



Energy Crisis, Net Zero, and Oil & Gas: Possible Futures

Steve Goreham



Our Energy Journey Today

**Climatism and the
War on Hydrocarbons**

Lessons from Europe

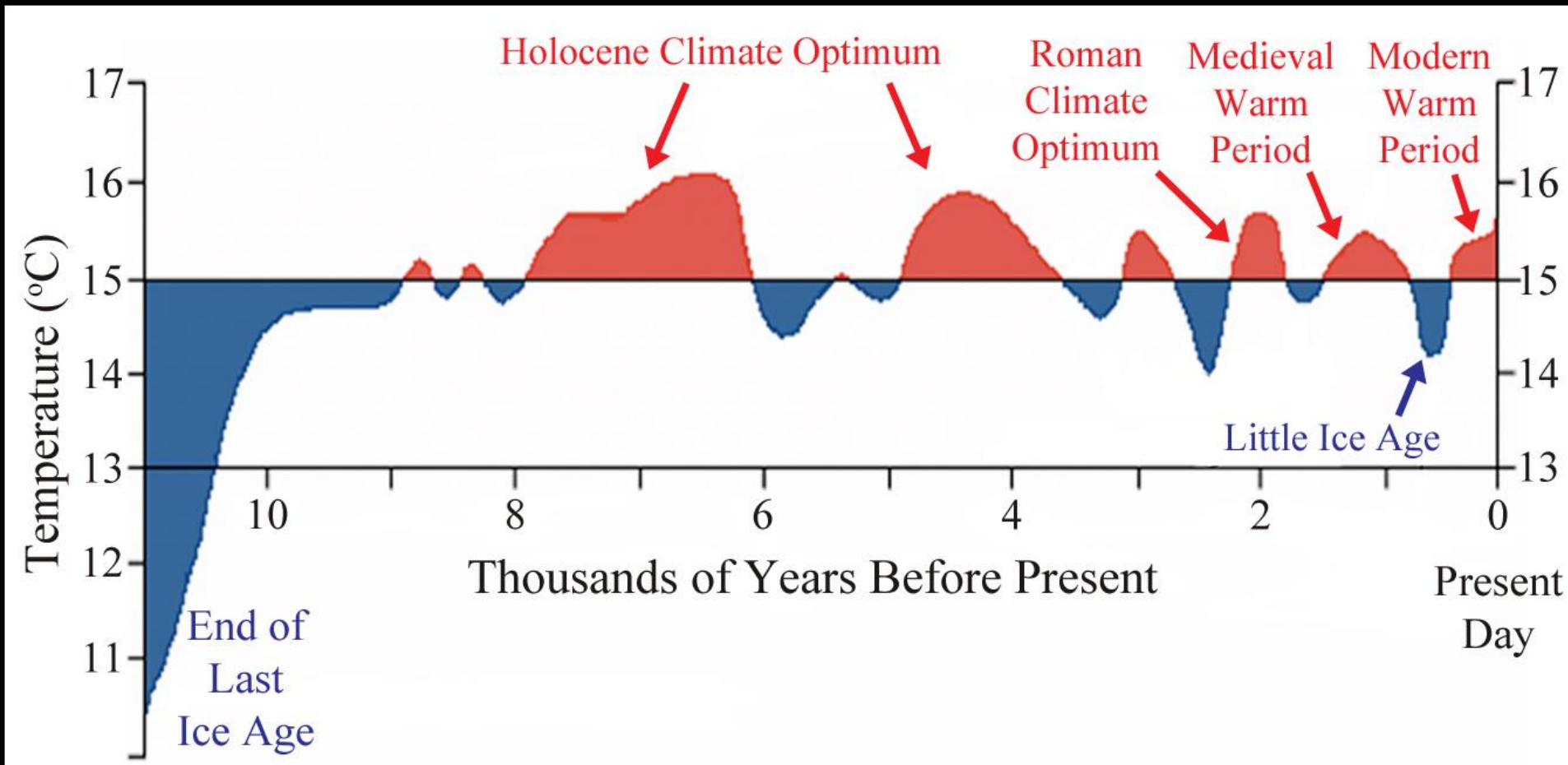
**Renewables,
Net Zero, and
Electric Vehicles**

