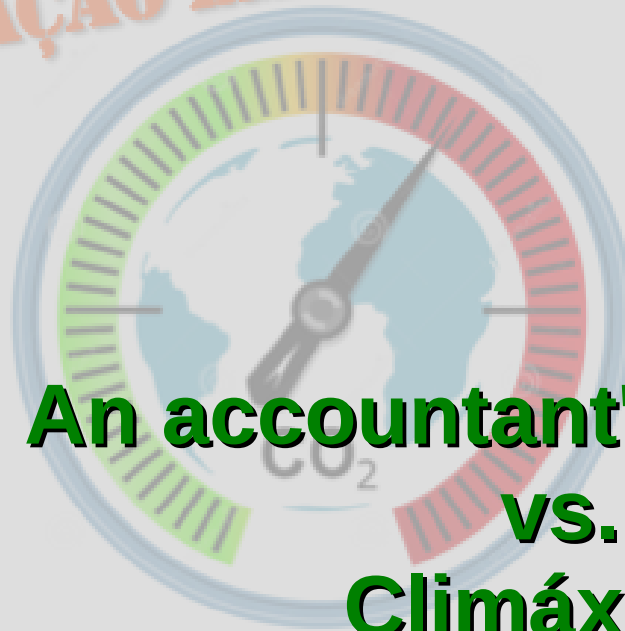


ACTIVISMO CLIMÁTICO EM ACCÇÃO

What to do?

FORMAÇÃO EM EMERGENÇAS CLIMÁTICAS



An accountant's approach
vs.
Climáximo

28
FEVEREIRO
10H
NO GAIA

RUA DA
REGUEIRA,
Nº 40



INSCREVE-TE
ENVIA MAIL PARA
CLIMAXIMO@RISEUP.NET

What does IPCC say?

- baseline scenarios: 3.7 – 4.8 °C
 - 2.5 – 7.8 °C when including climate uncertainty
- less than 2°C means:
 - 450 ppm CO₂-eq
 - 40% to 70% greenhouse gas emission cut by 2050
 - zero emission by 2100
- limited evidence
 - 430 ppm CO₂-eq
 - less than 1.5°C with a probability more than 50%
 - 70-95% cut by 2050

What does IEA say?

By 2040, the world's energy supply mix divides into four almost-equal parts: oil, gas, coal and low-carbon sources. ... energy-related carbon dioxide (CO₂) emissions grow by one-fifth.

This puts the world on a path consistent with a long-term global average temperature increase of 3.6°C. IPCC estimates that in order to limit this temperature increase to 2 °C the world cannot emit more than around 1000 gigatonnes of CO₂ from 2014 onwards.

This entire budget will be used up by 2040 in our central scenario.

What does the accountant say?

$$CO_2 = \frac{CO_2}{TOE} * \frac{TOE}{GDP} * \frac{GDP}{POP} * POP$$

**CO₂
emissions**

**Carbon
content of
the energy**

**Energy
intensity**

**Production
per person**

Population

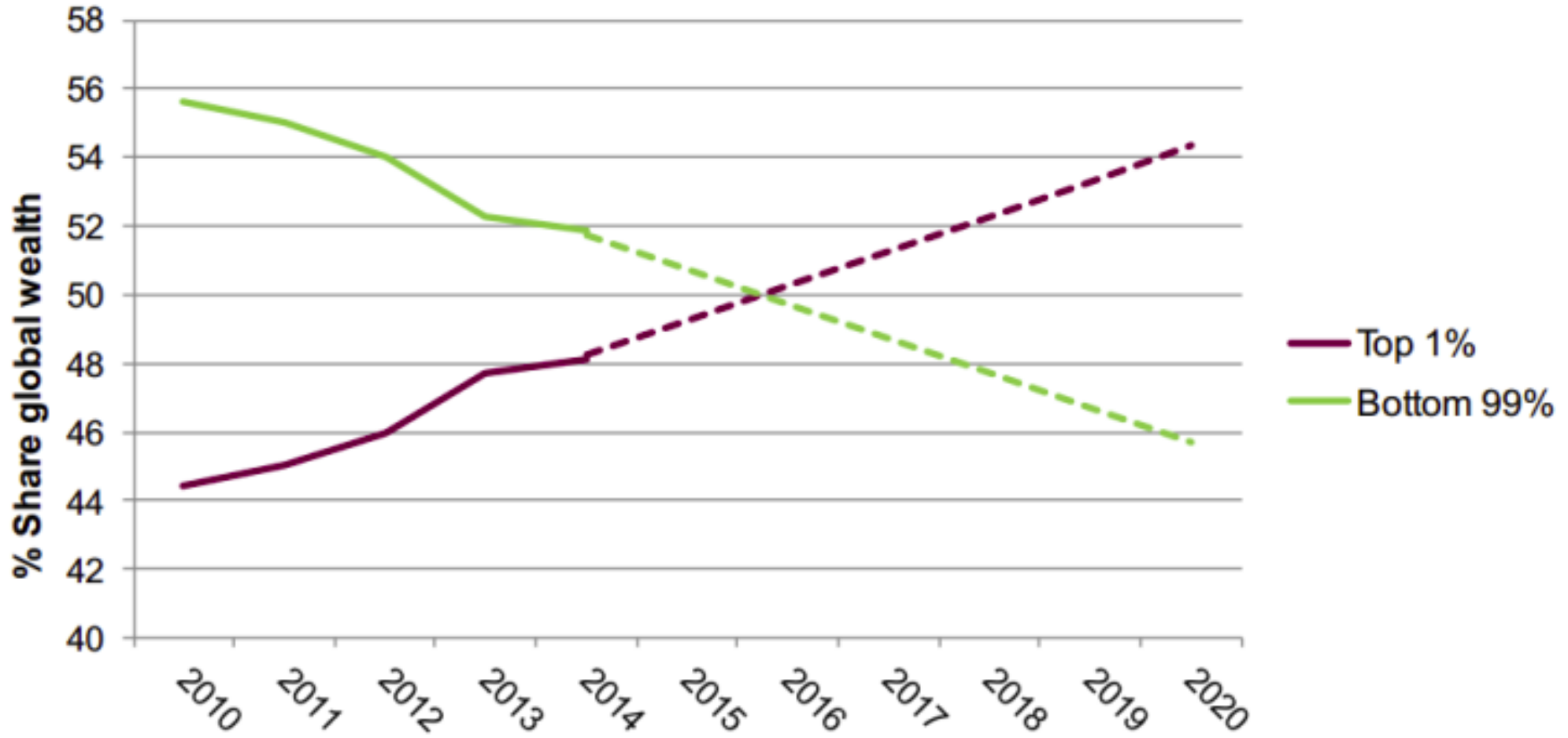
*Renewable
energy sources*

*Energy
efficiency*

Degrowth

*Population
control.
Genocide?*

What do you mean “population”?



