THE CASE FOR AN EQUITABLE GLOBAL ENERGY TRANSITION
Climate change and fossil fuels

• Climate change is caused by carbon-based fossil fuels.
• There are three fossil fuels: coal, oil and gas.
• All three emit carbon dioxide when burned.
• To stop the planet warming, we need to phase out the use of fossil fuels globally.
COP26: Did India betray vulnerable nations?

16 November 2021

India and China weaken pledge to phase out coal as COP26 ends

Governments agree to speed up climate action but fail to resolve deep divisions in Glasgow accord

India tries to block coal phaseout from COP26 deal

An official argued that developing countries were “entitled to the responsible use of fossil fuels.”
Coal’s share of power generation

Fossil fuel decline by 2030 in IPCC 1.5°C pathways

(Source: IIASA, AR6 Scenario Explorer)
Fastest historical power transitions

(Source: Muttitt et al 2023)
2030 coal reductions in TIAM-UCL default 1.5°C

(Source: Muttitt et al 2023)
2030 coal reductions on 2030/50 phaseout timeline

(Source: Muttitt et al 2023)
Effect on oil & gas production of slowing coal phaseout to 2030/50 in a 1.5°C scenario

(Source: Muttitt et al 2023)
Conclusions

• All three fossil fuels must be phased out: More attention is needed on oil and gas.

• The balance between the three fossil fuels matters

• Greater reliance on one fuel requires more time to phase it out.
Questions for India

Not:

• Should coal use be reduced and eventually phased out?

But instead:

• How fast can India feasibly reduce its coal use, taking into account its particular challenges?

• What finance and other international support would be needed to achieve this?
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Thank you!

Our paper in *Nature Climate Change*:

https://rdcu.be/c402D

Article in *CarbonBrief*:


Article in *The Conversation*: