

**Net Zero for Dummies**

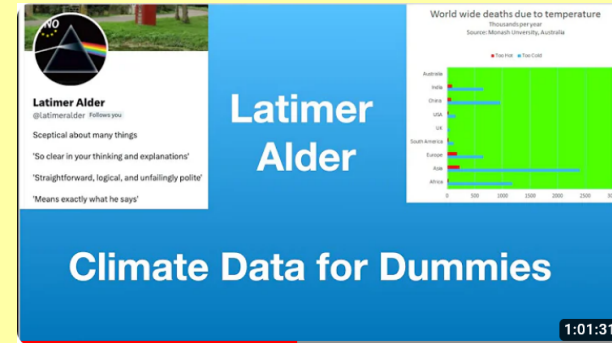
Latimer Alder

*Twitter: @latimeralder*

April 2024

# Introduction

- Independent Commentator
- Not affiliated to any organisation
- I go where the data takes me



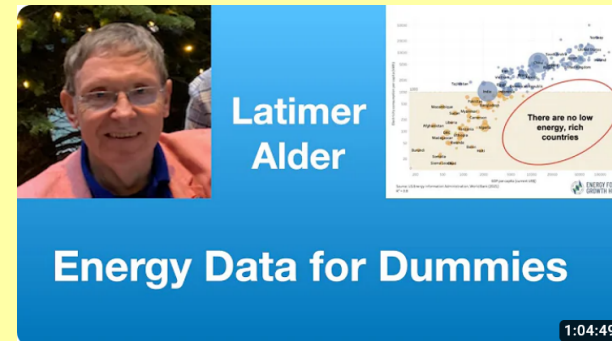
**Latimer Alder**  
@latimeralder Fellow  
Sceptical about many things  
'So clear in your thinking and explanations'  
'Straightforward, logical, and unfailingly polite'  
'Means exactly what he says'

**World wide deaths due to temperature**  
Deaths per year  
Source: Monash University, Australia

Region	Heat	Cool
Australia	~100	~100
India	~100	~100
China	~100	~100
USA	~100	~100
UK	~100	~100
South America	~100	~100
Europe	~100	~100
Asia	~100	~100
Africa	~100	~100

**Climate Data for Dummies**

1:01:31



**Latimer Alder**

**There are no low energy rich countries**

**Energy Data for Dummies**

1:04:49

# Agenda

The 'Science' of Net Zero

A Net Zero Case Study – UK

Net Zero in the World

Conclusions

# What is Net Zero?

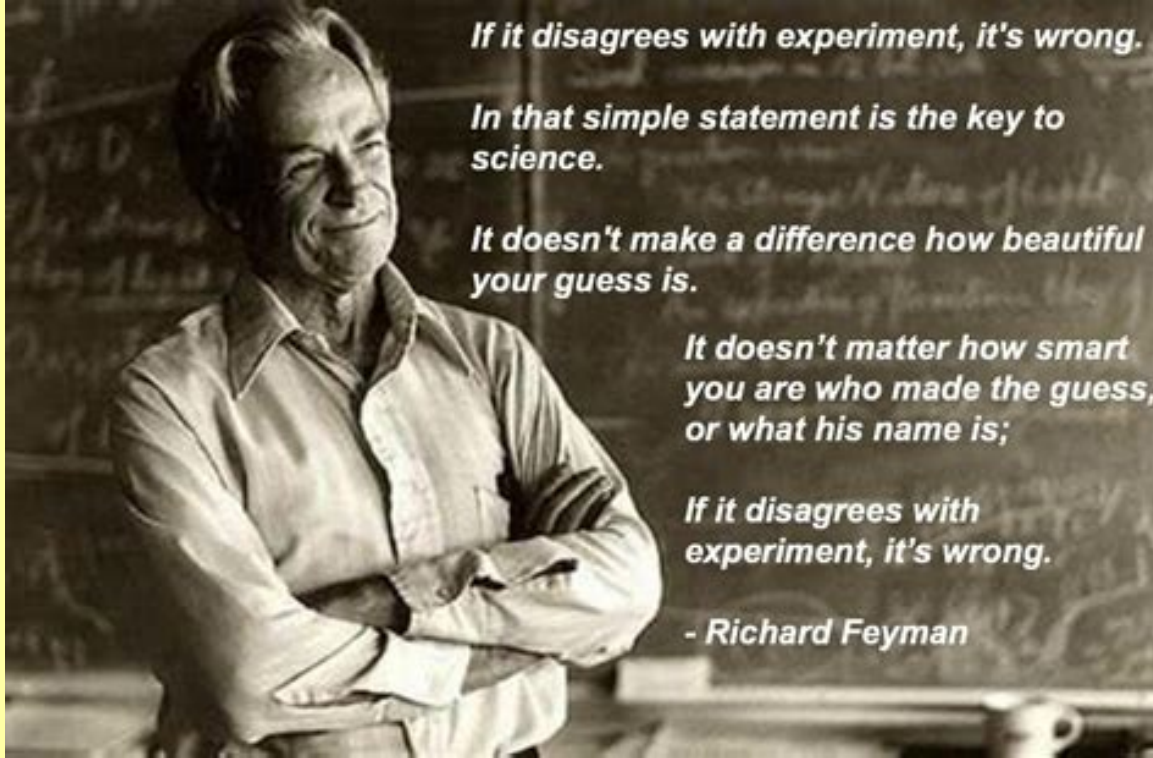
The idea that we/Earth are/is in so much peril  
our only hope is to eliminate all fossil fuels:-