What do you mean “population”?

BACKGROUND



Area

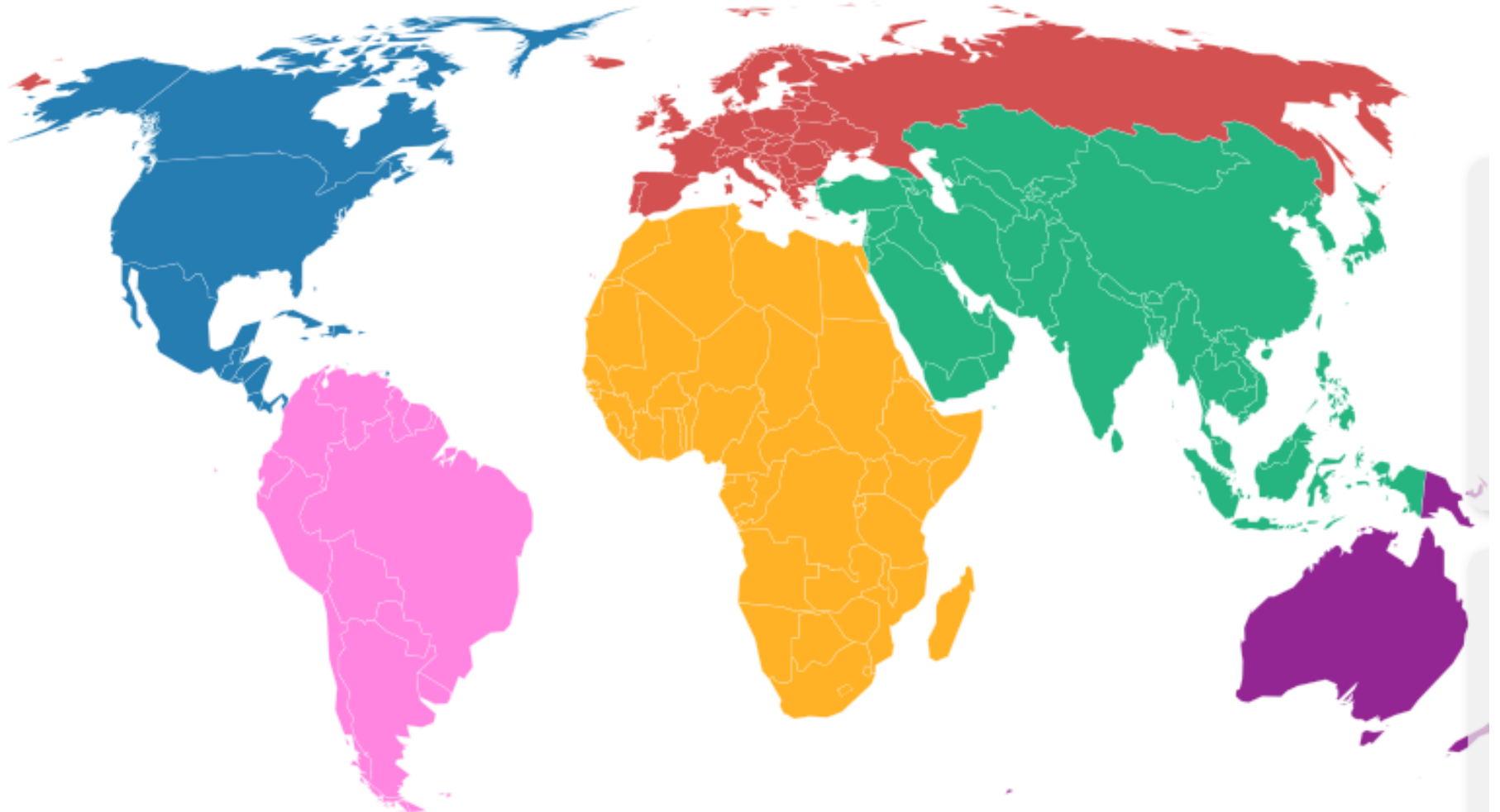
Population Wealth

RESPONSIBILITY

Extraction Emissions Consumption Historical Reserves

VULNERABILITY

People at risk Sea level Poverty



BACKGROUND

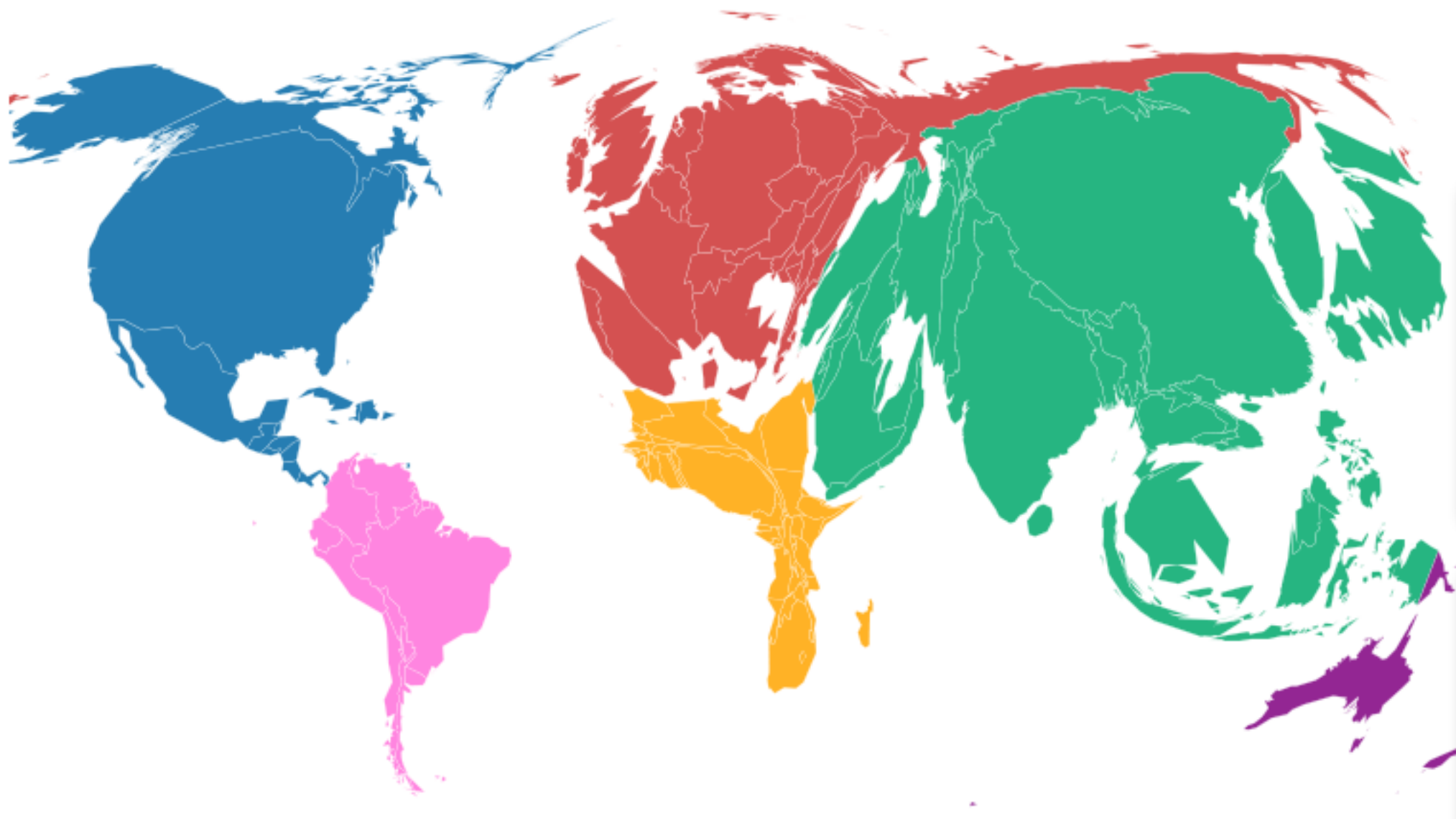
↻ Area Population **Wealth**

RESPONSIBILITY

Extraction Emissions Consumption Historical Reserves

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People at risk Sea level Poverty