**Possible
Futures**



Today's Climate is Not Historically Warm

Ice Core Data from Crete Site in Central Greenland

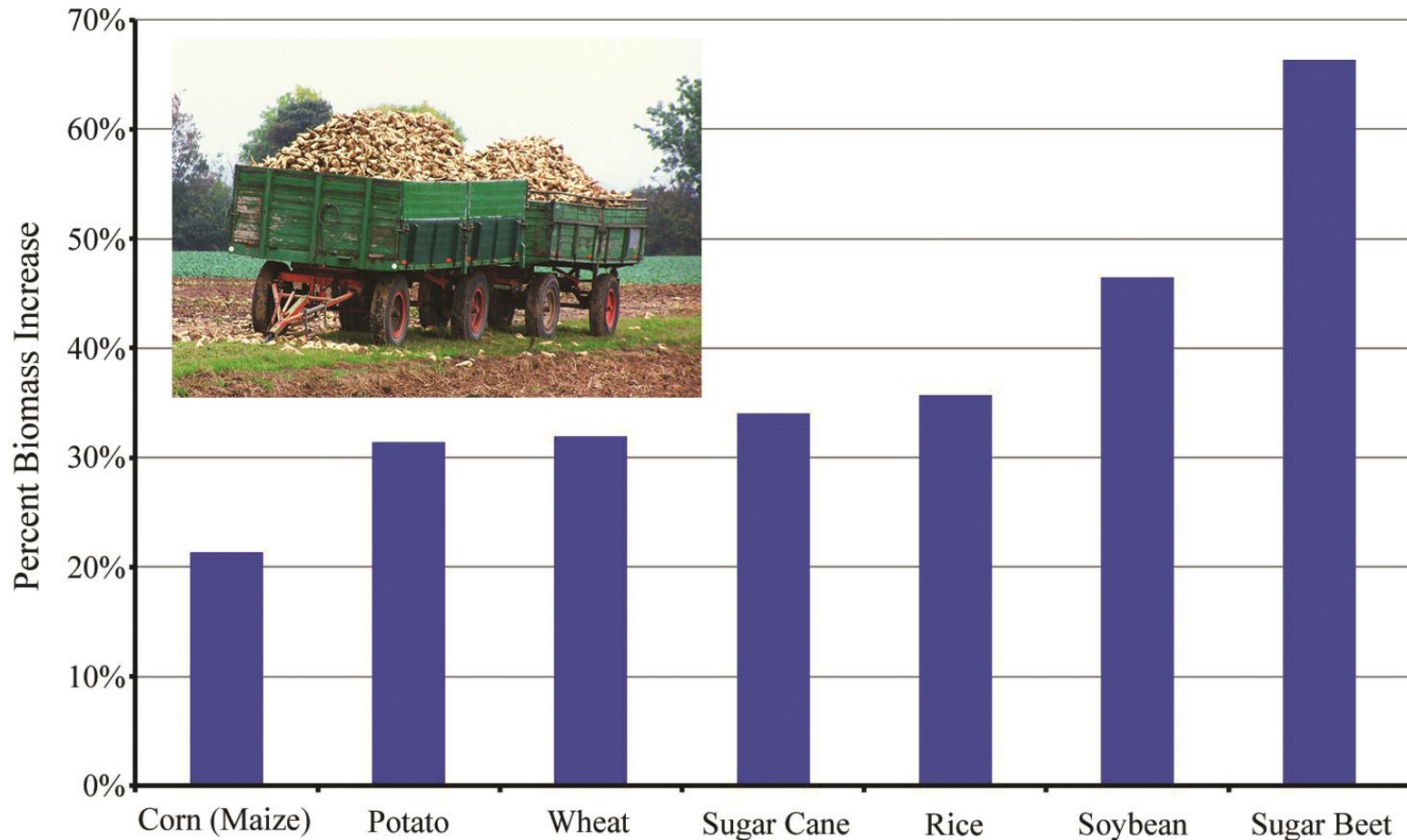


W. Dansgaard (1984), Adapted by Dennis Avery (2009)

CO₂ is Green!