Rapidly

Completely

At any cost – financial or societal

# What is Science?



*If it disagrees with experiment, it's wrong.*

*In that simple statement is the key to science.*

*It doesn't make a difference how beautiful your guess is.*

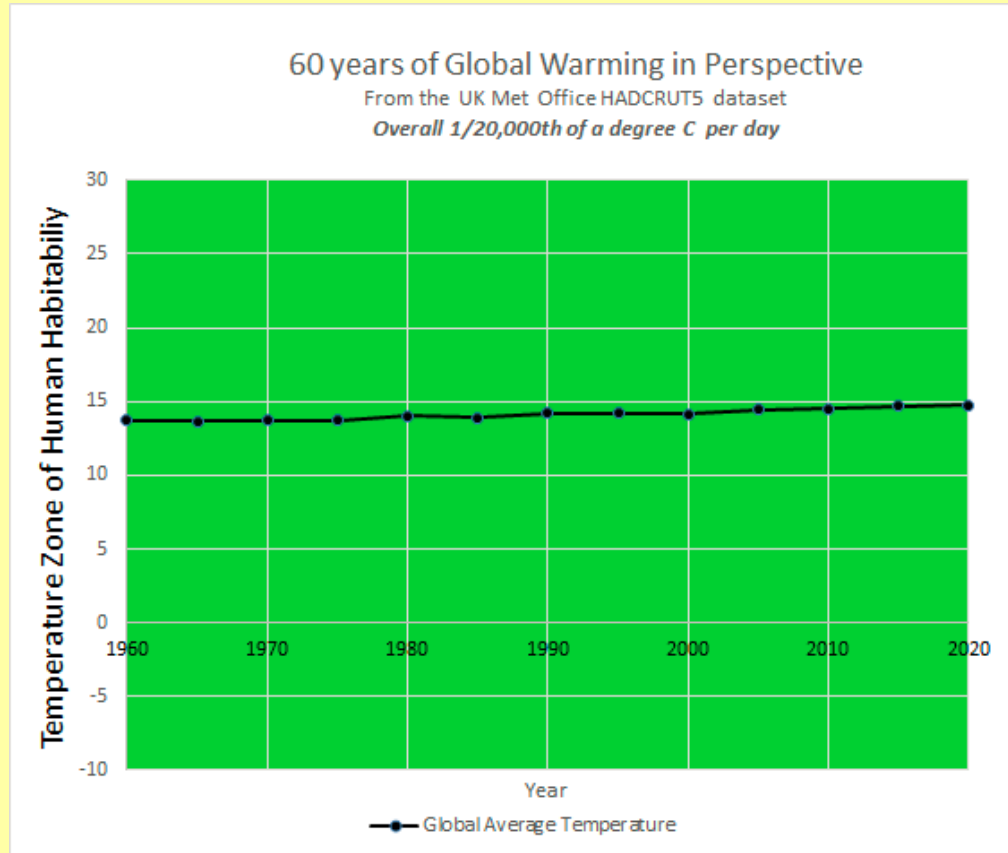
*It doesn't matter how smart you are who made the guess, or what his name is;*