BACKGROUND

RESPONSIBILITY

VULNERABILITY



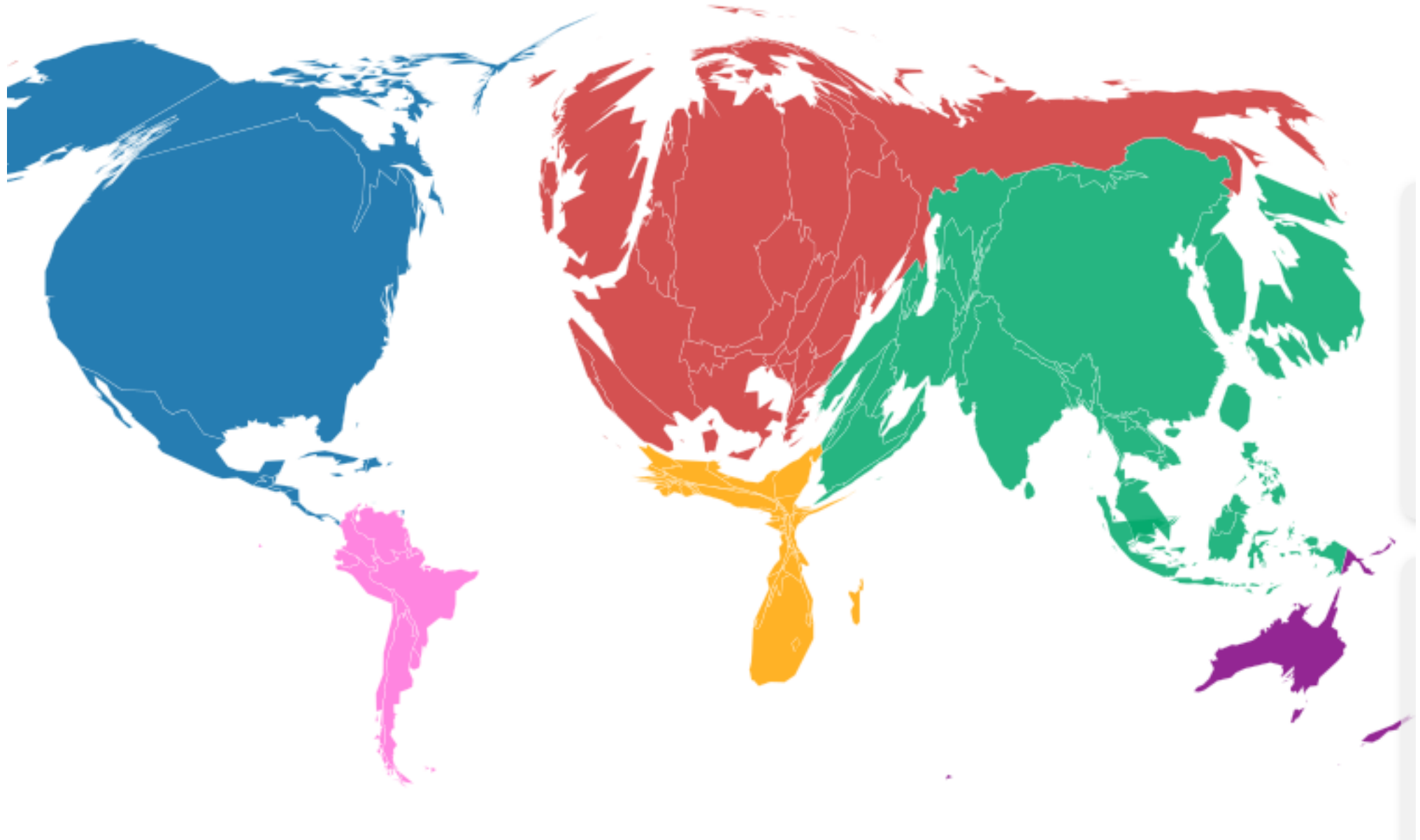
Area Population Wealth

Extraction Emissions Consumption



Reserves

People at risk Sea level Poverty



BACKGROUND

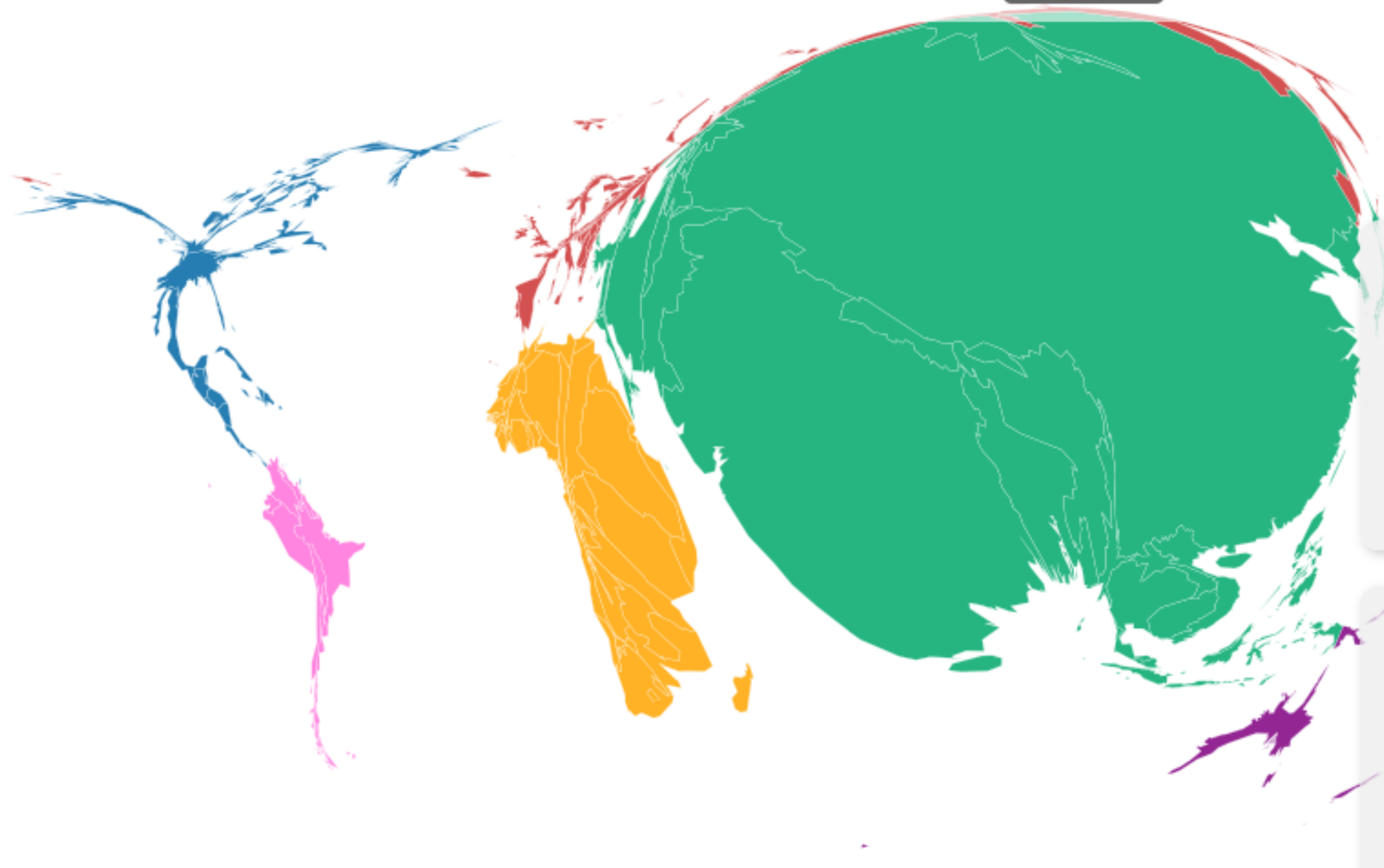
RESPONSIBILITY

VULNERABILITY

Area Population Wealth