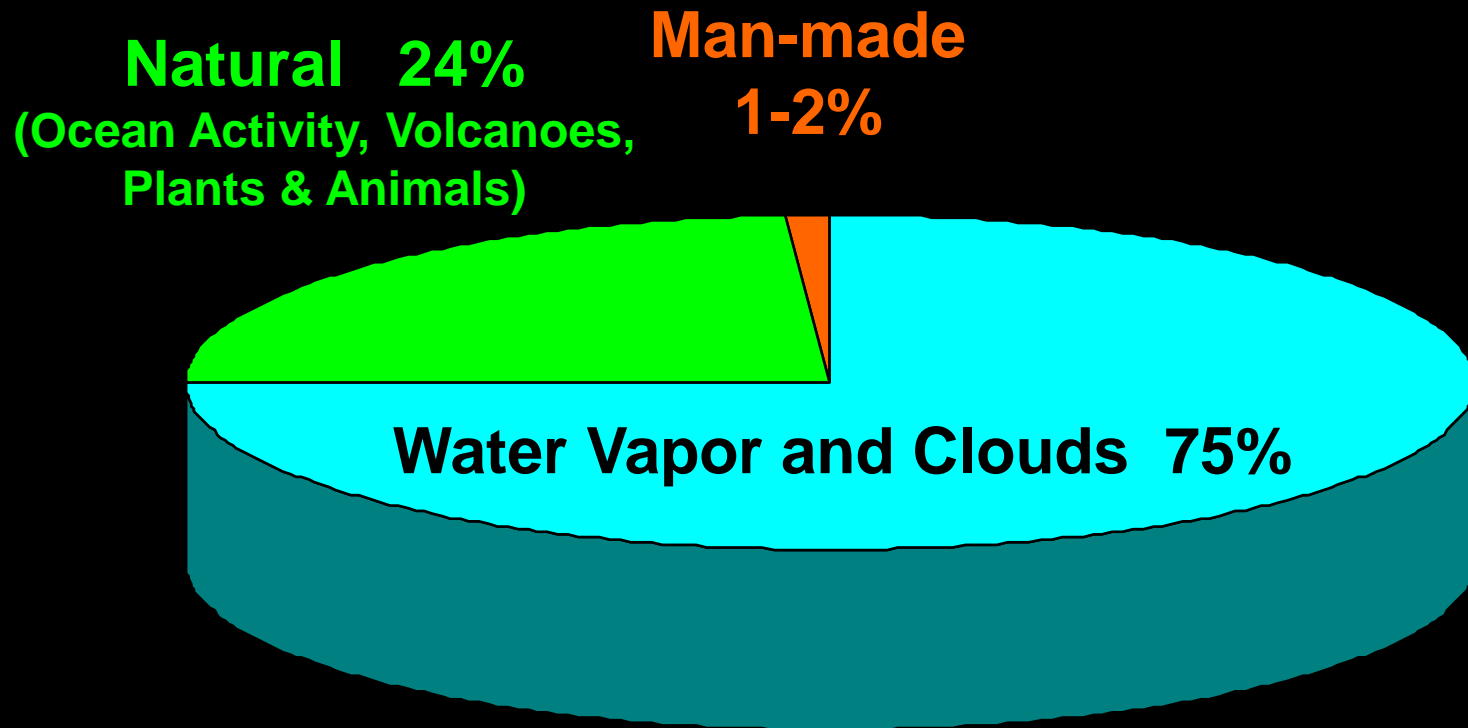
CO₂ is Plant Food, Essential for Life on Earth

Increased Food Crop Growth from Increased CO₂
(Additional 300 ppm Atmospheric CO₂ Concentration)