*If it disagrees with experiment, it's wrong.*

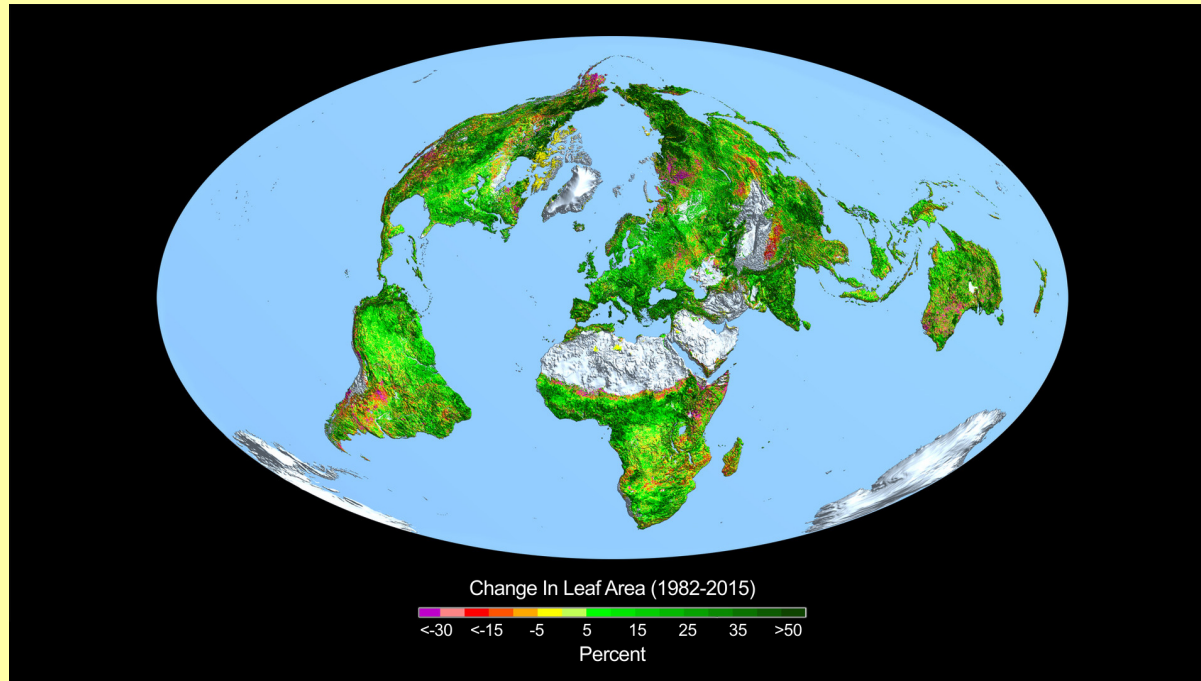
*- Richard Feynman*

# Global Warming/Climate Change

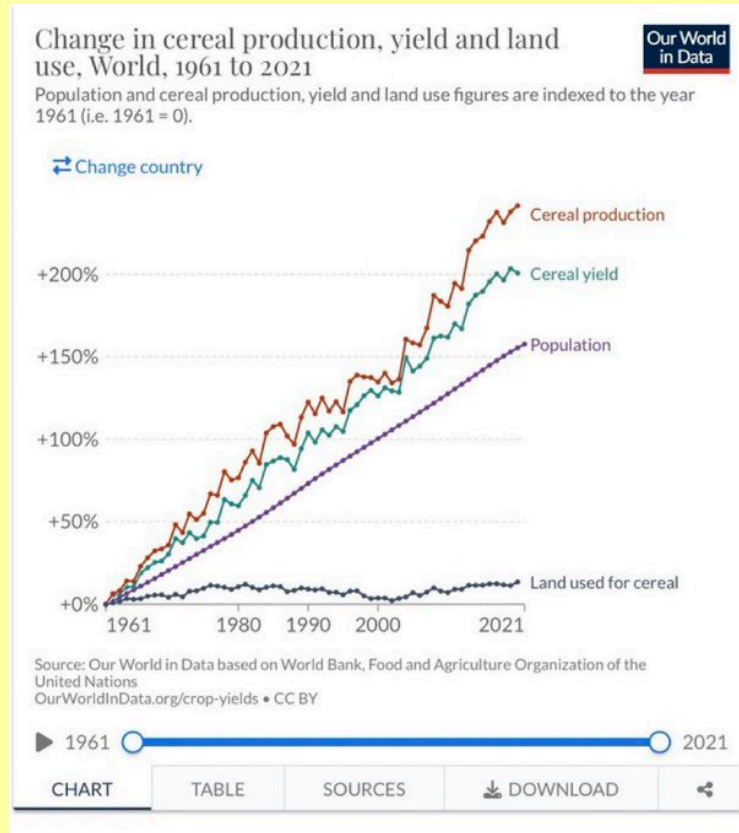
## *Doing the Experiment!*



# 'Catastrophic' Climate Change? *A Greener World*



# 'Catastrophic' Climate Change? *A Better Fed World*

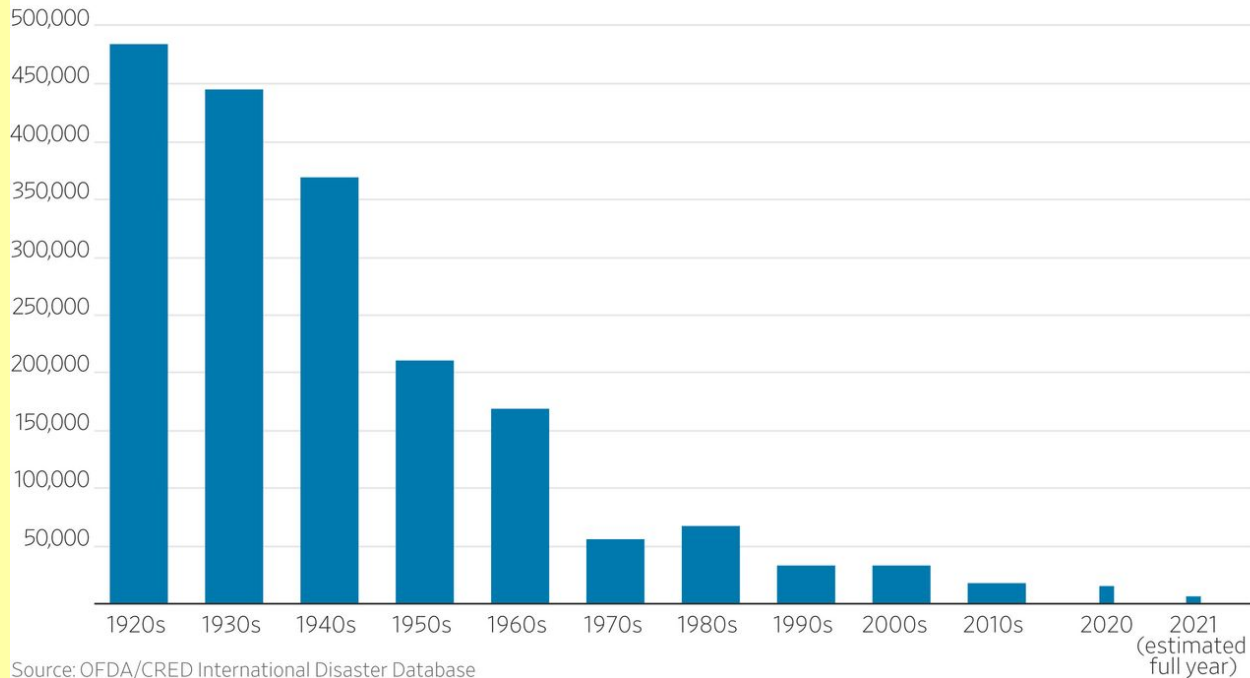




# 'Catastrophic' Climate Change? *A Safer World*

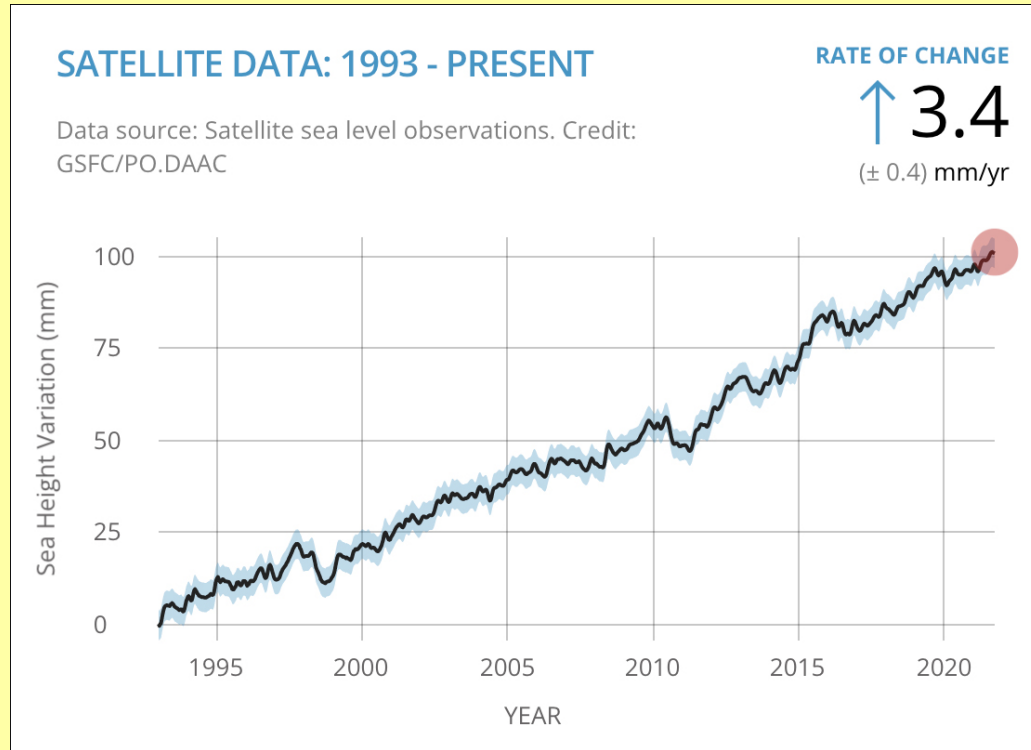
## Climate-Related Disasters Kill Ever Fewer

Global deaths from floods, droughts, storms, wildfire and extreme temperatures, annual average by decade 1920-2019, per year for 2020 and 2021



Source: OFDA/CRED International Disaster Database