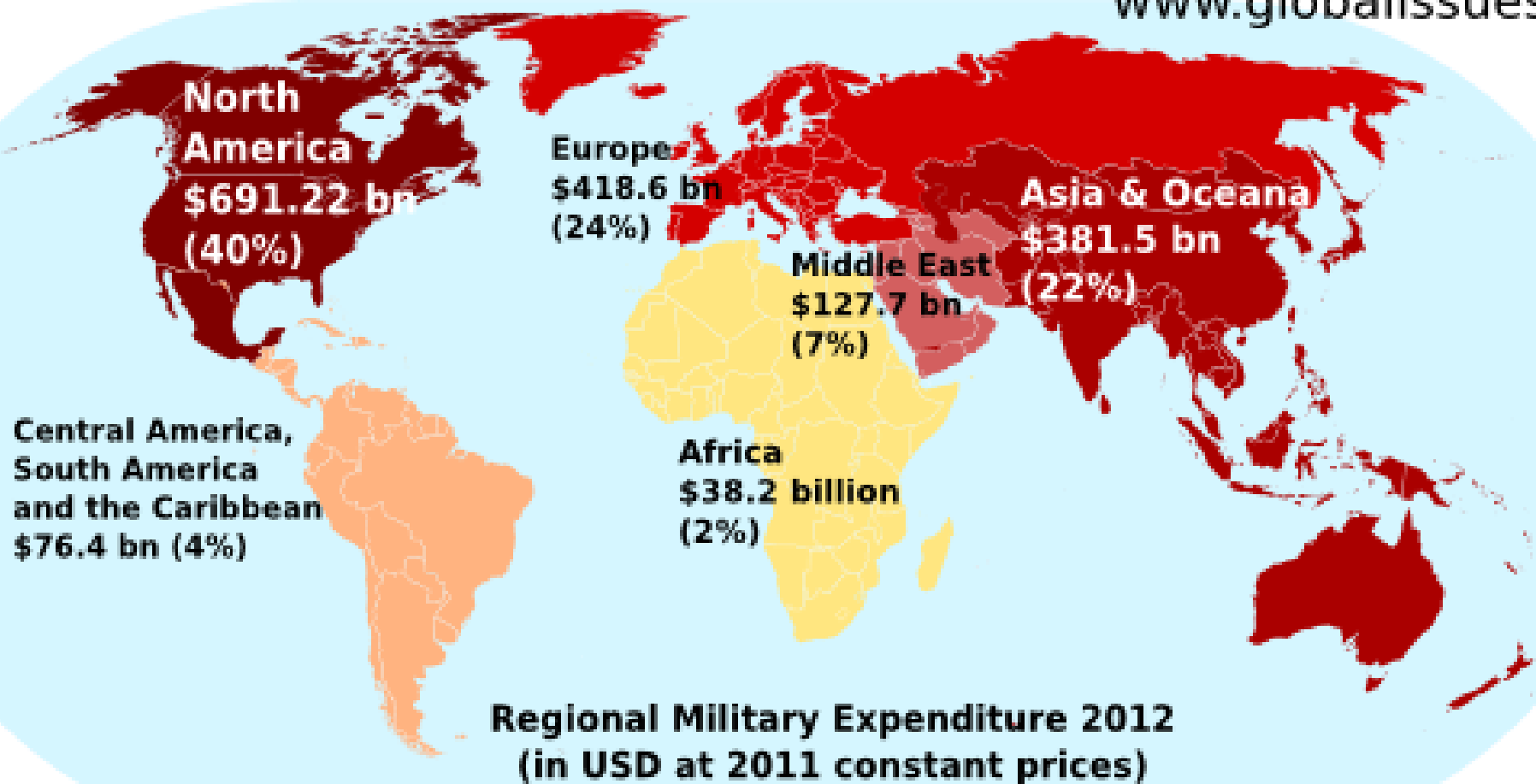
Extraction Emissions Consumption Historical Reserves

People at risk Sea level Poverty



What do you mean “production per person”?

www.globalissues.org



Source: Stockholm International Peace Research Institute

What do you mean “production per person”?