**Idso
(2011)**

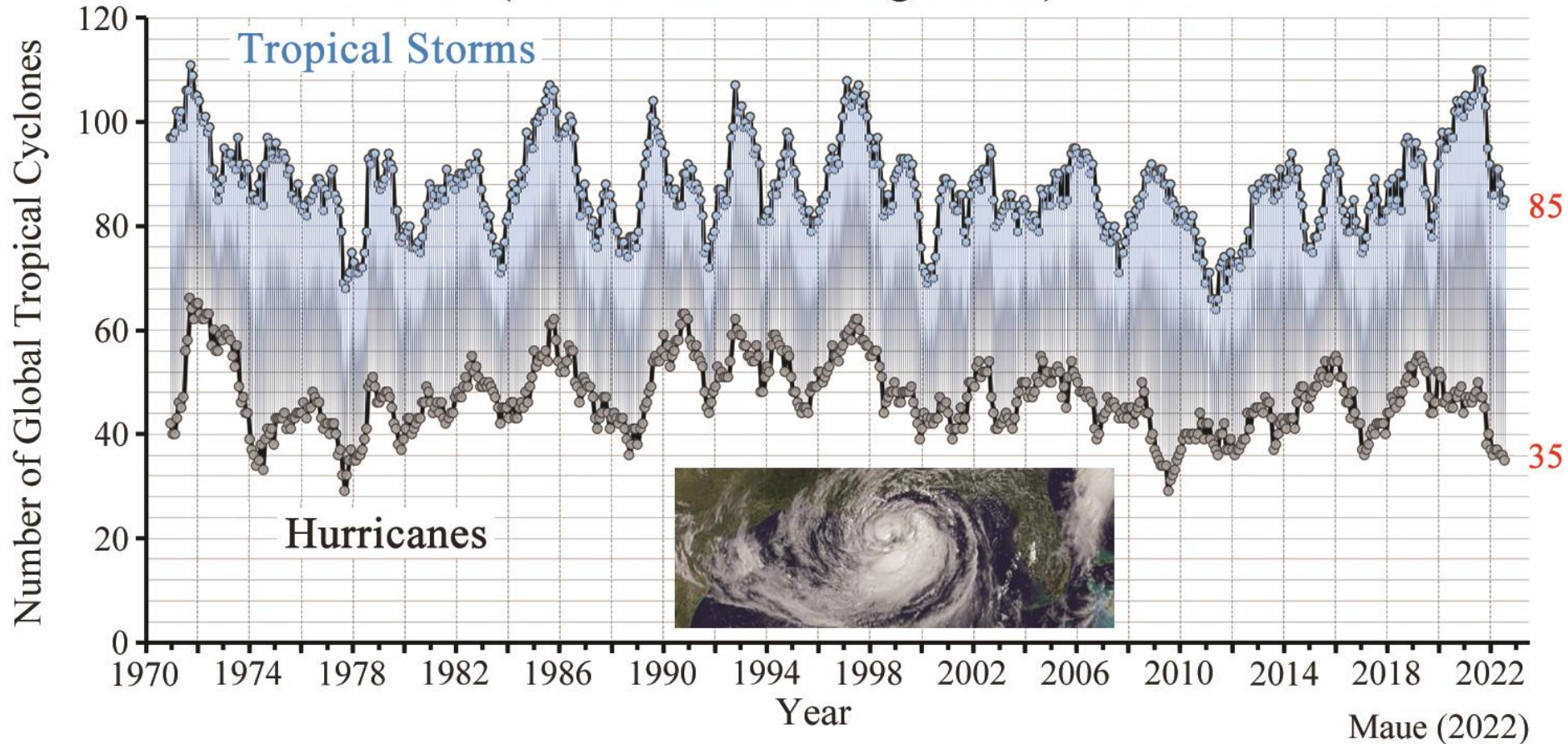
Human Contribution to Greenhouse Effect



Mankind Responsible for about 1 or 2 Parts in 100!