# 'Catastrophic' Climate Change? *Sea Level Rise – 1 foot a Century*



# The Climate Change Experiment *Results*

A Warmer World

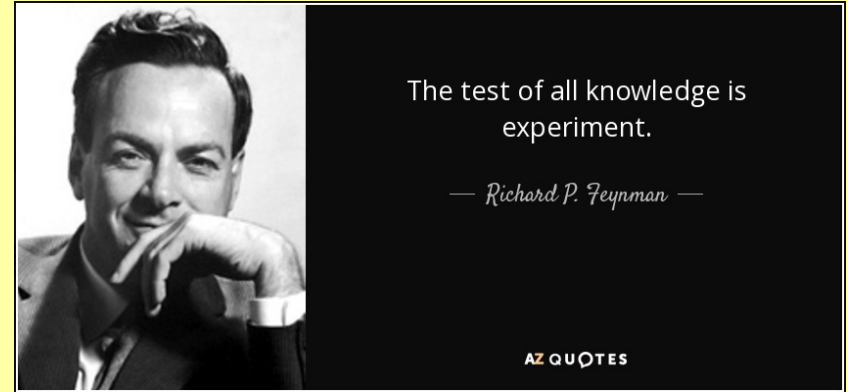
A Greener World

A Better-Fed World

A Safer World

Sealevel +1 foot per century

# Models



Neil Ferguson's Track Record of Predicting Deaths for Diseases

Disease	Ferguson's Prediction	Actual	Error
Foot and Mouth	50,000	200	250 times too big
Brid Flu	200,000,000	400	500,000 times too big
Swine Flu	65,000	457	150 times too big
Covid	510,000	42,000 (so far)	12 times too big

Compiled by Latimer Alder, 4 October 2020



# Consensus



Consensus is invoked only in situations where the science is not solid enough.

