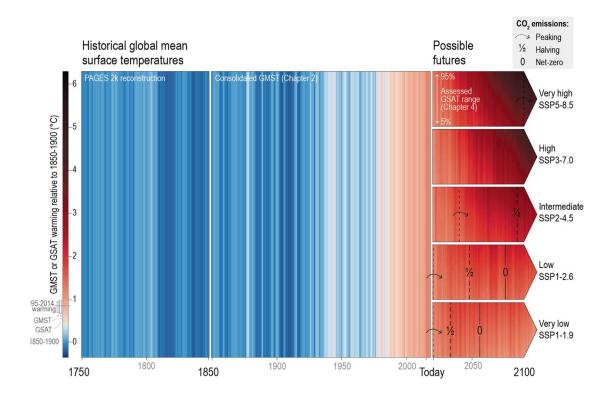
JUST ECONOMICS:

A Grand Bargain for Adaptation, Mitigation, and Compensation

A GLOBAL CLIMATE PROPOSAL

ABHIJIT BANERJEE ESTHER DUFLO MICHAEL GREENSTONE

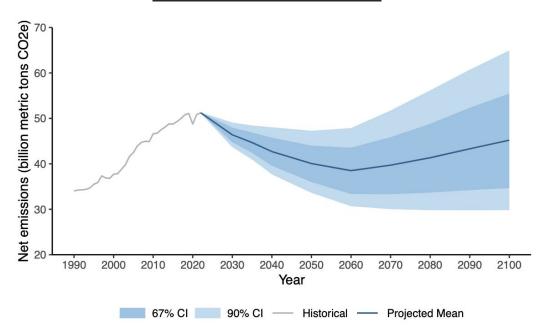
THE POSSIBLE FUTURES LOOK HOT



Source: <u>IPCC</u> (2021)

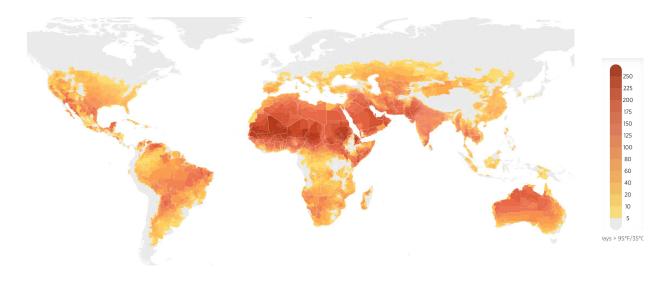
STUBBORNL Y HIGH PROJECTED CO2e EMISSIONS

PROJECTED GLOBAL EMISSIONS



98% OF CLIMATE DAMAGE S IN LMICs

Number of days above 32 degrees celsius



VULNERABLE COUNTRIES WILL GET VERY HOT

Source: Climate Impact Lab

98% OF CLIMATE DAMAGES IN LMICs

AND THE IMPACT OF A HOT DAY IS NOT THE SAME.



IMPACT OF A DAY ABOVE 90 DEGREES ON MORTALITY

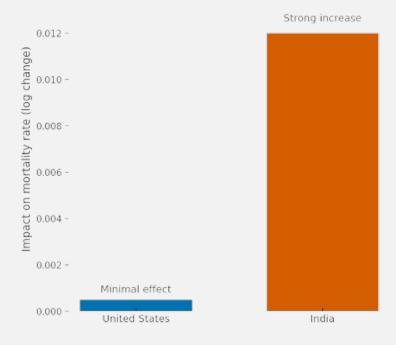
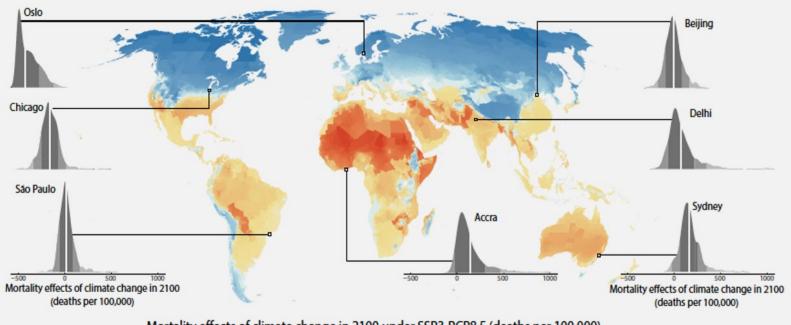