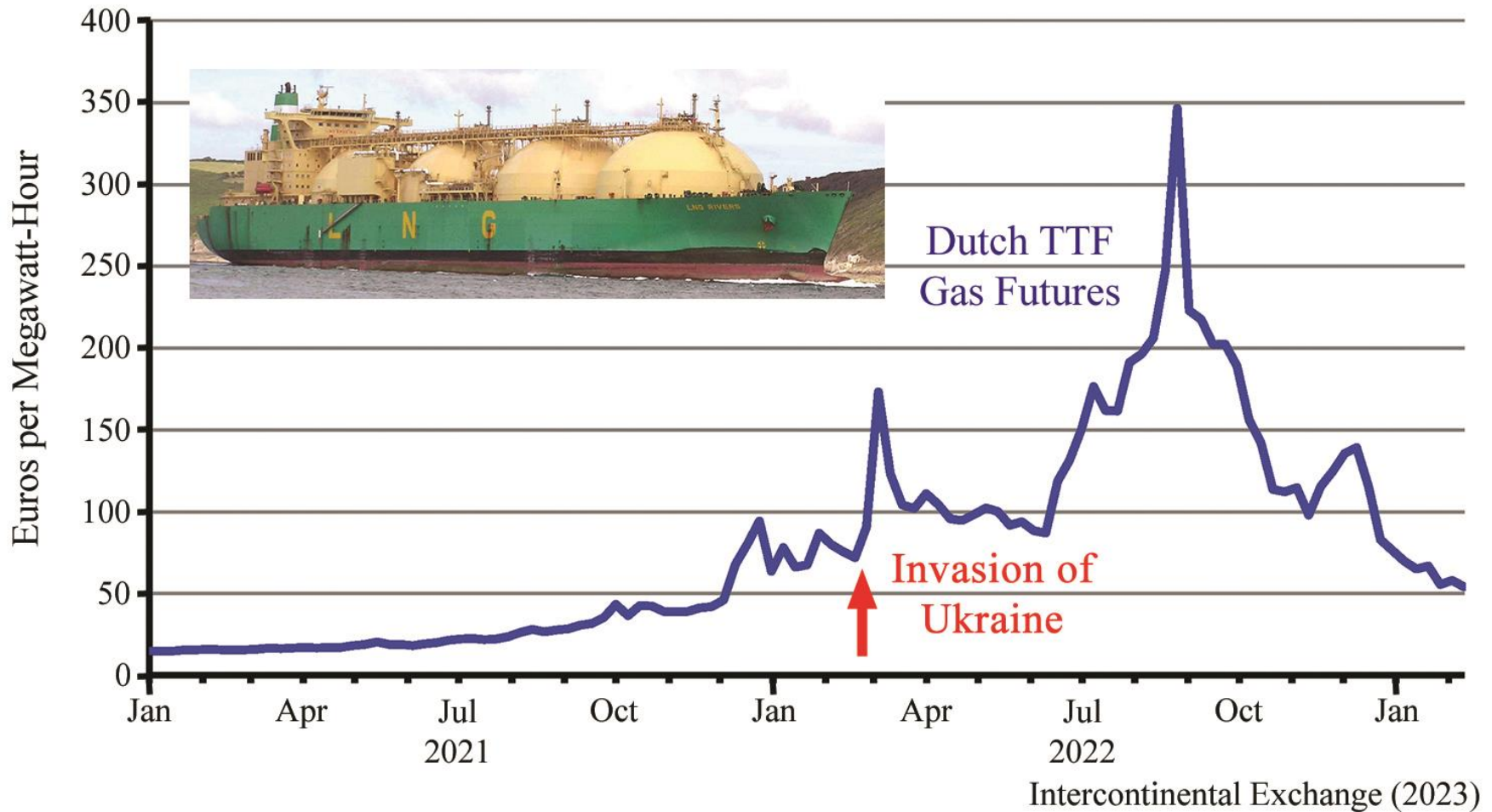
No Increase in Global Cyclone Frequency Or Intensity

Number of Global Cyclones 1971-2022
(12-Month Running Sums)



