

Global net zero emissions by 2050

A first-order benefit-cost analysis derived from mainstream sources, methods and midrange data

A: How much global warming would worldwide net zero abate?



1. NOAA's graph shows a straight-line **1-unit** increase in manmade influence on temperature from 1990-2020. The small influence of **methane** is unchanged (**no need** to destroy the West's cattle farms). Units are W m⁻².



2. If the whole world went in a straight line to net zero by 2050, just half the next unit of increase in our climate influence would be abated. That is the starting fact for this first-order, back-of-the-envelope analysis.



GLOBA

1 unit (W m-2

30 years' human influence (NOAA AGGI) ⇒ straight line to global net zero by 2050 x final warming per influence unit (IPCC 2021) 0.75 C°/unit = final warming prevented by global net zero 0.375 C

0.5 units

B: How much would global net zero by 2050 cost the world?

McKinsey & Company

3. Each unit abated prevents **3/4 C°** global warming ...

'In economic terms, spending on physical assets on the course to net-zero would reach about US\$275,000 bn by 2050, or US\$9.2 trillion per year on average ... equivalent to about half of global corporate profits, a quarter of total tax revenue, and 7% of household spending.' mckinsey.com/mgi/overview/in-the-news/what-it-will-cost-to-get-to-net-zero

5. McKinseys put Capex alone at £275,000 bn. Add about **2xCapex** for **Opex**. Then the cost of net zero is \$800,000 billion, equivalent to 150% of global corporate profits.



4. ... so half a unit would prevent no more than 3/8 C°.

30 years' human climate influence (NOAA AGGI) 1 unit (W m-2) ⇒ straight line to global net zero by 2050

x final warming per influence unit (IPCC 2021) = final warming prevented by global net zero

÷[capex\$275tn (McKinsey 2022) +\$525tn opex] \$800,000 bn

= Final warming prevented per \$1 billion spent 1/2,000,000 C°

0.5 units 0.75 C°/unit 0.375 C°

6. Each \$1 billion spent on mitigation would purchase less than one 2-millionth of a degree of global warming prevented – a tiny benefit at inordinate cost.

C: How much adjustment for IPCC's over-predicted warming?



Predicted,1850-2030 (IPCC 1990, p. xxiv) - Observed, 1850-1990 (HadCRUT5)

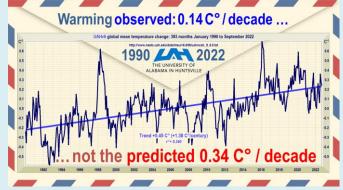
- = Predicted, 1990-2030 (IPCC 1990)
- Predicted, 1990-2030 (IPCC 1990)
- ÷ Number of decades from 1990-2030
- = Predicted decadal warming (IPCC 1990)

OFFICIAL MIDRANGE ESTIMATES

1.8 C° 0.45 C°

1.35 C° 4 decades

0.34 C°/decade



8. Though **IPCC**'s midrange prediction of medium-term warming for 1990-2030 was **0.34 C°/decade**, observed warming to 2022 by **UAH satellites** was **0.14 C°/decade**.

7. IPCC (1990) predicted **1.8 C°** warming for 1850-2030. Deduct **0.45 C°** observed to 1990. **IPCC**'s prediction was thus **1.35 C°** in **4 decades** 1990-2030 (**0.34 C°/decade**).

9. Correcting for just 0.14 C°/decade warming observed by UAH satellites, vs. 0.34 C°/decade global warming for 30 years 1990-2022 predicted by IPCC in its 1990 report, global net zero from 2020-2050 would prevent only 0.15 C° final warming.

Each \$1 bn spent would prevent only 1/5,000,000 C° final warming.

GLOBAL NET ZERO



NO BENEFIT: EXCESSIVE COST

Straight line to global net zero by 2050 (NOAA) x final warming per influence unit (IPCC 2021)

x UAH-obsvd/IPCC-predicted warming, 1990-2022 0.14/0.34=0.41

= final warming prevented by global net zero

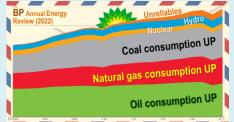
÷ (capex \$275 tn (McKinsey 2022) + \$525 tn opex)

= final warming prevented per \$1 billion spent

0.5 units 0.75 C°/unit 2 0.14/0.34=0.41 0.15 C°

\$800,000 bn 1/5,000,000 (

D: How much adjustment for developing nations' exemption?







10. Coal, oil and gas consumption are rising, chiefly in China and India: 70% of recent primary energy growth, as BP shows, is in Paris-exempt countries. Even the West, though bound by the Paris treaty, will not reach net zero:

Global net zero to 2050 Obsvd. I.P.C.C.

World: warming prevented 0.15 to 0.38 C

West: warming prevented 0.05 to 0.13 C

West: Realistic prevented 0.02 C'