2010 World Cup, South Africa:

2.8 million tonne CO₂-e

Iraq War (since 2003):

250-600 million tonne CO₂-e

Only the US spends 3.5 million barrels of fuel in Iraq and Afghanistan. This means 320.000 tonne CO₂ per day.

What do you mean “energy intensity”?

Jevons paradox:

increased energy (and material-resource) efficiency leads not to conservation but increased use.

“If the quantity of coal used ... be diminished in comparison with the yield, the profits of the trade will increase, new capital will be attracted, the price of pig-iron will fall, but the demand for it [will] increase; and eventually the greater number of furnaces will more than make up for the diminished consumption of each. And if such is not always the result within a single branch, it must be remembered that the progress of any branch of manufacture excites a new activity in most other branches, and leads indirectly, if not directly, to increased inroads upon our seams of coal.”

*William Stanley Jevons,
The Coal Question (1865)*

This is theory, how is reality?

“Over the last thirty-five years,

energy expended per dollar of GDP has been cut in half. But rather than falling, energy demand has increased, by roughly 40%. **Moreover, demand is rising fastest in those sectors that have had the biggest efficiency gains—transport and residential energy use.**

Refrigerator efficiency improved by 10%, but the number of refrigerators in use rose by 20%.

In aviation, fuel consumption per mile fell by more than 40%, but total fuel use grew by 150% because passenger miles rose.

CO₂ from these two sectors has risen 40%, twice the rate of the larger economy.

Economists and environmentalists who try to measure the direct effects of efficiency on the lowering of price and the immediate rebound effect generally tend to see the rebound effect as relatively small, in the range of 10 to 30 percent in high-energy consumption areas such as home heating and cooling and cars. But once the indirect effects, apparent at the macro level, are incorporated, the Jevons Paradox remains extremely significant.”

*(John Bellamy Foster, Brett Clark and Richard York;
“Capitalism and the Curse of Energy Efficiency: The Return of the Jevons
Paradox”)*

And wait !

Why did you factor GDP here?

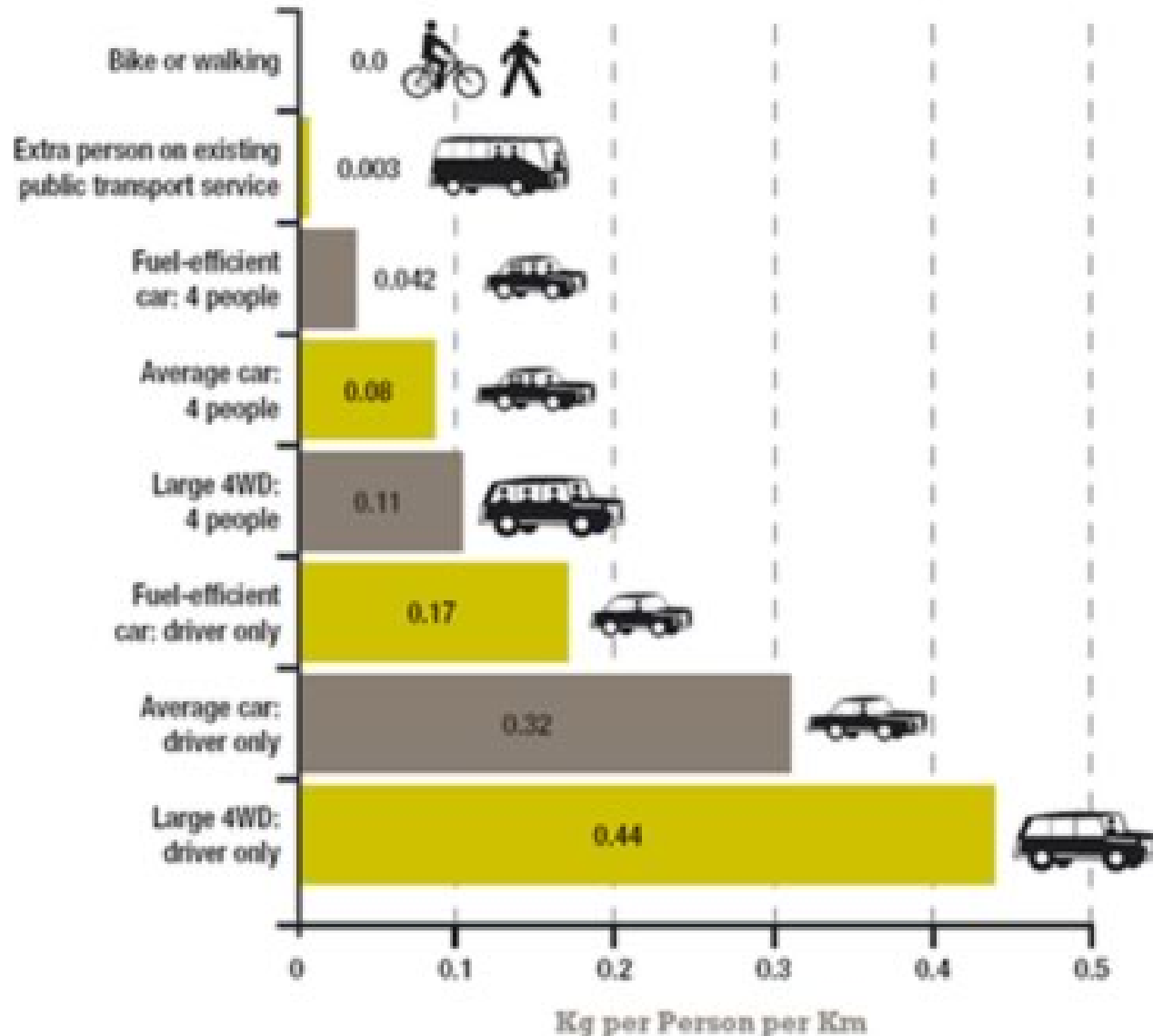
$$CO_2 = \frac{CO_2}{TOE} * \frac{TOE}{GDP} * \frac{GDP}{POP} * POP$$

TOE

—
POP

Do people want “production” in itself?

Greenhouse Gas Emissions from
different forms of Transport



Finally, renewables, right?