Photo: <u>CNN</u> Source: Burgess et al. (2017)

98% OF CLIMATE DAMAGES IN LMICs





Source: Carleton et al, 2022

MORTALITY SCC FOR LMIC

US\$ 130

OECD EMISSIONS 2022

14.4 BILLIONS

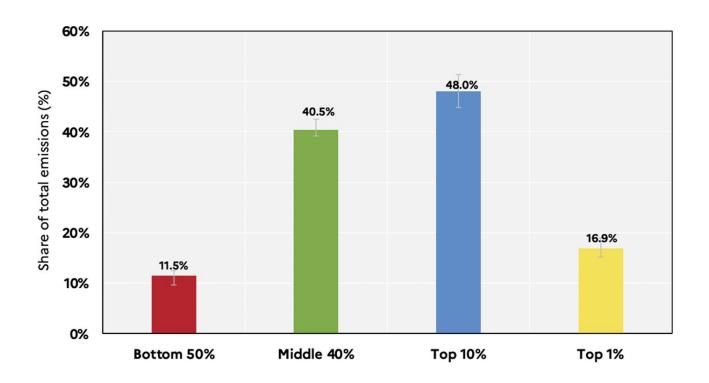
DAMAGES IMPOSED TO AFRICA

1.1 TRILLIONS

DAMAGES IMPOSED TO LMIC COUNTRIES

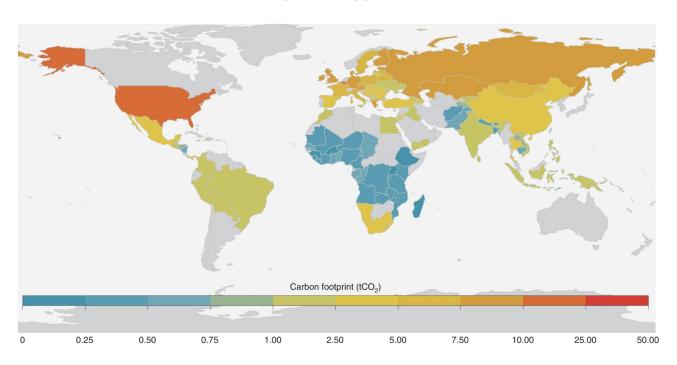
1.8 TRILLIONS

VULNERABLE PEOPLE PLAY LITTLE ROLE IN EMISSIONS



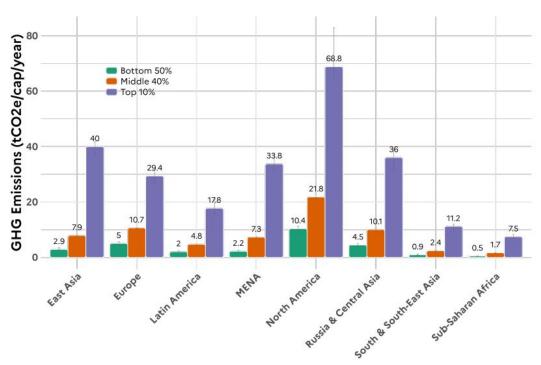
VULNERABLE PEOPLE PLAY LITTLE ROLE IN EMISSIONS

PER CAPITA FOOTPRINT

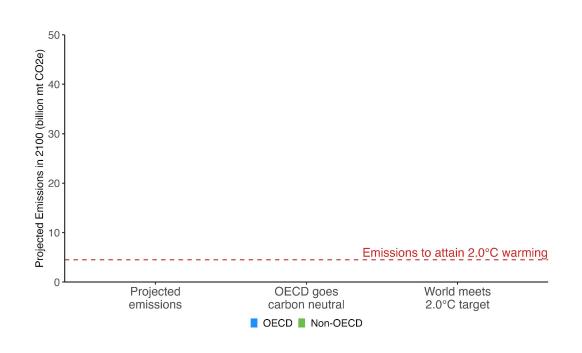


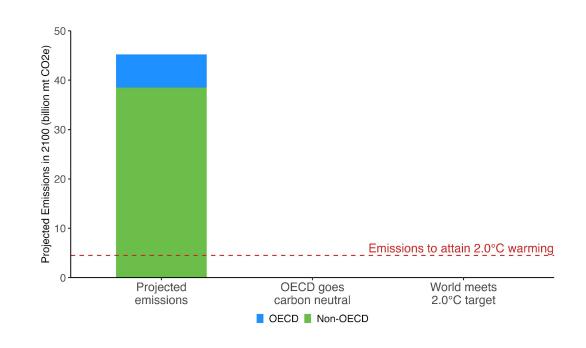
Source: Bruckner et al. (2022)