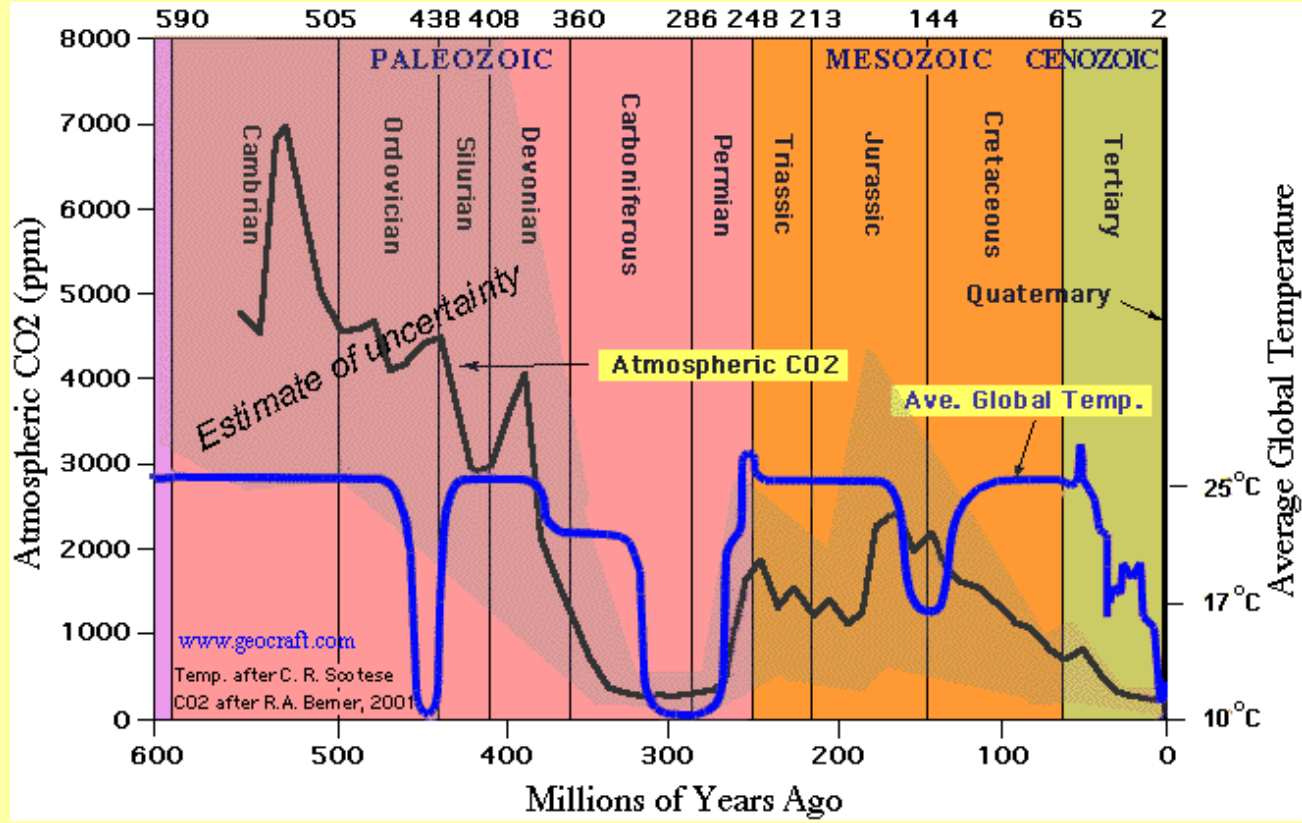
— *Michael Crichton* —

AZ QUOTES

# Controlling the Climate?



# CO2 controls Temperature?





# Where Should We Set The Knob?





# Summary

**NO** evidence in any data for any Climate Catastrophe

**NO** evidence of any 'Existential Threat'

==> **NO** 'scientific' need for Net Zero

*Purely political theatre*

# Case Study in Net Zero – United Kingdom



# How did we get here?

Climate Change Act 2008 (80% emissions reduction)

Amended by decree 2018 to 100%

2019 Election Manifesto

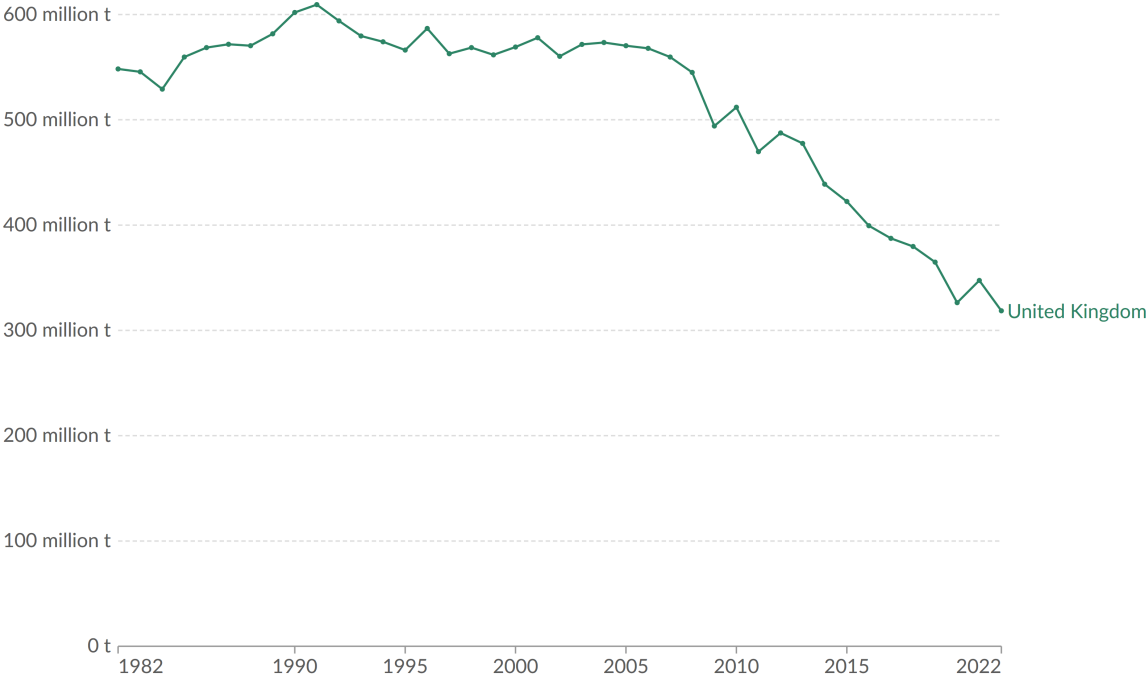
==> No popular debate. No real democratic mandate

# UK emissions

## Annual CO<sub>2</sub> emissions

Carbon dioxide (CO<sub>2</sub>) emissions from fossil fuels and industry. Land-use change is not included.

