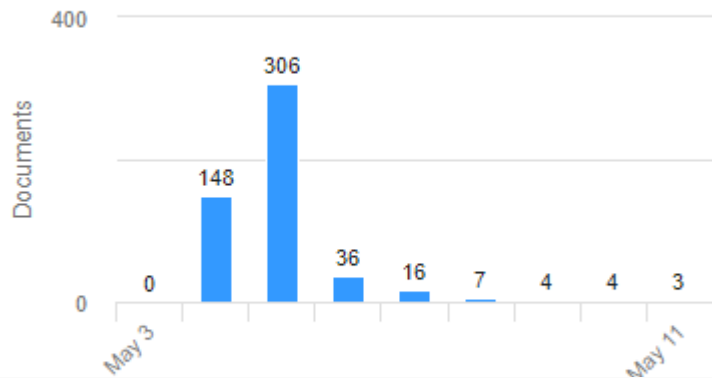


Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?

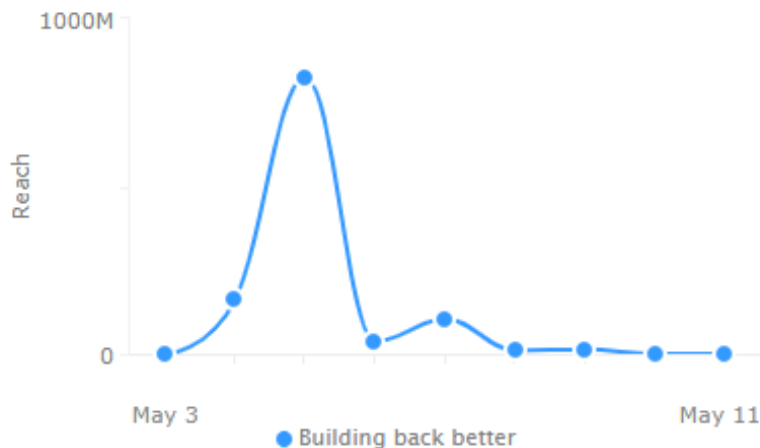
Cameron Hepburn, Brian O'Callaghan, Nicholas Stern, Joseph Stiglitz and Dimitri Zenghelis

Forthcoming in the *Oxford Review of Economic Policy* 36(S1)

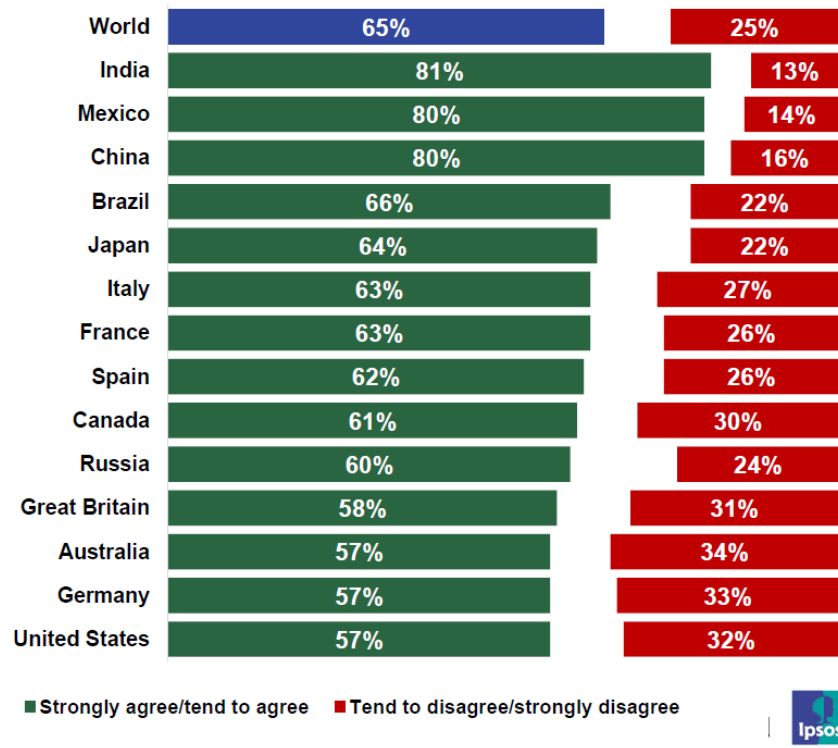
Media Exposure



Potential Reach



Majorities in favour of green recovery



Source: Ipsos Global Advisor, April 2020

- **Covered by 600+ outlets** including *the Reuters, Bloomberg, New York Times, BBC, Telegraph, Guardian, India Today, La Repubblica, O Globo, Global Canada, Sydney Morning Herald.*
- **Early impacts:** business e.g. Sarasin, Pictet, IIGCC; BEIS, 400+ civil servants via Apolitical; AfDB, Head of UNDP; viral social media posts from Google Chief Sustainability Officer, ex Prime Minister of Australia, New York City's Mayor's Office; informed the COP26 Universities Network UK government briefing.