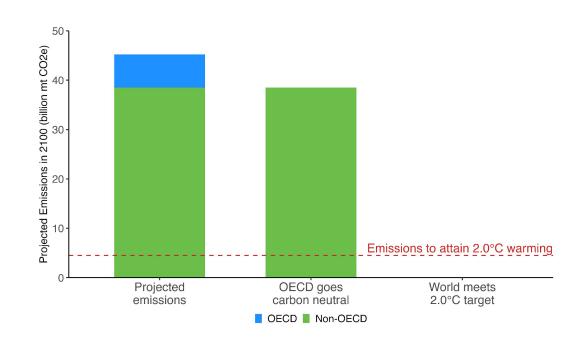
PER CAPITA EMISSIONS BY REGION AND INCOME GROUP

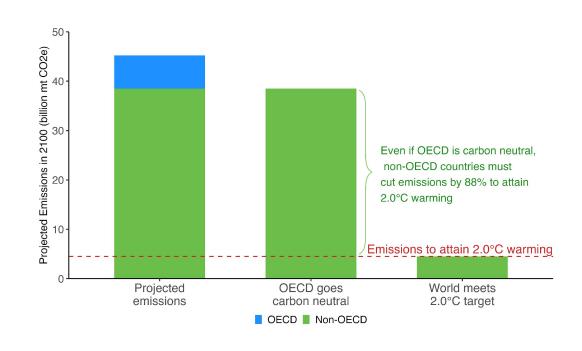


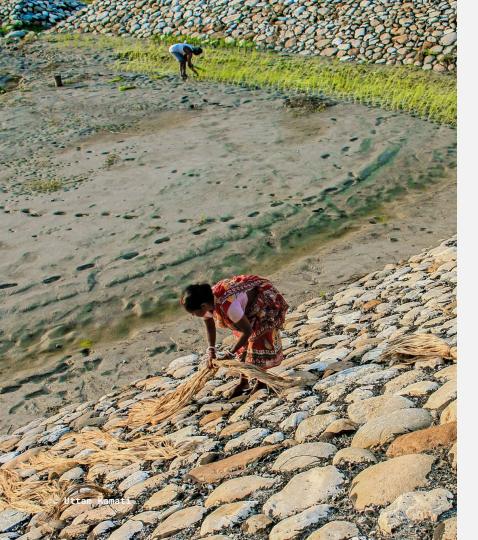
Source: Chancel et al., World Inequality Lab (2023)











THE CHALLENGE BEFORE US:

PUT BACK VULNERABLE PEOPLE AND COUNTRIES AT THE HEART OF THE **CLIMATE EFFORT**

NO GLOBAL CLIMATE KING, QUEEN, OR CEO

/ All actions are voluntary.



© Rafa Neddermeyer/COP30 Brasil Amazônia/PR

2. LMICs ARE UNHAPPY

- / Previous climate finance amounts small compared to damages, needs, and promises.
 Often come as loans and/or with great restrictions;
- / Unlikely to substantially reduce emissions;
- / Trade off immediate welfare vs short term emission reduction pressure.



© Thaier Al-Sudani/Reuters

5. HIGH-INCOME COUNTRIES ARE UNHAPPY

/ Reluctant to cut own emissions and VERY reluctant to provide climate finance.