TOP TEN ON FORTUNE 500

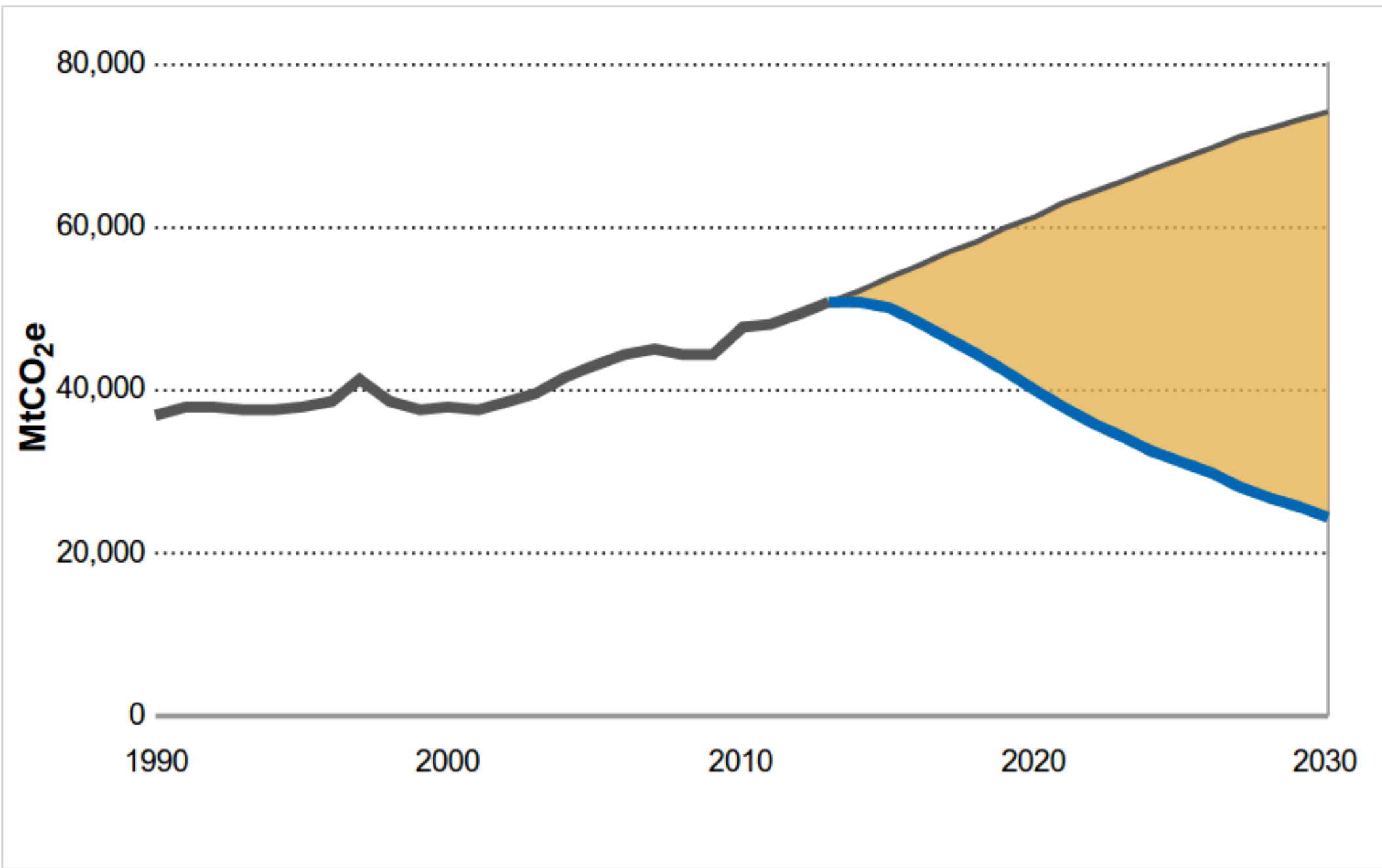
Rank	Company	Revenue(\$ million)	Profit(\$ million)
1	Royal Dutch Shell PLC	484,489	30,918
2	Exxon Mobil Corp	452,926	41,060
3	Wal-Mart Stores Inc	446,950	15,699
4	BP PLC	386,463	25,700
5	Sinopec Group	375,214	9,453
6	China National Petroleum Corp	352,338	16,317
7	State Grid Corp of China	259,142	5,678
8	Chevron Corp	245,621	26,895
9	ConocoPhillips	237,272	12,436
10	Toyota Motor Corp	235,364	3,591

Source: Fortune

And thus spoke IEA:

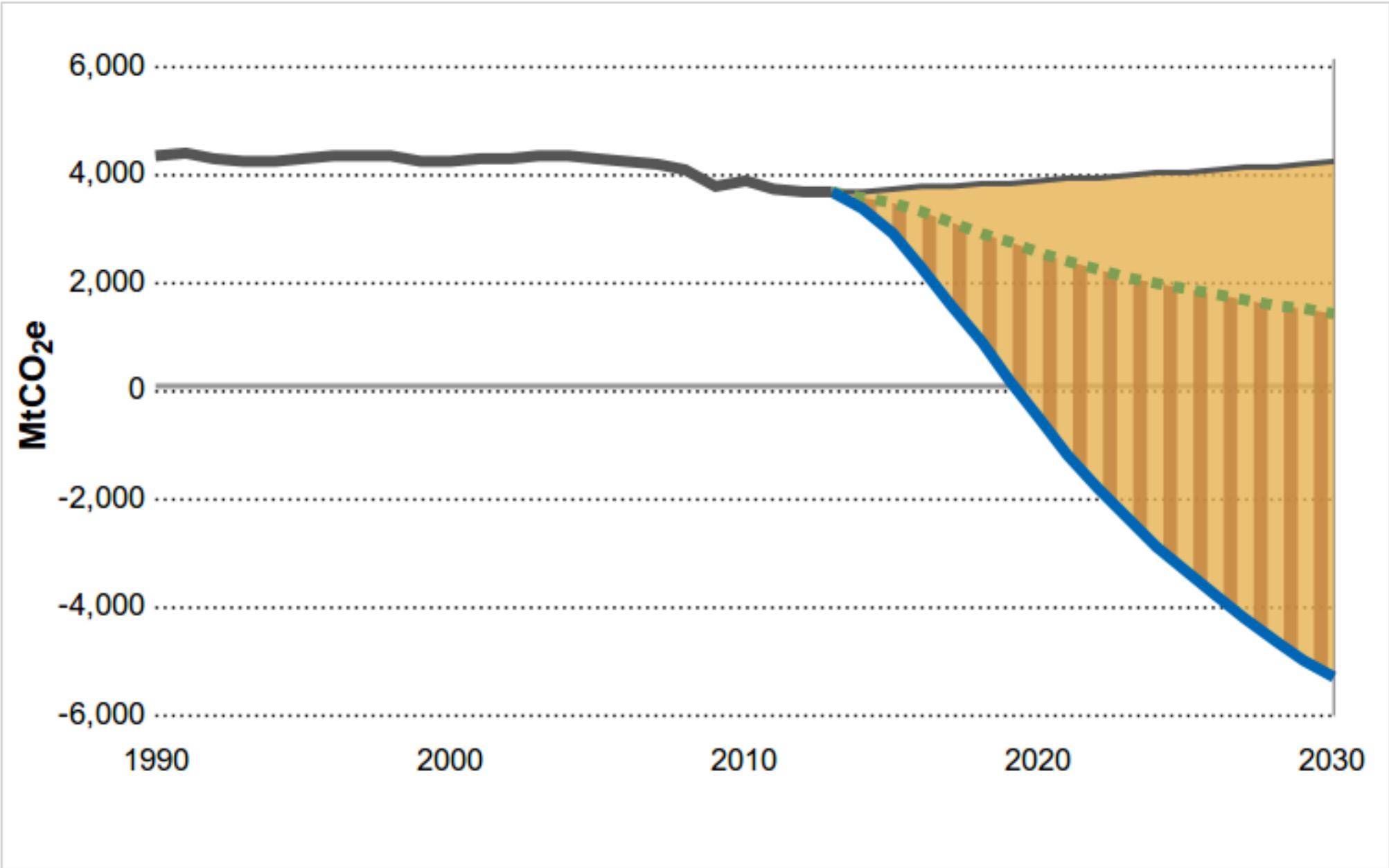
“Fossil-fuel subsidies totalled \$550 billion in 2013 – more than four-times those to renewable energy.”