Europe's High Natural Gas Prices

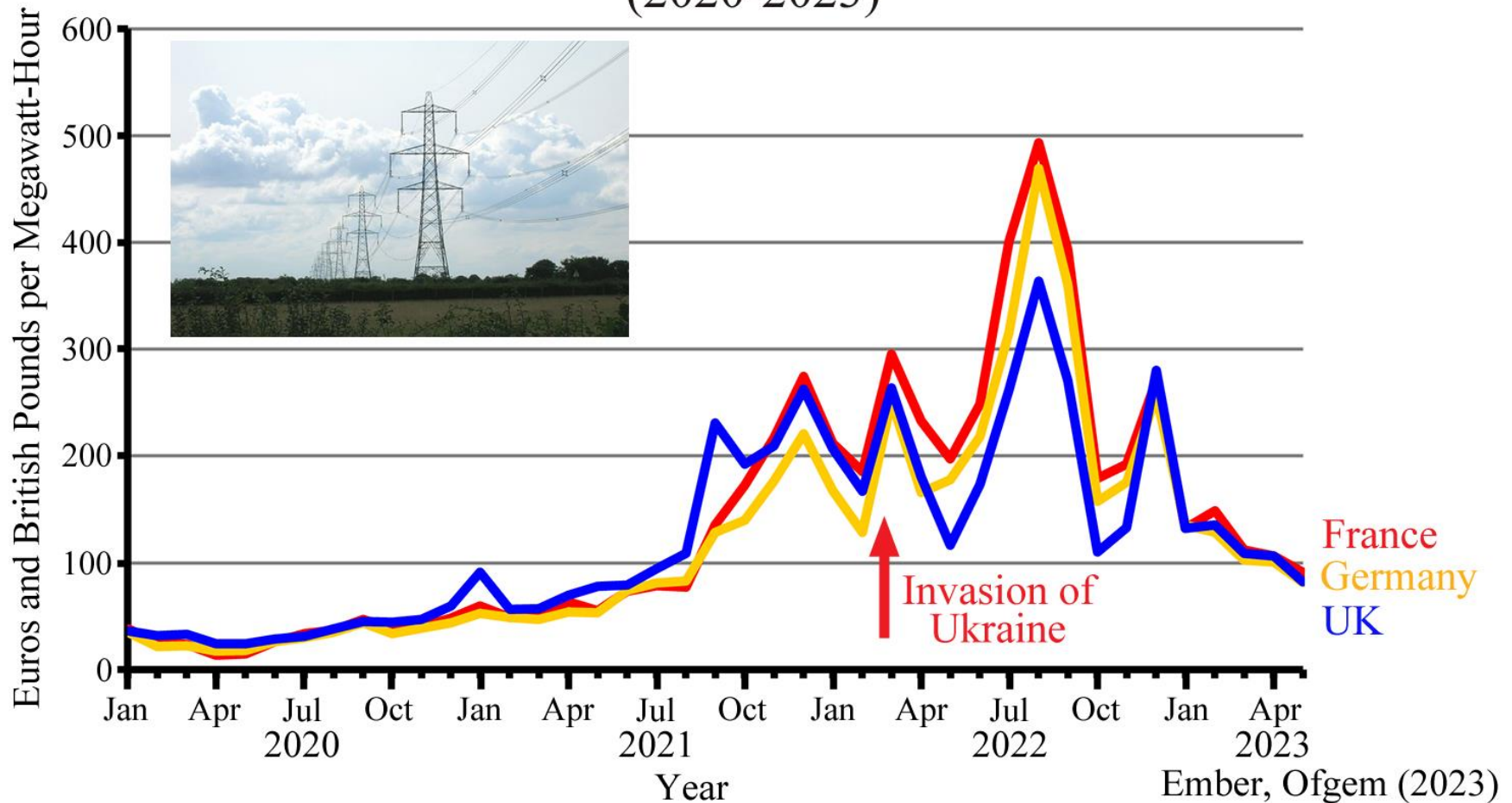
Europe Natural Gas Prices 2021-2023



Prices Still Almost Double Levels of Early 2021

Europe's Very High Electricity Prices

France, Germany, UK Monthly Electricity Prices
(2020-2023)



Prices Still 3 Times Higher than in 2020

More Environmentally Friendly?

Average Units of Land (Total Used Footprint)