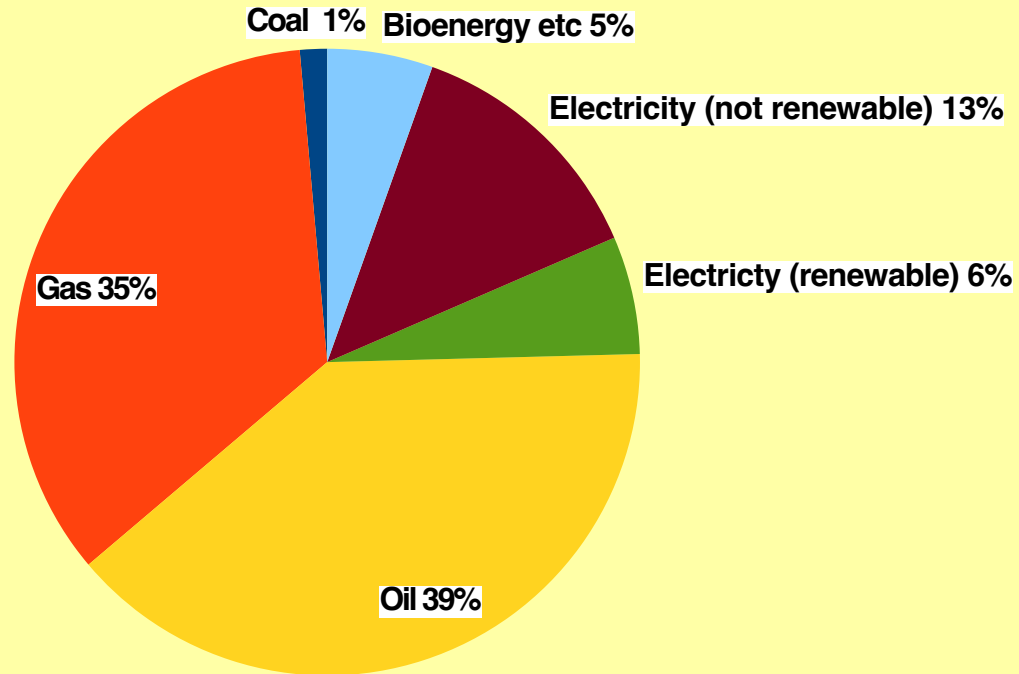
Our World  
in Data



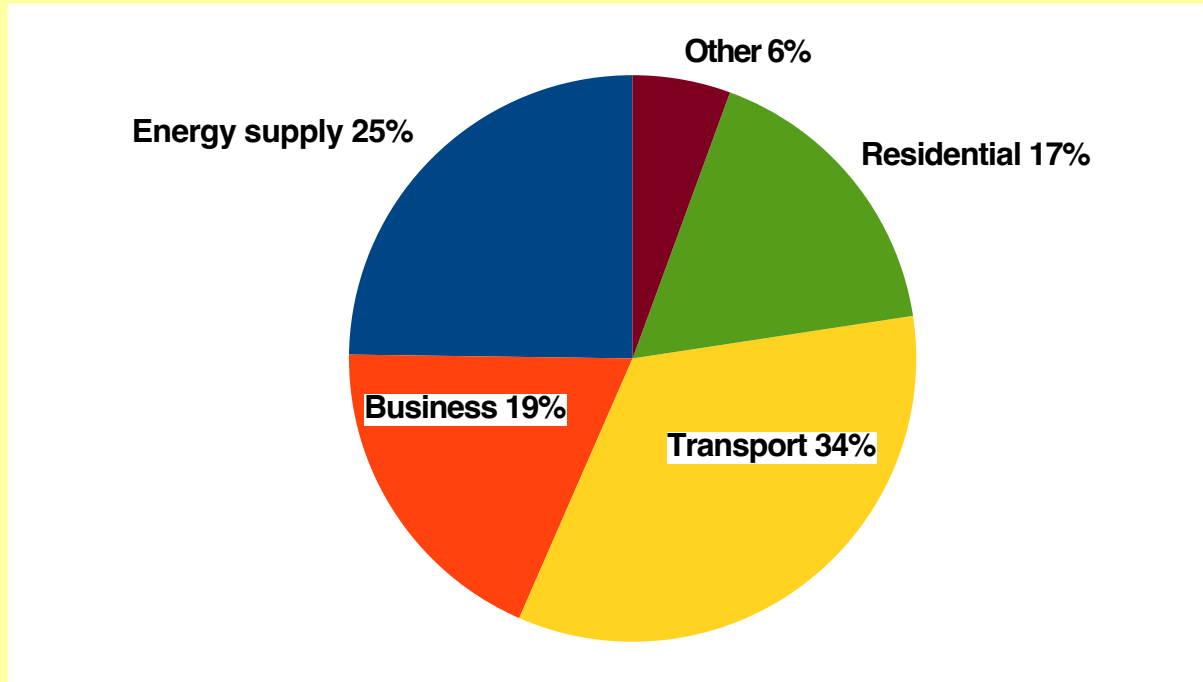
Data source: Global Carbon Budget (2023)

OurWorldInData.org/co2-and-greenhouse-gas-emissions | CC BY

# Where Next? By Fuel Type



# Where Next? By Sector



# Electrify Everything!

Electrify Transport – Ban petrol/diesel (£40K per household)




Electrify Domestic – Ban gas (£15K)

Needs vastly expanded Electricity Grid (£15K)

