# A PRESENTATION ON COVID-19

Andy Haines

Professor of Environmental Change and Public Health, Centre on Climate Change and Planetary Health, London School of Hygiene and Tropical Medicine



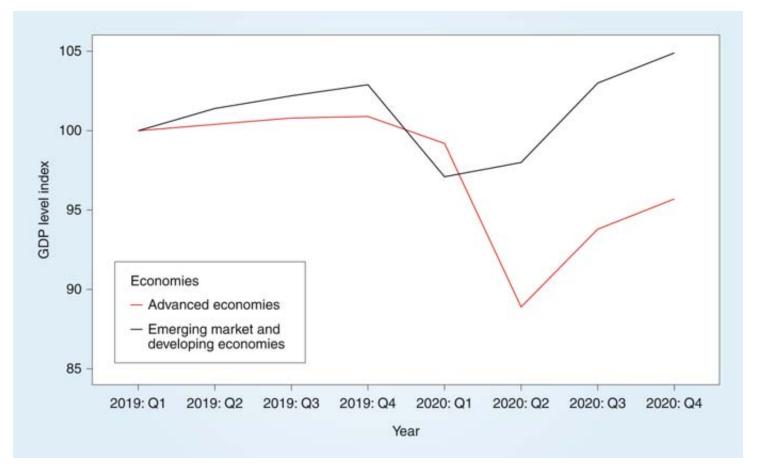
## FROM COVID-19 to COP-26:

Integrating climate action with pandemic recovery



## Economic recession: the need for recovery policies that integrate health, equity and sustainability

Guerriero, Haines, Pagano Nature Sustainability 2020

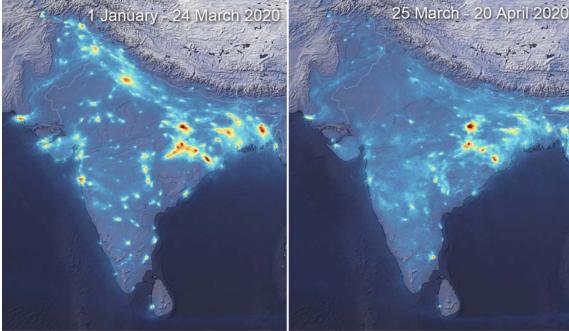




### Air pollution declines in some countries



Nitrogen dioxide over India



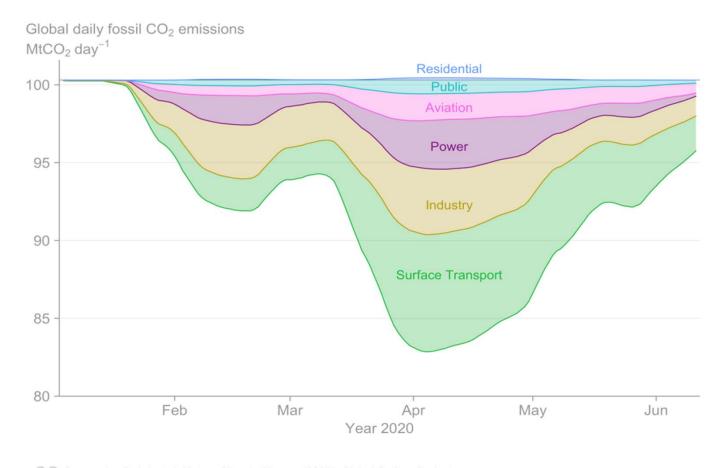
Sentinel-5P Nitrogen Dioxide tropospheric column

0 μmol/m² 300

https://www.abc.net.au/news/2020-04-09/himalayas-visible-india-pollution/12136856



## Post COVID-19 fossil fuel related CO 2 emissions by sector





·Figure: @Jones\_MattW



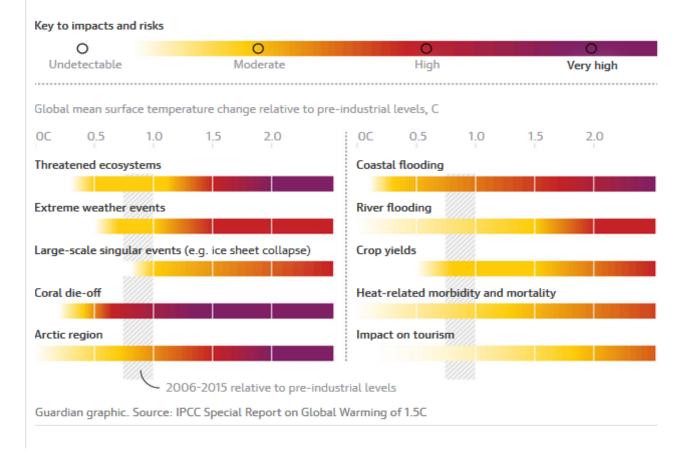
Post COVID-19 fossil fuel related CO 2 emissions by region