What to do:



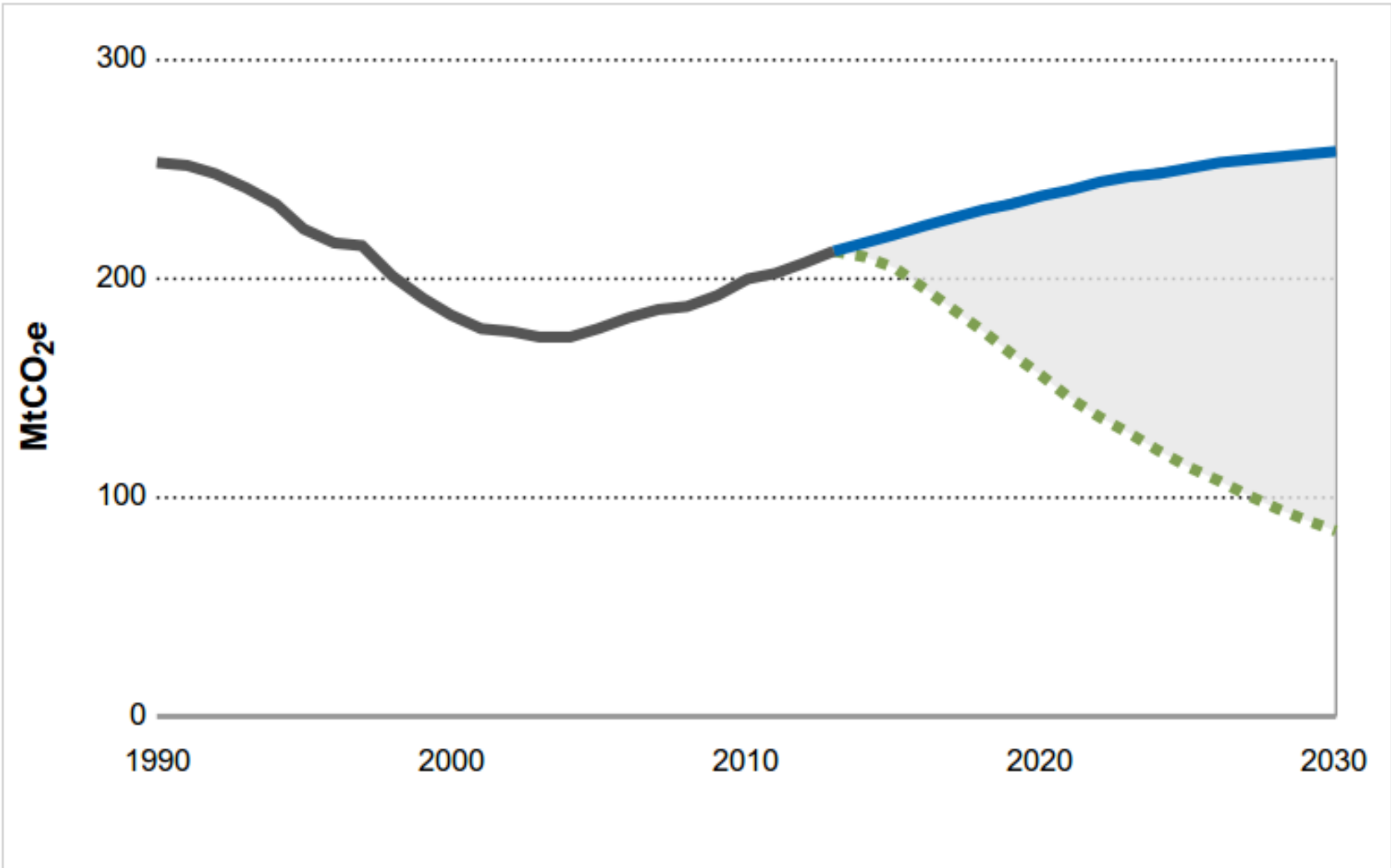
Country/region report in 2030 for EU 15

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Country/region report in 2030 for Congo, Democratic Republic of the