Costs? > £70,000 per household

For NO benefits

# FIRES – Government Advisers

	2020-2029	2030-2049	2050 Absolute Zero	Beyond 2050
<b>Road vehicles</b>	Development of petrol/diesel engines ends. Any new vehicle introduced from now on must be compatible with Absolute Zero	All new vehicles electric, average size of cars reduces to ~1000kg.	Road use at 60% of 2020 levels - through reducing distance travelled or reducing vehicle weight	New options for energy storage linked to expanding non-emitting electricity may allow demand growth
<b>Rail</b>	Growth in domestic and international rail as substitute for flights and low-occupancy car travel	Further growth with expanded network and all electric trains; rail becomes dominant mode for freight as shipping declines	Electric trains the preferred mode of travel for people and freight over all significant distances.	Train speeds increase with increasing availability of zero emissions electricity
<b>Flying</b>	All airports except Heathrow, Glasgow and Belfast close with transfers by rail	All remaining airports close		Electric planes may fly with synthetic fuel once there are excess non-emitting electricity supplies
<b>Shipping</b>	There are currently no freight ships operating without emissions, so shipping must contract	All shipping declines to zero.		Some naval ships operate with onboard nuclear power and new storage options may allow electric power
<b>Heating</b>	Electric heat pumps replace gas boilers, and building retrofits (air tightness, insulation and external shading) expand rapidly	Programme to provide all interior heat with heat pumps and energy retrofits for all buildings	Heating powered on for 60% of today's use.	Option to increase use of heating and cooling as supply of non-emitting electricity expands
<b>Appliances</b>	Gas cookers phased out rapidly in favour of electric, hob and ovens, fridges, freezers and washing machines become smaller.	Electrification of all appliances and reduction in size to cut power requirement.	All appliances meet stringent efficiency standards, to use 60% of today's energy.	Use, number and size of appliances may increase with increasing zero-emissions electricity supply
<b>Food</b>	National consumption of beef and lamb drops by 50%, along with reduction in frozen ready meals and air freighted food imports	Beef and lamb phased out, along with all imports not transported by train; fertilizer use greatly reduced	Total energy required to cook or transport food reduced by 60%.	Energy available for fertilising, transporting and cooking increases with zero-emissions electricity
<b>Mining material sourcing</b>	Reduced demand for iron ore and limestone as blast furnace iron and cement reduces, increased demand for materials for electrification	Iron ore and limestone phased out while metal scrap supply chain expands greatly and develops with very high precision sorting	Demand for scrap steel and ores for electrification much higher, no iron ore or limestone.	Demand for iron ore and limestone may develop again if CCS applied to cement and iron production
<b>Materials production</b>	Steel recycling grows while cement and blast furnace iron reduce, some plastics with process emissions reduce.	Cement and new steel phased out along with emitting plastics. Steel recycling grows. Aluminium, paper reduced with energy supply.	All materials production electric with total 60% power availability compared to 2020	Material production may expand with electricity and CCS, CCL hydrogen may enable new cement and steel.
<b>Construction</b>	Reduced cement supply compensated by improved material efficiency, new steel replaced by recycled steel	All conventional mortar and concrete phased out, all steel recycled. Focus on retrofit and adaptation of existing buildings.	Any cement must be produced in closed-loop, new builds highly optimised for material saving.	Growth in cement replacements to allow more architectural freedom; new steel may become available.
<b>Manufacturing</b>	Material efficiency becomes prominent as material supply contracts	Most goods made with 50% as much material, many now used for twice as long	Manufacturing inputs reduced by 30% compensated by new designs and manufacturing practices. No necessary reduction output.	Restoration of reduced material supplies allows expansion in output, although some goods will in future be smaller and used for longer than previously.
<b>Electricity</b>	Wind and solar supplies grow as rapidly as possible, with associated storage and distribution, rapid expansion in electrification of end-uses.	Four-fold increase in renewable generation from 2020, all non-electrical motors and heaters phased out.	All energy supply is now non-emitting electricity.	Demand for non-emitting electricity drives ongoing expansion in supply.
<b>Fossil fuels</b>	Rapid reduction in supply and use of all fossil fuels, except for oil for plastic production	Fossil fuels completely phased out		Development of Carbon Capture and Storage (CCS) may allow resumption of use of gas and coal for electricity