Natural Gas 0.8

Nuclear 1.0

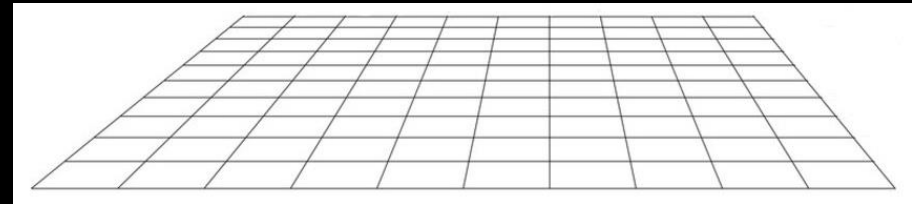
Coal 1.4

Solar 119

Wind 33-835

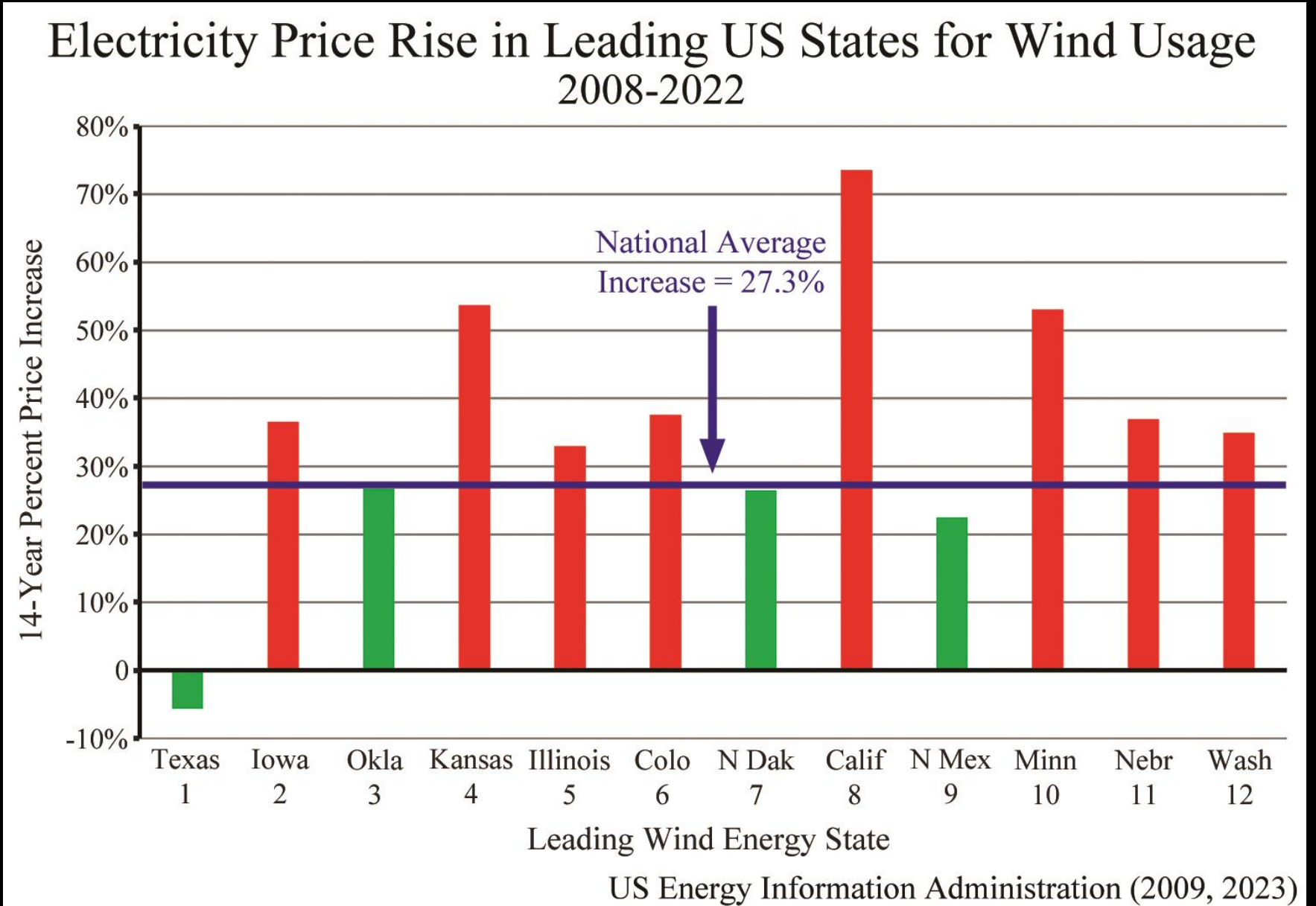
Biomass 1,518

Smil (2016)