Change in global daily fossil CO<sub>2</sub> emissions MtCO<sub>2</sub> day<sup>-1</sup> Rest of the World China -5 India -10 Europe USA -15 Feb Mar Apr May Jun Year 2020 ⊚ (f) Source: Le Quéré et al. Nature Climate Change (2020); Global Carbon Project -Figure: @Jones\_MatfiV



### **Growing risks from Climate Change IPCC 1.5°C report 8 October 2018**

#### Rising temperatures, rising risks





### WHO 'Manifesto for a healthy, green recovery'

May 2020



#### Prescriptions for a healthy, green recovery

- 1) Protect and preserve the source of human health: nature.
- 2) Invest in essential services, from water and sanitation to clean energy in healthcare facilities.
- 3) Ensure a quick healthy energy transition.
- 4) Promote healthy, sustainable food systems.
- 5) Build healthy, liveable cities.
- 6) Stop using taxpayers money to fund pollution.



#### Nature – based solutions --some examples



Bauch, Birkenbach, Pattanayak and Sills PNAS 2014



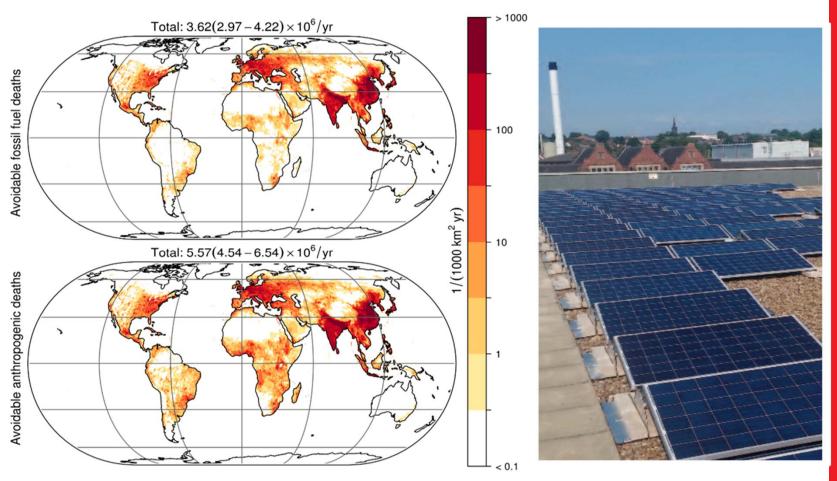
Forest conservation reduces disease risks in the Brazilian Amazon

- Decreased Malaria transmission
- Reduced air pollution and fewer Acute Respiratory Infections (ARI)
- Cleaner water--- Less diarrhoeal disease

Restoring ecosystems regulates freshwater quantity and quality and provides flood protection (wetlands and mangroves)



## Health co-benefits of decarbonizing the world economy-millions of deaths averted annually (Lelieveld, Klingmüller Pozzer, Burnett, Haines, Ramanathan PNAS 2019)





## What could cities do to adapt to and mitigate climate change?

Accessible efficient public transport and active travel



Universal access to clean low carbon energy



Safe access to green spaces and ecosystem strategies for resilience

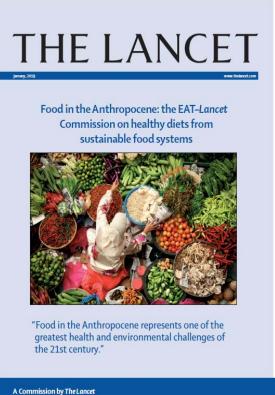


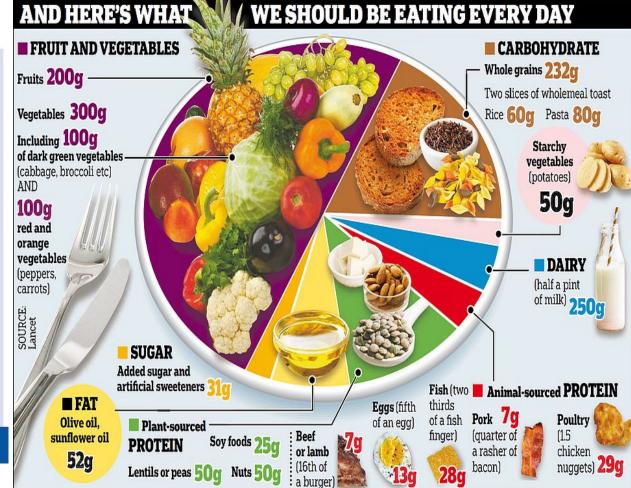
Housing
Improvements
Water and
Sanitation





