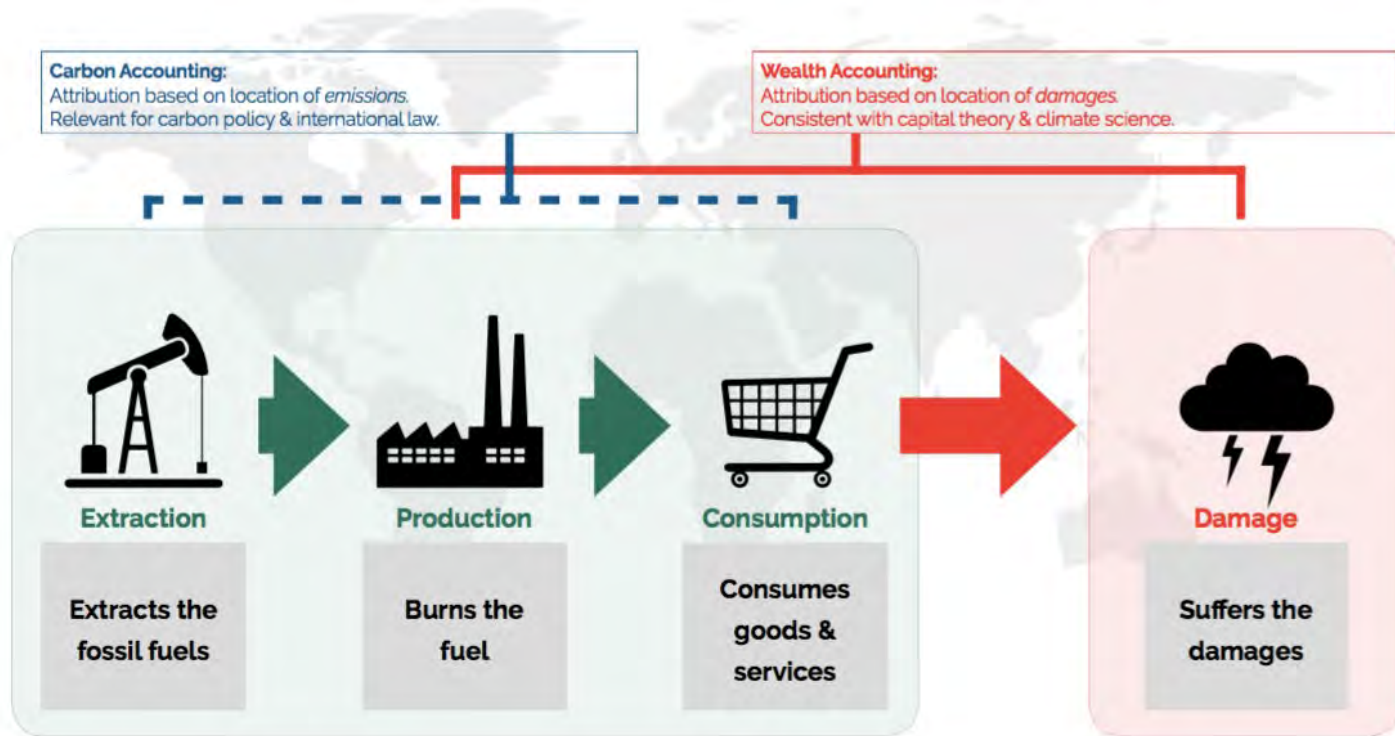


Achieving Net Zero: Synergies and Trade-Offs Relating to Climate Change

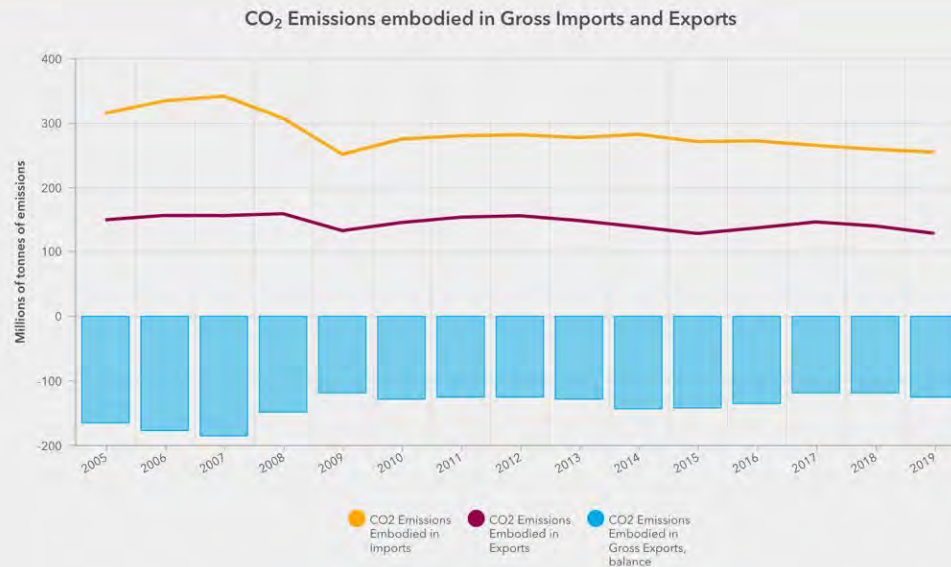
Diane Coyle, dc700@cam.ac.uk
www.bennettinstitute.cam.ac.uk



