COVID-19 recovery packages and progress on climate change

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Fourth ILO Employment Policy Research Symposium

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$17,200,000,000,000
Agenda

1 Global recovery stock take
   a) Is green stimulus stimulatory?
   b) How much green have we seen?
   c) Who are the leaders and laggards?

2 Priorities for future employment policy research

3 Questions
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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)

Analysed past green policy studies (both public and private)

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

**Policy archetypes**

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
| Assisted bankruptcy (super Chapter 11) | Airline bailouts | NFP, education, research, health bailouts | Reduction in goods & services taxes | Income tax cuts | Business tax relief for strategic adj. | Education investment | 

**Potential Climate Impact**

- High positive impact
- High negative impact

**Long-Run Multiplier**

- Low
- High

**Speed**

- Slow
- Fast

**Key**

- Number of experts rating policy archetype in Top 10
  - 34 experts
  - 157 experts

**Figure:**

- The diagram uses circles to represent policies, with their size indicating the number of experts rating the policy archetype in the Top 10. The colors of the circles range from high to low, with high positive impact and high negative impact. The long-run multiplier is indicated with a horizontal axis, ranging from low to high.
Several other studies have investigated the job and fiscal multiplier impacts of green spending

Green fiscal multipliers are high, particularly in a recession

- Batini et al. (2021) using vector-autoregressive models

- Pollitt (2011), Spencer et al. (2012) using macroeconometric models

- Hasna’s 2021 JMP on green multipliers at the US DoE

Green job multipliers are high with positive spillovers

- Ex-ante COVID modelling (e.g., IEA 2020; Lewney et al. 2021; O’Callaghan et al. 2021; Vivid Economics 2021)

- Ex-post GFC modelling (e.g., Aldy 2013; CEA 2016; Steinberg et al. 2015)

Modelling excerpt
Three tenets to an environmentally-sustainable recovery (in two places)

- Maximise support of green-specific initiatives
- Eliminate all dirty support
- Bring green incentives into ‘neutral’ spending

Both at home and abroad

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What makes up the $17.2tn?

- **Rescue spending**: $14.4tn
- **Recovery spending**: ~$2.8tn
- **Total green recovery spending**: ~$700bn

Note: The "rescue spending" bar includes unclear spending. All figures exclude currently unclear funds from the European Commission. Including these funds, total spending approaches $20.5tn. Figures to be finalised with processing of US infrastructure bill.
Green energy in context: awfully lacking

Energy spending in 2020/21 & 2008/09

<table>
<thead>
<tr>
<th></th>
<th>One-off</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 green recovery spending</td>
<td>$108 B</td>
<td></td>
</tr>
<tr>
<td>GFC green spending (in 2021 dollars)</td>
<td>$192 B</td>
<td></td>
</tr>
<tr>
<td>Public funds for fossil fuel 'support' (IISD)</td>
<td>$580 B</td>
<td>$5,400 B</td>
</tr>
<tr>
<td>Explicit fossil fuel subsidies (IMF)</td>
<td>$470 B</td>
<td></td>
</tr>
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</table>

Note: COVID-19 spending & GFC spending are additive. IISD figure is an alternative measure for IMF explicit subsidy figure. IMF implicit subsidy figure is additive to the explicit subsidy figure.

1. Fossil fuel subsidies are enormous
2. Pledges to “Build Back Better” have mostly been media stunts
Across sectors, high-carbon measures are more prominent than low-carbon

Source: Emissions Gap Report 2021 Ch 5 (O’Callaghan et al., 2021)

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Leading nations are showing how to invest green + establish new competitive advantage

A sample of the 568 green COVID-19 policies we have recorded

- Wind farms in Brazil
- Cycling programs in Finland
- Electric buses in India
- Training programs for renewable energy in Dominican Republic
- Support of National Parks in the Democratic Republic of the Congo
- Hydrogen R&D in Germany
- Energy efficiency for appliances in South Korea
- Renewables powering tourism in Cuba

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Green spending opportunities are … everywhere

Spending by green archetype in 2020

- **Advanced Economies in Observatory (24 countries)**
  - **B**: Conditional liquidity support
  - **U**: Electronic appliance & efficiency incentives
  - $$\delta$$: Clean transport infrastructure
  - $$\lambda$$: Buildings upgrades & new green housing
  - $$\psi$$: Clean research and development

- **Total = USD317bn**

- **Emerging Market and Developing Economies in Observatory (26 countries)**
  - **T**: Electric vehicle incentives
  - **X**: Green worker retraining and job creation
  - $$\eta$$: Clean energy infrastructure investment
  - $$\mu$$: Natural infrastructure and green spaces
  - **V**: Unspecified and green market creation

- **Total = USD51bn**

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Many nations are missing big opportunities for green recovery

https://recovery.smithschool.ox.ac.uk/
Inadequate support of developing economies

Generous support needed to avoid lost progress + higher poverty, and make climate progress

- Advanced Economies: $15,139
- Annex 2 Countries: $15,889
- Non-Annex 1 Countries: $726
- Least Developed Countries: $64
We need to significantly increase support of vulnerable nations

Providing affordable finance

- Debt forgiveness
- Direct grants
- Concessional finance
- Guaranteeing debt
- Redistributing multilateral finance
- Staged exemptions from Carbon Border Adjustment Mechanisms

Addressing information + capacity gaps

- Understanding the environmental implications of fiscal policy decisions
- Knowing the economic strengths of environmental investment
- Long-term partnerships
- Overflow from COVID recovery to ‘peacetime’


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There is still time to influence recovery investments – it’s more important than ever

Influence **announced** recovery spending

Influence **future** recovery spending

Influence the next stage of COVID response – **policy ‘reinforcement’**

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We have work to do in every box of the Just Transition Matrix

<table>
<thead>
<tr>
<th>Policy type</th>
<th>Policy action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills programs (training/reskilling/upskilling)</td>
<td>Direct/explicit</td>
</tr>
<tr>
<td>Job creation programs</td>
<td>Supplementary</td>
</tr>
<tr>
<td>Job-finding services</td>
<td></td>
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<tr>
<td>Social support programs</td>
<td>For workers</td>
</tr>
<tr>
<td>Support for businesses to create JT plans</td>
<td>For the community</td>
</tr>
<tr>
<td>Community engagement</td>
<td>Green businesses</td>
</tr>
<tr>
<td></td>
<td>Fossil businesses</td>
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See more at
https://recovery.smithschool.ox.ac.uk/

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Appendix: Global Recovery Observatory

What is the Observatory?

- Brings transparency to govt spending, pressures more responsible env. action, & gives practical policy examples from around the world
- Tracking fiscal spending in **89 countries**
- **>7,000 policies** recorded & assessed using our original green fiscal policy taxonomy
  - 40 policy archetypes & 150 sub-archetypes (see appendix)
  - Assessed for short- and long-term GHG, air pollution, natural capital, social inequality, rural livelihoods, quality of life, and economic impact