© Shutterstock

LMICs ARE UNHAPPY

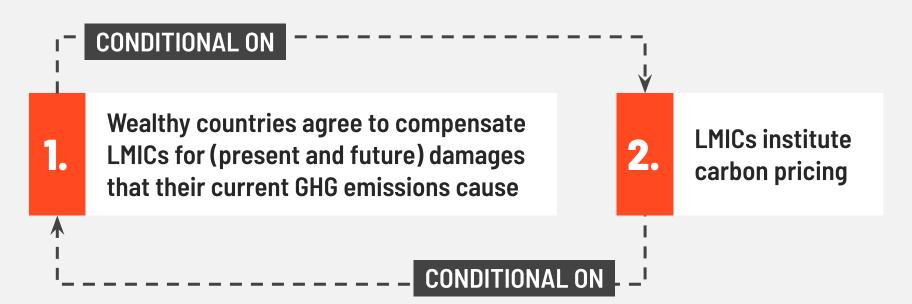
HIGH-INCOME COUNTRIES ARE UNHAPPY 3 DECADES OF FAILURE DEMAND THAT **WE CONSIDER** NEW **APPROACHES**

A GLOBAL CLIMATE GRAND BARGAIN

PRINCIPLE:

BENEFITS MUST EXCEED COSTS FOR ALL PARTIES.

CLIMATE GRAND BARGAIN HAS TWO PARTS:

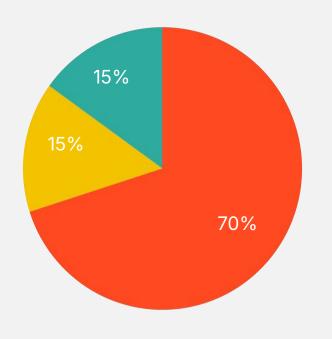


HOW TO SPEND THE KEY PRINCIPLES MONEY BE USEFUL TO THE R MOST AFFECTED A

RESPECT AUTONOMY CONTRIBUTE TO ADAPTATION

F.A.I.R

FORESEEABL AUTOMATIC IMMEDIATE REGULAR



FUNDS ALLOCATED INTO THREE PILLARS:

PILLAR 1: AU

AUTOMATIC TRANSFERS TO HOUSEHOLDS

PILLAR 2:

COMMUNITY BLOCK GRANTS

PILLAR 3:

PRE-ARRANGED CRISIS FINANCING FOR GOVERNMENTS

PILLAR 1

TRANSFERS TO FAMILIES (PIX DO CLIMA)

(70%)

/ Universal Basic Income of \$3 PPP/day in vulnerable countries

/ Triggered by hot days in richer countries (WTBI)



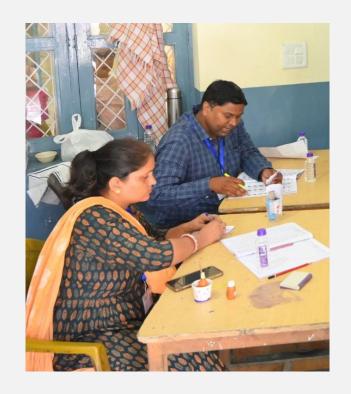
© Joa Souza | Shutterstock

PILLAR 2

COMMUNITY BLOCK GRANTS

(15%)

/ Adaptive measures that must be undertaken by the community



© Sudarshan Jha, Shutterstock

PILLAR 3

PRE-ARRANGED CRISIS FINANCING FOR GOVERNMENTS

(15%)

/ The government ends up being the / insurer of last resort



© Rafaela Felicciano/Metrópoles

^{*} According to a report by the high-level panel on risk prevention, only 2% of the financing for coping with disasters is pre-arranged, through contingent loans, grants, and insurance.

F.A.I.R. WOULD

/ Eliminate extreme poverty

/ Contribute to adaptation



© Shutterstock



WHAT LMIC WOULD DO

GRADUATE D CARBON PRICING

/ COMMON BUT DIFFERENTIATED RESPONSIBILITIES

/ GRADUATED CARBON PRICING BY INCOME LEVEL

- \$10/t FOR LOW-INCOME COUNTRIES
- \$30/t FOR LOWER-MIDDLE INCOME COUNTRIES
- \$50/t FOR UPPER-MIDDLE INCOME COUNTRIES

All rising 5% annually in real terms.