Source: Agarwala 2019

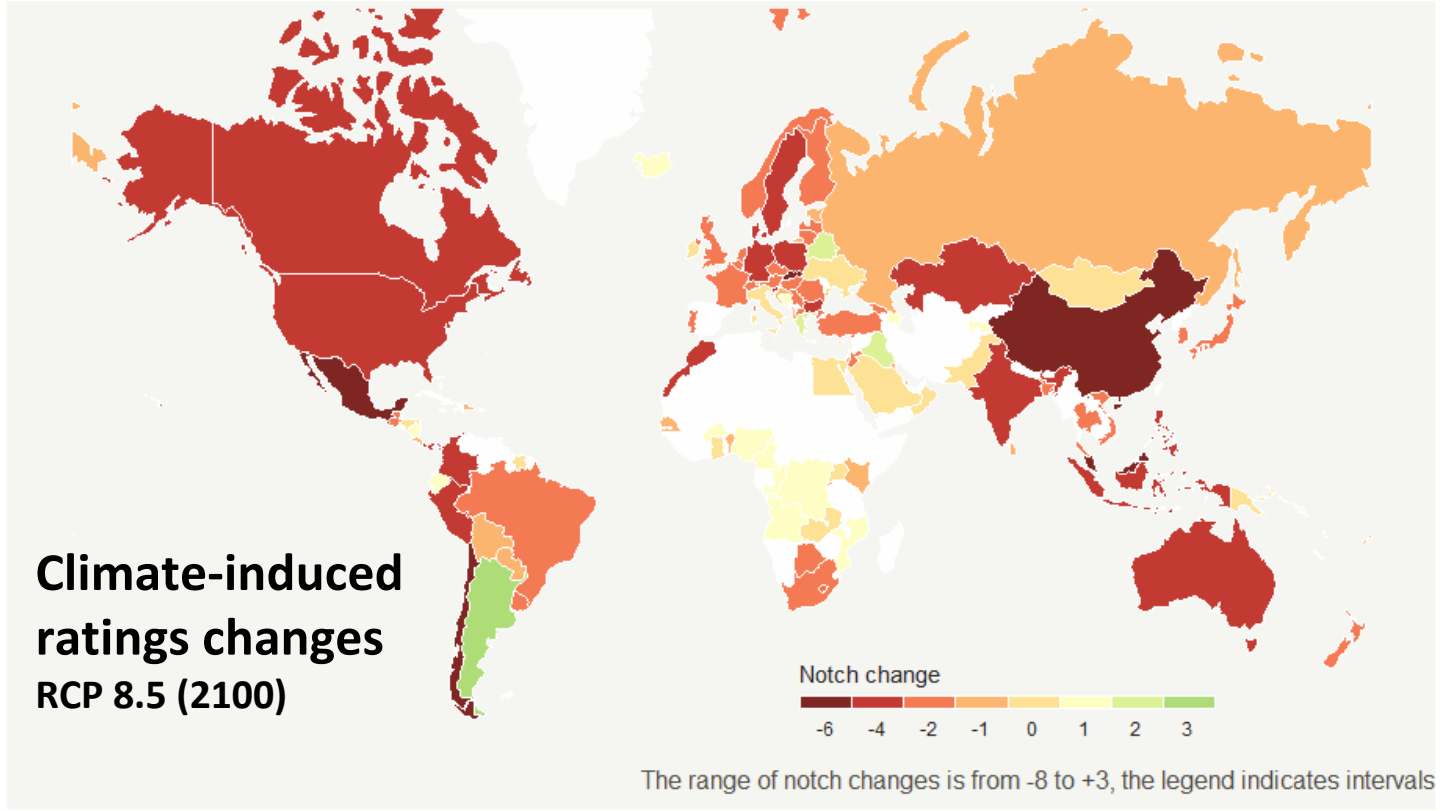
CO₂ Emissions Embodied in Trade

The carbon emissions embodied in gross exports and gross imports can be used to estimate the difference between a country's "production" of CO₂ and its "demand" for CO₂. In 2019, it is estimated that United Kingdom had a negative CO₂ balance, with a deficit of 1.3e+02 millions of metric tons of CO₂ emissions between total exports and imports.