The EAT-Lancet Commission - planetary health diet and targets for sustainable food production that can prevent 11 million premature adult deaths per year by 2050.







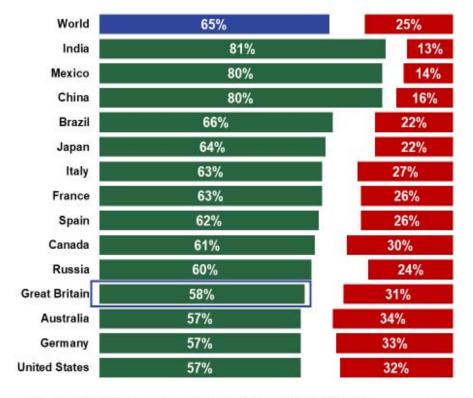
### Support for a 'climate friendly' recovery

#### Support for a 'green' economic recovery from Covid-19

#### Country data

Q. To what extent do you agree or disagree with the following:

In the economic recovery after Covid-19, it's important that government actions prioritize climate change



Base: 28,039 online adults aged 16-74: Fieldwork dates: Friday 17 to Sunday 19 April.







<sup>■</sup> Strongly agree/tend to agree ■ Tend to disagree/strongly disagree

## Ways to promote a green, healthy and just recovery (Guerriero, Haines, Pagano. Nature Sustainability 2020).

- Removing subsidies that are harmful for health and climate and helping renewables to remain economically competitive, particularly when oil prices are low.
- Fossil fuel subsidies ~US\$400 billion annually worldwide, exceeding subsidies for renewables
- Clean energy prices are competitive: auction price for solar photovoltaic system USD 0.048/kWh is lower than the marginal operating cost of existing coal-fired plants
- Setting prices at fully efficient levels would lower global CO2 emissions by ~ 28% and fossil fuel air pollution deaths by ~46% (IMF estimates)
- Avoid health and environmental damaging bailouts (aviation, oil, automative industry e.g. Norway has delayed oil & gas industry taxes)



## Ways to promote a green, healthy and just recovery.

2. Recapitalizing companies not only according to economic criteria, but also on the basis of environmental and health criteria.

In this first phase of economic recession there has been a massive liquidity injection to firms whose cash flow has declined.

Liquidity keeps firms alive in the short term but can aggravate their solvency problem.

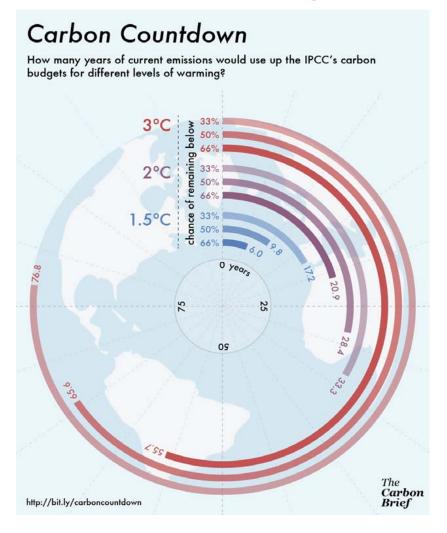
4% of G20 rescue packages have potential to reduce GHG emissions('green'), 4% are 'brown' and likely to increase net GHG emissions beyond the base case, and 92% are 'colourless'

Hepburn C et al Oxford Review of Economic Policy 36(S1)

In the medium term firms will need an equity injection- this funding should be targeted using a mix of economic, environmental and health criteria



### The need for urgent action



Over 40 million health professionals urge G20 leaders to put public health at the core of Covid-19 recovery

May 25, 2020

This letter is supported and promoted by the Global Climate and Health Alliance, Every Breath Matters, and the World Health Organization in service of the global medical and health community.



### COP 26 Glasgow November 2021