/ EMISSION PRICING WORKS

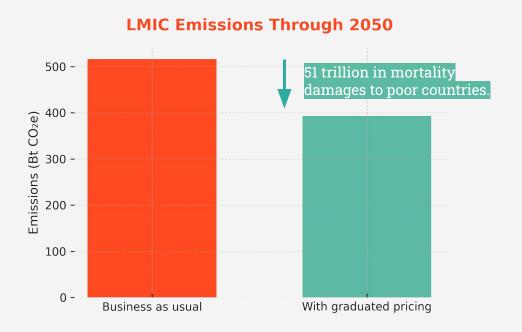
GUJARAT EMISSIONS MARKET

- / Gujarat implemented the world's first particulate-matter trading market in 2019
- / An evaluation found 20-30% emission reductions and lower compliance costs for firms
- / Finalist 2025 Earthshot Prize



© Shutterstock

/ PROJECTED IMPACTS OF LMIC CARBON PRICING



/ PROJECTED IMPACTS OF LMIC CARBON PRICING

CLIMATE AND ECONOMIC IMPACTS OF CARBON PRICES THROUGH 2050

	Business	Emissions	Cumulative Reduction	Average Annual Carbon
	as usual	Reduction	in Climate Damages	Price Revenue
	(Bt CO ₂ e)	(Bt CO ₂ e)	(Billions of USD)	(% of GDP)
Low and Middle Income Countries	516	123	28,553	4.0

Linking damage funding to rich countries' emissions acts as an implicit carbon tax, encouraging mitigation.

WHY WOULD THIS WORK?

WHY WOULD WEALTHY COUNTRIES AGREE TO DO THIS?

MORAL RESPONSIBILITY:

ROOTED IN THE "POLLUTER PAYS" PRINCIPLE

Payments connected to emissions and damages they cause to others.



© Iain Thompson via Wikimedia Commons, licensed under CC BY-SA 2.0

WHY WOULD WEALTHY COUNTRIES AGREE TO DO THIS?

SELF-INTEREST: NO MITIGATION WITHOUT COMPENSATION. WEALTHY COUNTRY WANT TO LIMIT CLIMATE CHANGE



© Keystone

WHY WOULD LMIC AGREE TO DO THIS?

COMPENSATED FOR DAMAGES

Transparent calculations of expected damages in each country. No bargaining or lengthy approvals.

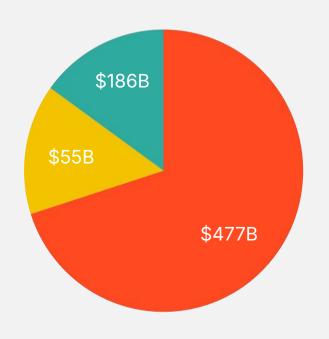
SELF-INTEREST OF MITIGATION:

MITIGATION ALMOST ENTIRELY BENEFITS LMICS.

Carbon pricing is also a source of government revenues, and would attract private financing.