1. Short: impacts of COVID-19 on emissions
2. Medium: potential impacts from recovery packages
3. Long: possible behavioural and institutional change
4. Summary

Global emissions could fall 8% (2.6 Gt CO₂) in 2020

- A fall of 2.6 Gt CO₂ is **more than at any previous point in history**
- A fall by 8% is one of the largest, compare to:
 - 4% during the Second World War (1939-1945)
 - 3% during the 1991-92 recession
 - 1% during the 1980-81 energy crisis
 - 1% during the 2009 Global Financial Crisis ([Boden et al. 2017](#))
 - Only exceeded by major historical wars and epidemics such as the European Black Death or South American influenza ([Pongratz et al. 2011](#); [Boden et al. 2017](#))

This is the pace of change required for 1.5°C

- Global GHG emissions must fall by **7.6%** *every year* from 2020 to 2030 to keep temperature increases to less than 1.5°C (UNEP [2019](#)).
- Every year that GHG emissions are not zero, atmospheric GHG concentrations continue to build, increasing the risk that even incremental increases could trigger feedback loops that result in outsized and permanent damage to the climate (Farmer et al. [2019](#)).

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



Reviewed **+400 stimulus policies** from 2009 Global Financial Crisis



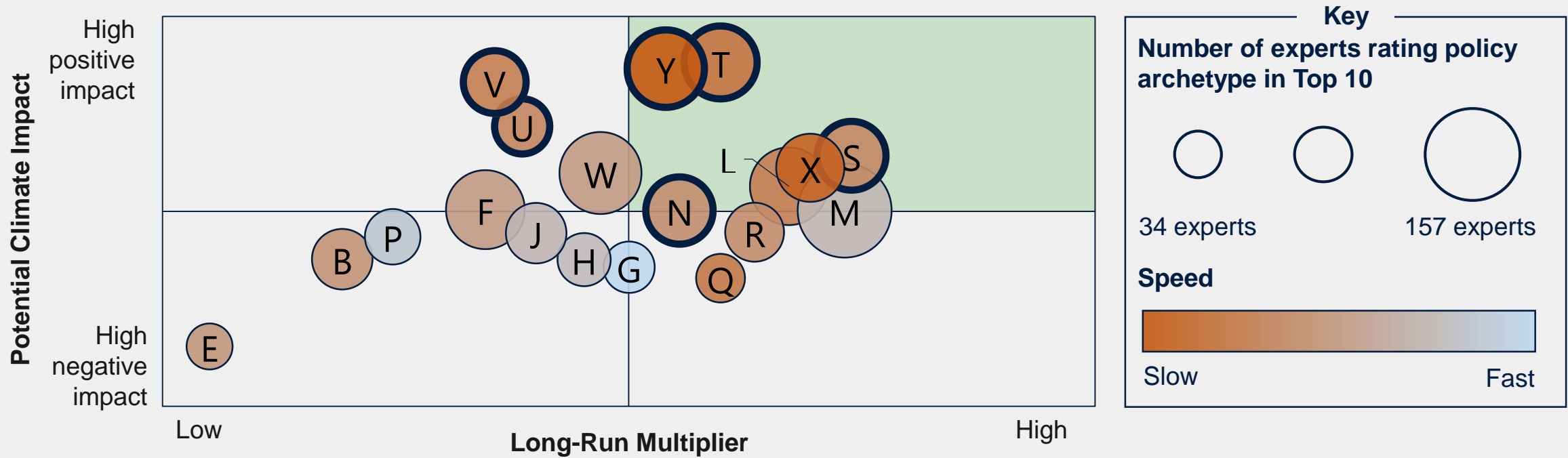
Surveyed **+230 leading economists** (covering all G20 countries) for views on multipliers, speed, climate desirability



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



Global survey identifies policies that are seen to 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



Recovery policies can deliver both climate and economic goals – five in particular

1. Clean physical infrastructure investment
2. Building efficiency spending
3. Education and training investment
4. Natural capital investment
5. Clean R&D spending



There are significant co-benefits, including social, environmental, health and political benefits



Policy design is important – success/failure can be determined by details (eg flexibility, social distancing)

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Behavioural change

- Adaptive behaviours and habit discontinuities
- Some shifts will be permanent

Institutional change

- Shifts in international institutions
- Changes to geopolitics

Thank you

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