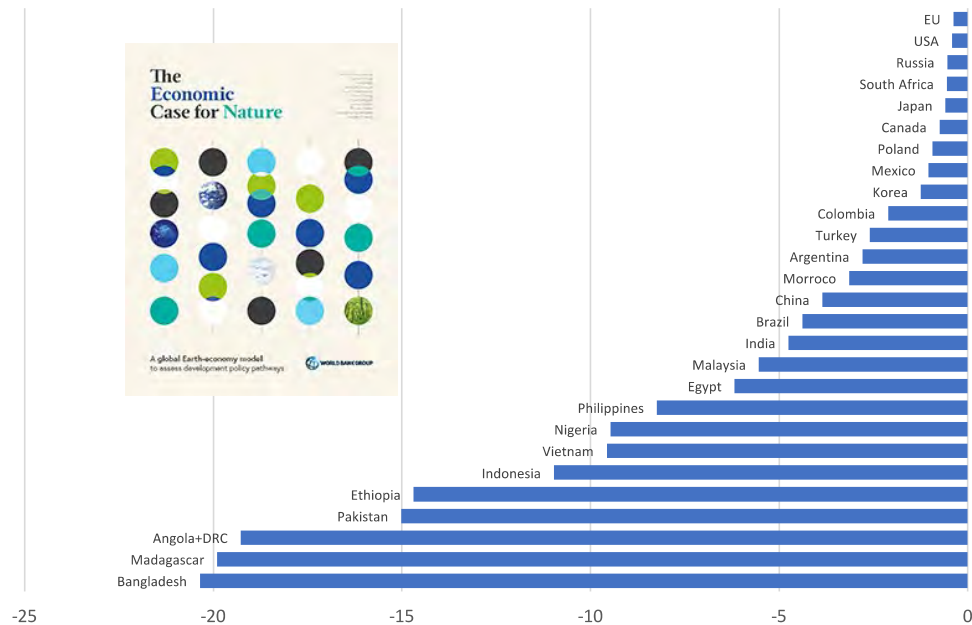


Source: IMF Direction of Trade Statistics (DOTS); OECD Carbon emissions embodied in trade; IMF staff calculations.

**Climate-induced
ratings changes
RCP 8.5 (2100)**



Change in 2030 GDP under the partial ecosystem collapse scenario compared with the no-tipping point scenario (% of GDP)



Source: World Bank (2021): The Economic Case for nature

March 2021.....a milestone

Ecosystem Accounting in the News

— “ —

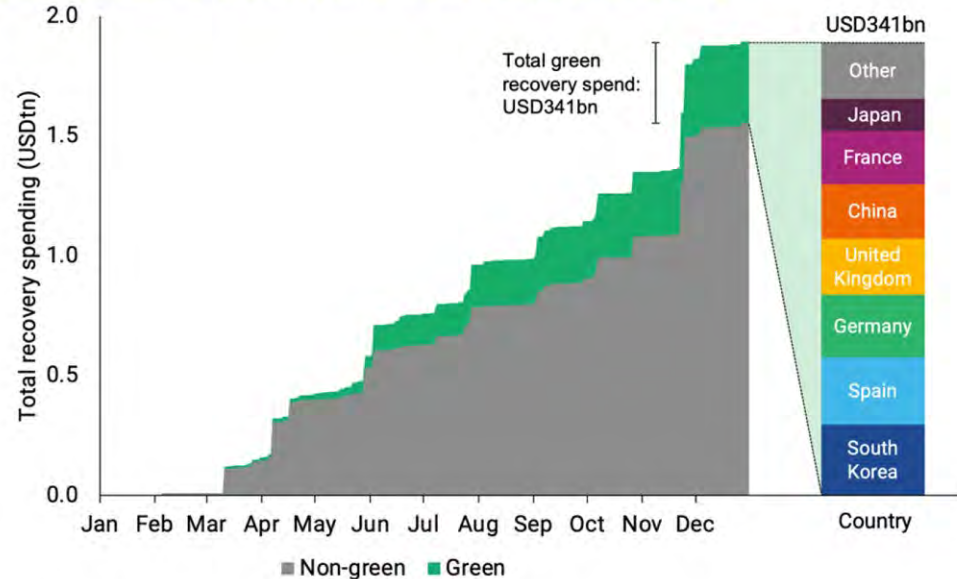
No longer will we allow mindless
environmental destruction to be
considered as economic progress