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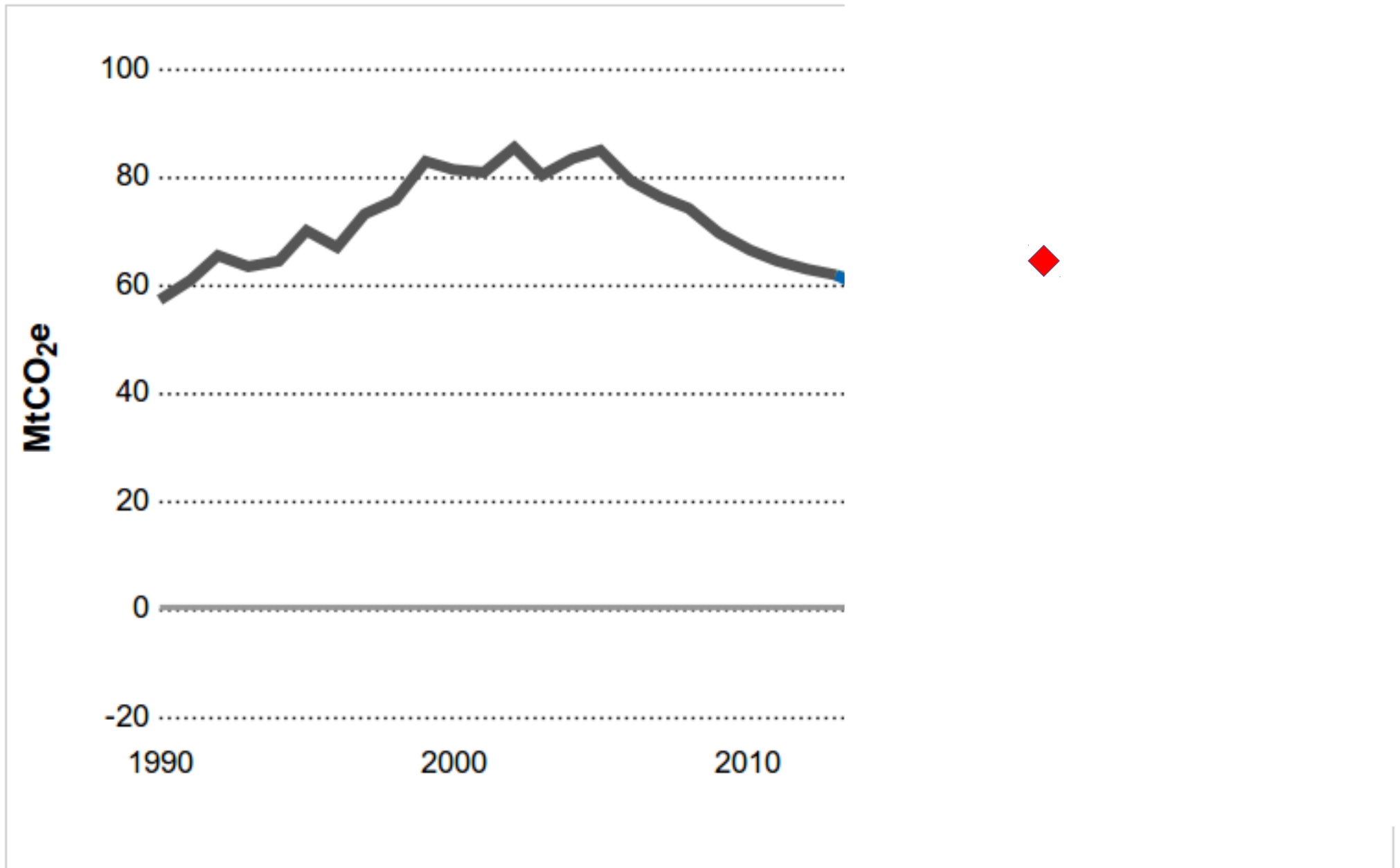
Country/region report in 2030 for Portugal

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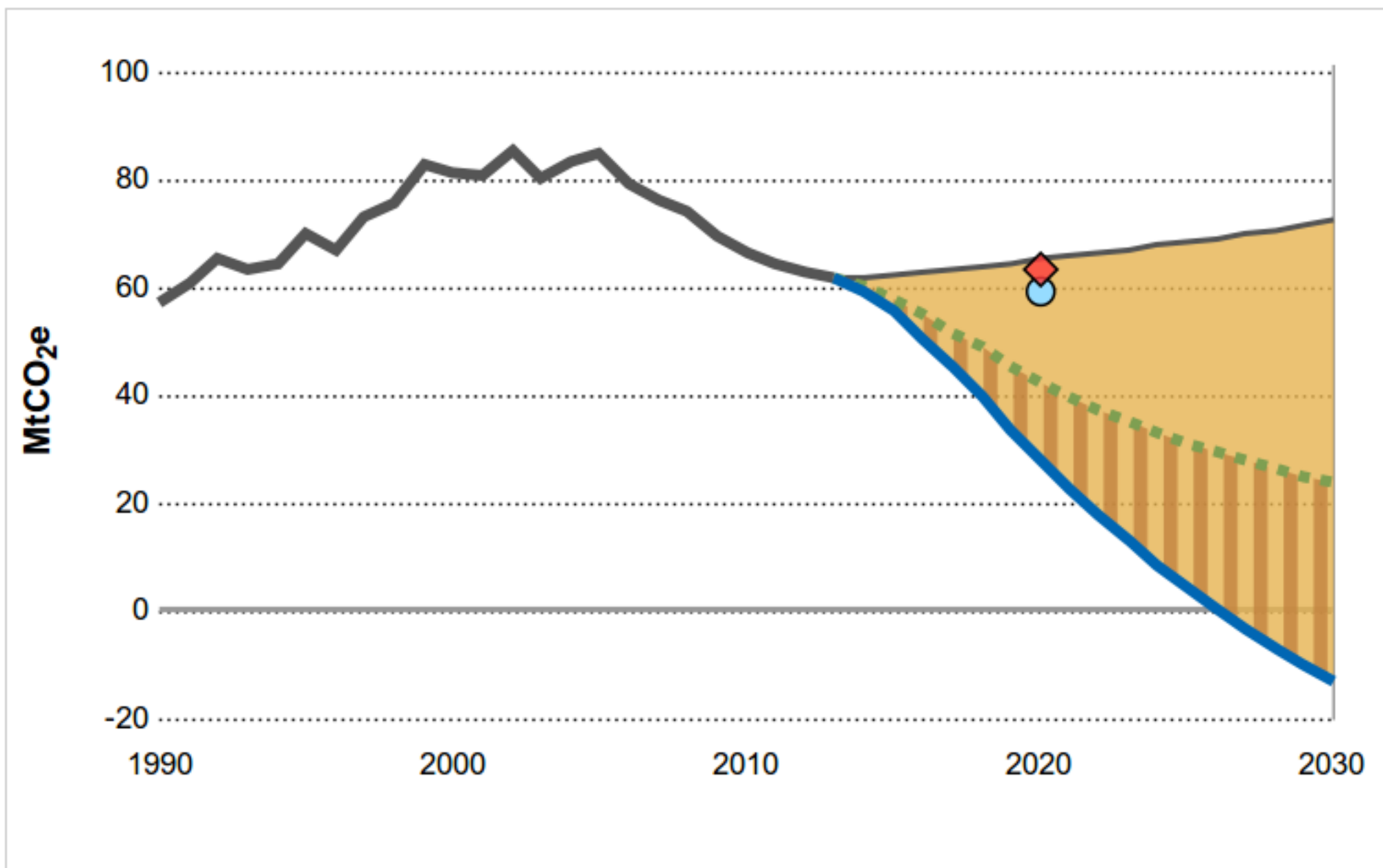
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In addition to what we talked about until now...

- Tax and Dividend
- 1 Million Climate Jobs
- Fracking ban
- Divestment / Fossil Free Europe