# The Reality of Net Zero in UK



# UK Lessons

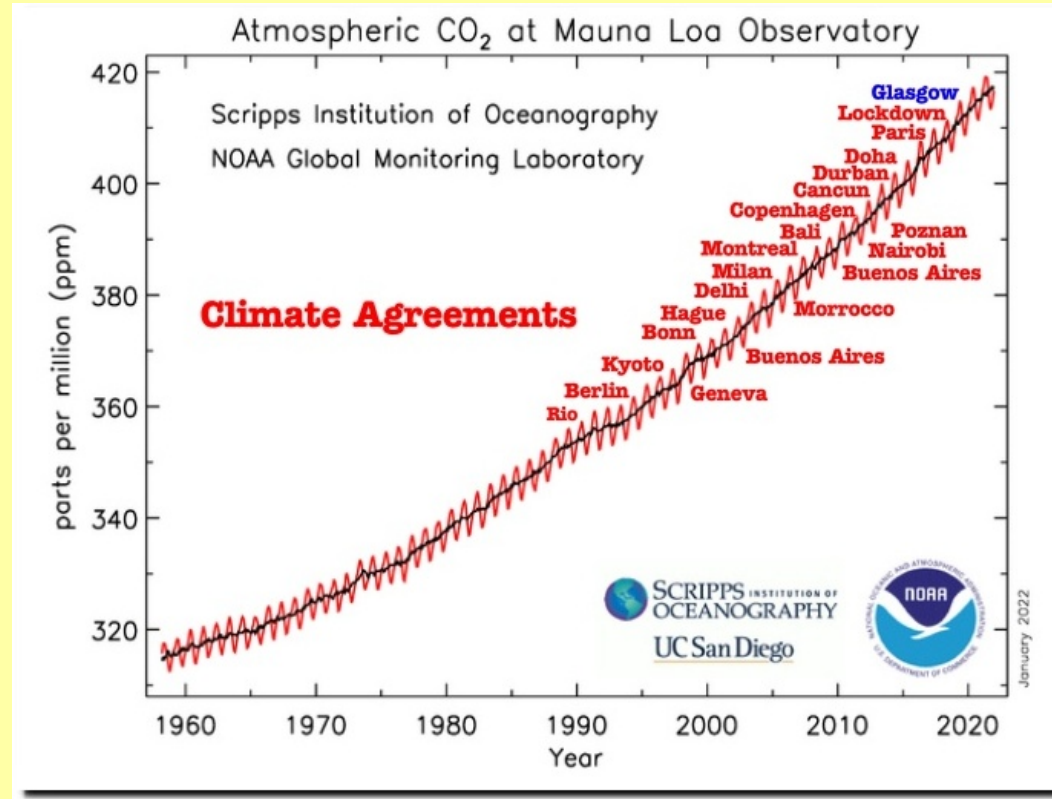
**NO** proper democratic mandate

**NO** benefits

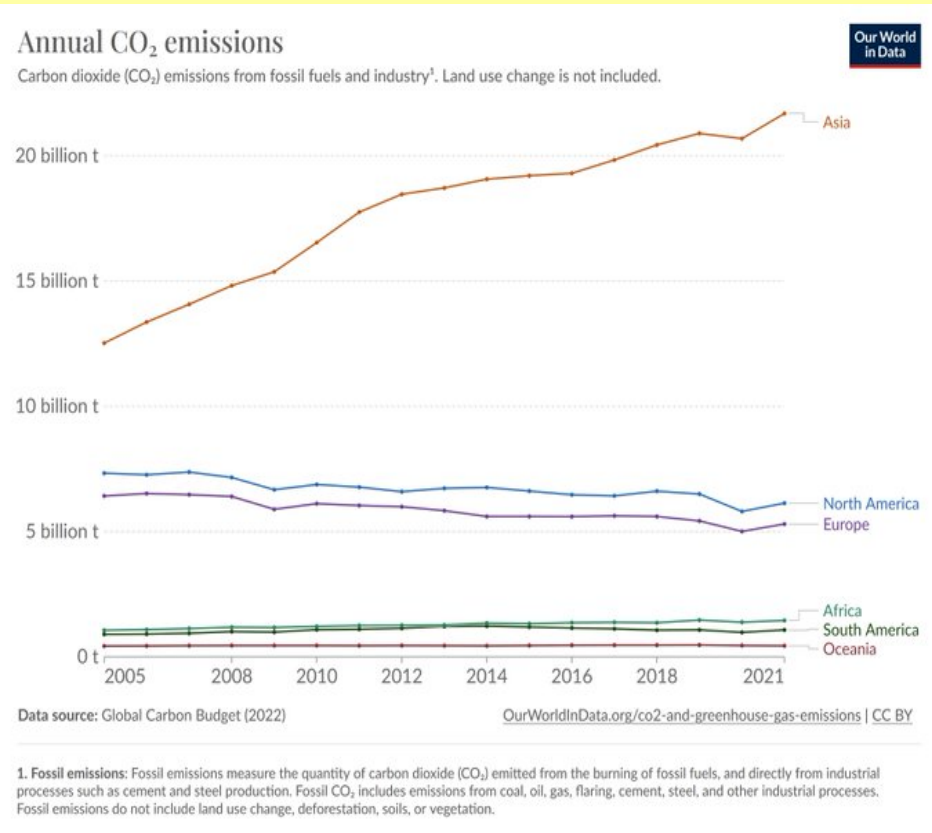
Just costs and inconveniences

==> How long can this last?

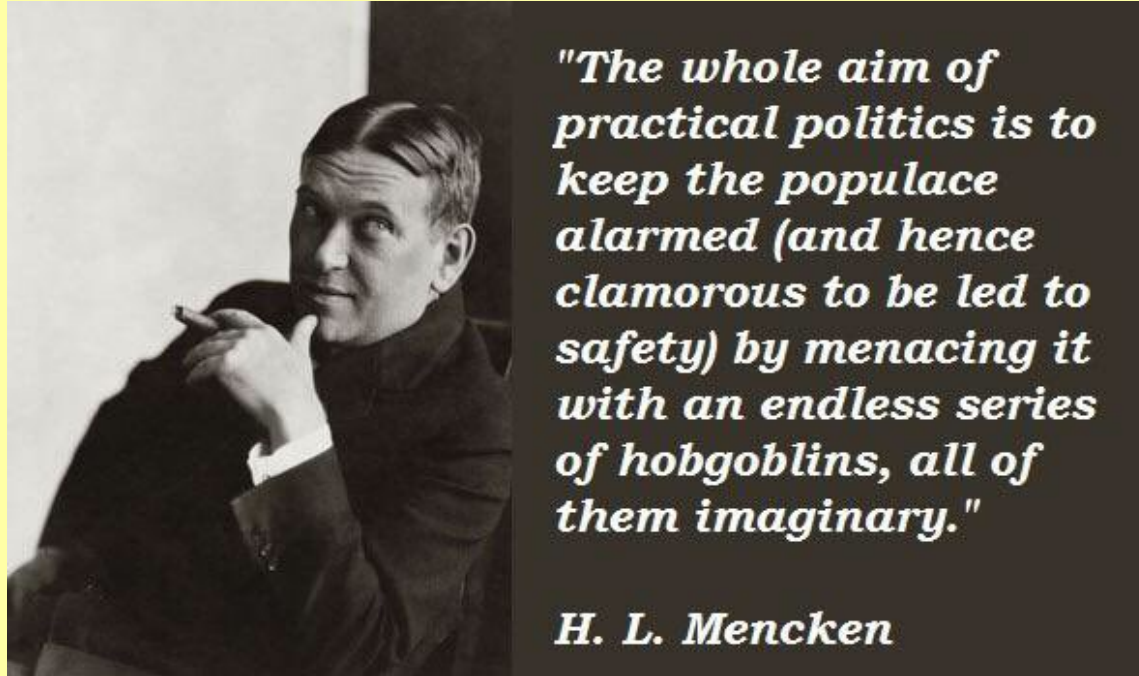
# But what about the World?



# Oops!



# Net Zero is a Hobgoblin!



*"The whole aim of practical politics is to keep the populace alarmed (and hence clamorous to be led to safety) by menacing it with an endless series of hobgoblins, all of them imaginary."*

*H. L. Mencken*

# Conclusion

Net Zero is purely politics

It is unachievable in any realistic timescale

It provides NO benefits to the ordinary people

==> It is doomed to fail

# Corollary

Fighting Climate Change is a waste of time and effort

==> Use our resources to adapt to it instead

# Further Watching





# Final Thought

Net Zero **IS** for Dummies