*António Guterres, Secretary-General of the
United Nations*

Recovery spending: more grey than green

Figure 2.1

Global announced recovery spending and green spending, 2020



Source: O'Callaghan and Murdock (2021)

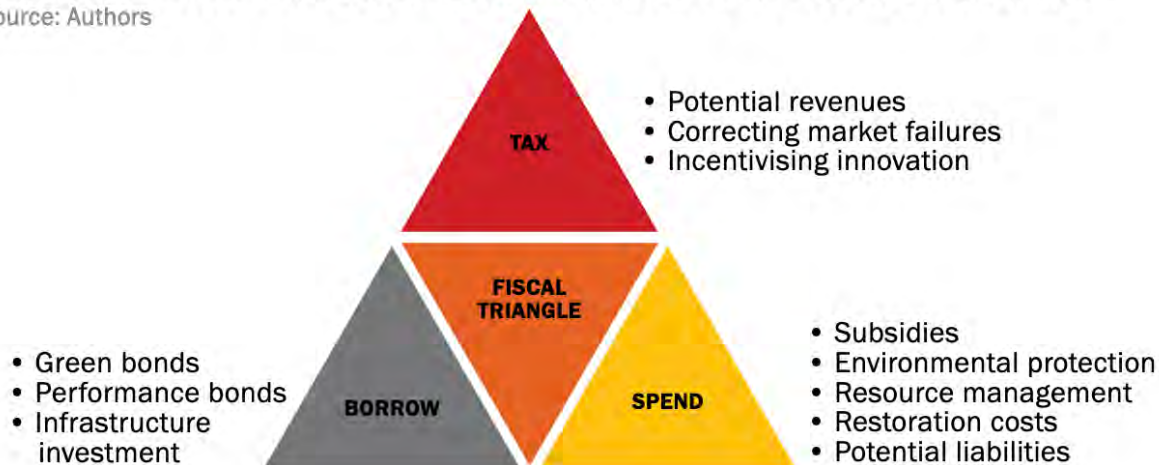
Background report, Lucas & Vardon

But many green recovery options

Figure 1: SEEA accounts and the fiscal triangle

SEEA ACCOUNTS ORGANIZE DATA FOR MACROECONOMIC PLANNING

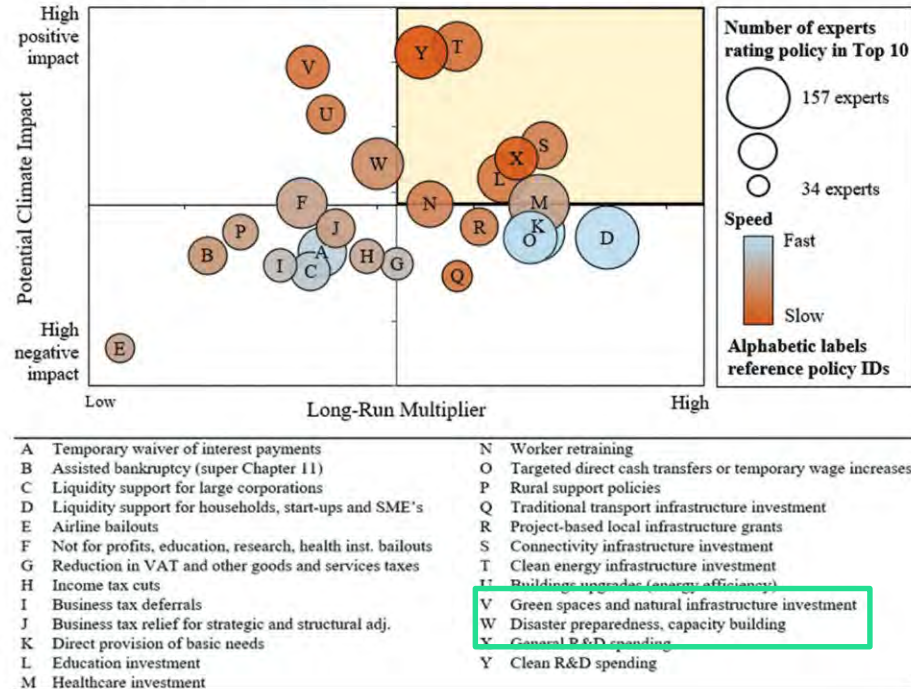
Source: Authors



Agarwala & Zenghelis, UN SEEA 2021

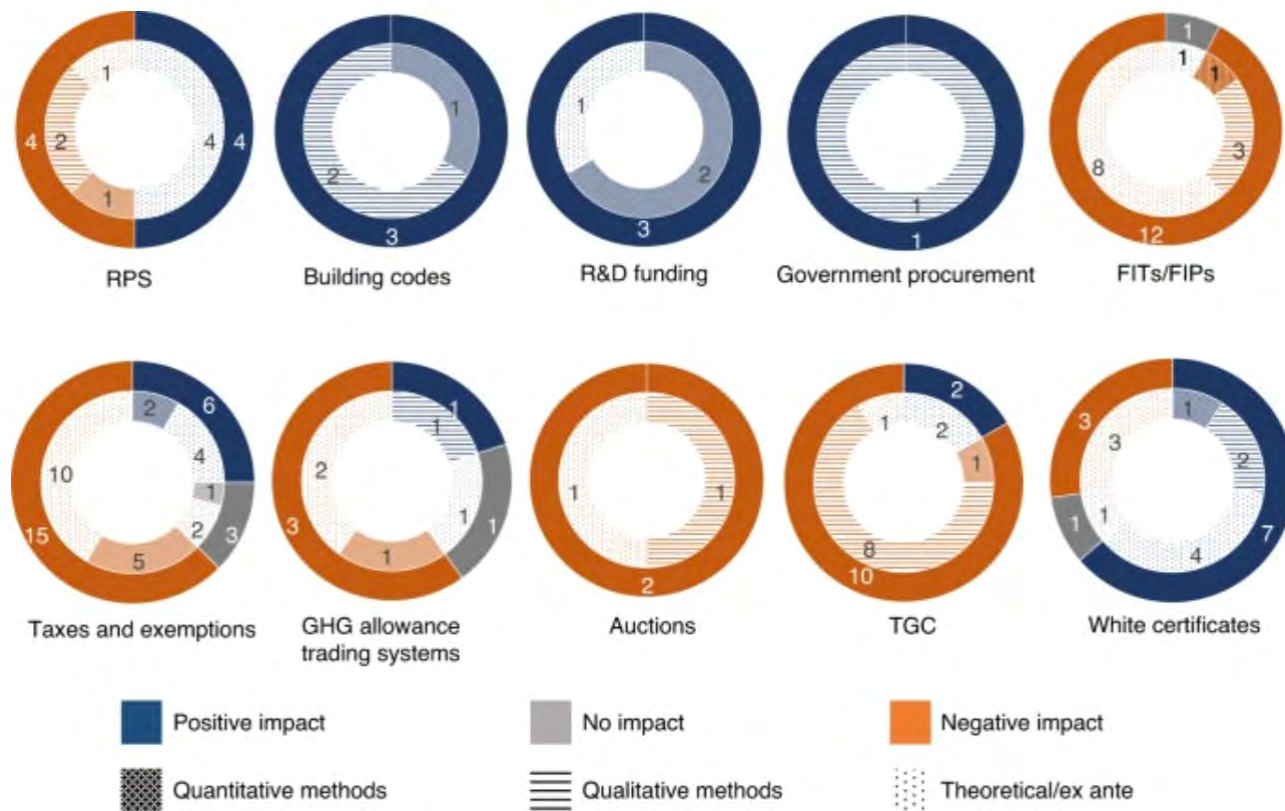
High climate and recovery impact

Figure 1: Target group mean survey results aggregated using relativity-adjusted scores



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

Fig. 5: Direction of the impact of ten policy instruments on the distributional policy outcome.



Natural capital:
environmental stocks and systems that generate
benefits for people (including ecosystems, raw
materials, and a stable climate).

Institutional capital:
the quality and reliability of
governance.

Human capital:
the health and skills of the
population.



Physical capital:
infrastructure, homes, machines
and equipment, and information
and communications technology.



UNIVERSITY OF
CAMBRIDGE



Bennett Institute
for Public Policy
Cambridge

Figure 21 Summary of Options for Change



Dasgupta Review

The next challenges

- Domestic vs global: accounting across borders
 - Climate, biodiversity, public health, food system
 - NSOs need to situate domestic statistics in global context
- Inclusive wealth *as a portfolio*
 - Health in human capital
 - Social capital a key metric

THANKYOU!

<https://www.bennettinstitute.cam.ac.uk/>