HOW COULD RICH **COUNTRIES** RAISE ENOUGH **MONEY?** PAYING FOR FULL DAMAGES: \$1.8 TRILLION / YEAR

BUT FAIR PROPOSAL IS ONLY \$700 BILLION / YEAR



ESTIMATING THE COST OF FAIR IN

AUTOMATIC TRANSFERS TO HOUSEHOLDS

PILLAR 2: COMMUNITY BLOCK GRANTS

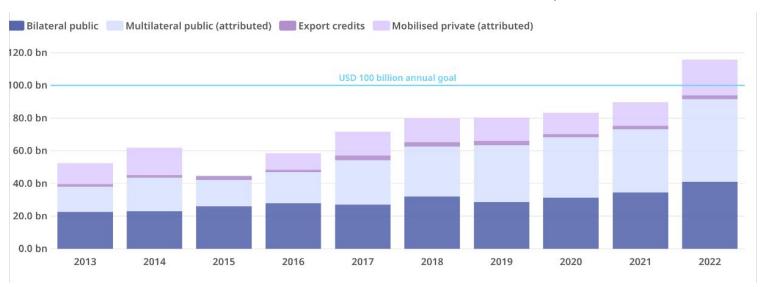
PILLAR 3: PRE-ARRANGED CRISIS FINANCING FOR GOVERNMENTS

TOTAL ESTIMATED COST APPROXIMATELY 1% OF THE OECD GDP

CLIMATE FINANCING SO FAR

CLIMATE FINANCE FOR DEVELOPING COUNTRIES

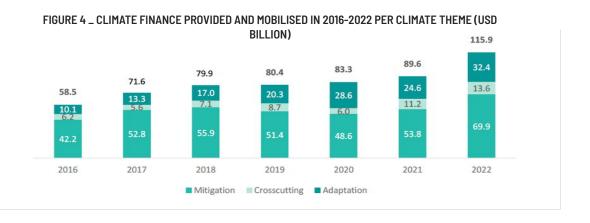
AMOUNTS PROVIDED AND MOBILISED BY DEVELOPED COUNTRIES, BILLION USD



The gap in the private finance series in 2015 is due to the implementation of enhanced measurement methodologies. As a result, private flows for 2016-22 cannot be directly compared with private flows for 2013-14.

Source: 0ECD (2024)

CLIMATE FINANCING SO FAR





SEVERAL OPTIONS TO RAISE MONEY

CO2 / CARBON TAX IN RICH COUNTRIES

- \$ / GENERAL BUDGET PROCESS
- **■■■ / IMPROVE THE FAIRNESS OF INTERNATIONAL TAXATION**

HISTORICA L COP



O Brasil vai trabalhar de

maneira incansável para a

ricos e o combate à fome.

Fernando Haddad Ministro da Fazenda

taxação internacional dos mais

"COP30 WILL BE THE MOMENT TO RECOGNIZE THAT **ADAPTING IS NOT A** SIGN OF WEAKNESS, BUT OF WISDOM". A. C. DO LAGO

"BRAZIL WILL WORK TIRELESSLY TO TAX THE RICHEST AND COMBAT HUNGER"

FERNANDO HADDAD MIN. FINANCE

GLOBAL SOLIDARIT Y LEVIES



USD 4-150 billion



USD 100/ton CO2eq, base year 2026; approx. USD \$60 billion



USD 5/ton CO2, base year 2021; approx. USD \$210 billion



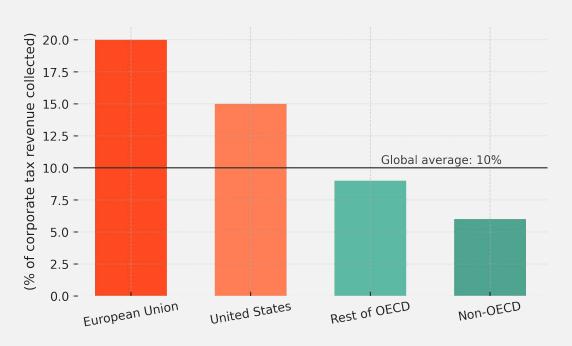
2% on wealth potential to raise USD 250 billion per year



0.1% financial-transactions tax could raise up to USD \$418 billion

TAX REVENUE LOST DUE TO PROFIT SHIFTING

THE ULTRA-RIC H DON'T PAY TAXES



Source: Zucman et al.(2024)

IMPROVE AND
SLIGHTLY INCREASE
THE TAX ON
MULTINATIONAL
CORPORATIONS

\$300-500 BILLION USD BRAZILIAN
PROPOSAL
FOR TAX ON
BILLIONAIRES

\$200 BILLION USD

A GLOBAL **CLIMATE GRAND NECESSARY**

PLANET ASKING FOR A

WHITCO mpensation, little hope for meaningful LMIC mitigation (guarantees substantial climate change)

A GLOBAL **CLIMATE GRAND NECESSARY**

MORAL RESPONSIBILITY COMBINED WITH SELF-INTEREST

Rooted in the "polluter pays" principle; Reduces the odds of disruptive climate change

A GLOBAL **CLIMATE GRAND** FEASIBLE & **NECESSARY**

RESPECTS SELF-DETERMINATION

Preserves agency for both wealthy and lmic and is "carrot" instead of "stick"

A GLOBAL **CLIMATE GRAND** FEASIBLE & **NECESSARY**

REALISTIC

Built to accommodate incomplete participation by all

JUST ECONOMICS:

A Grand Bargain for Adaptation, Mitigation, and Compensation

A GLOBAL CLIMATE PROPOSAL



ABHIJIT BANERJEE ESTHER DUFLO MICHAEL GREENSTONE