**Whitelee Wind Array
Scotland, UK**

Power Prices Increasing Faster in Wind States



“Electrification” — Forced Adoption of Electricity from Renewables

Elimination of
Natural Gas and
Propane Heating Fuels



Electric Vehicles

Renewables and Electricity Blackouts

California

Wide Area Rolling Blackouts August, 2020



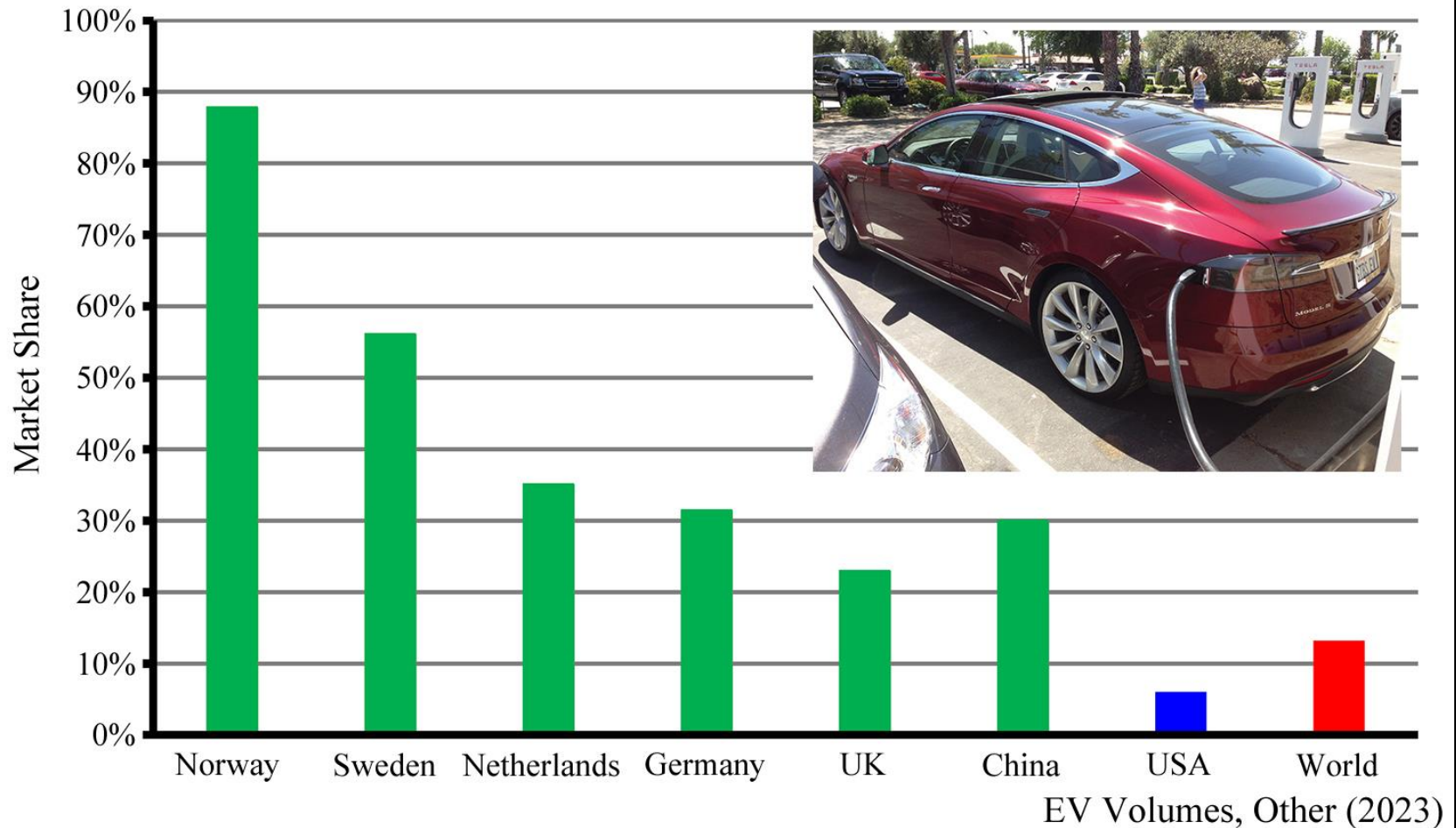
August 2020 Blackouts (Bloomberg)

Texas and Oklahoma Lethal Blackouts February, 2021



World: Growing EV Market Penetration

Electric Vehicle Share of 2022 New Light Vehicle Sales



Global: 27 Million EVs of 1.5 Billion Light Vehicles

Pickup EVs Are Heavy



**2023 Ford F-150
SuperCrew
Gasoline
4,677 lb.**



“Four tons of ‘em”



**2023 Ford F-150
Lightning EV
About 6,500 lb.**



**2023 Rivian
R1T EV
7,148 lb.**



**2024 Chevy
Silverado EV
8,532 lb.**

Europe's Retreat from Green Energy

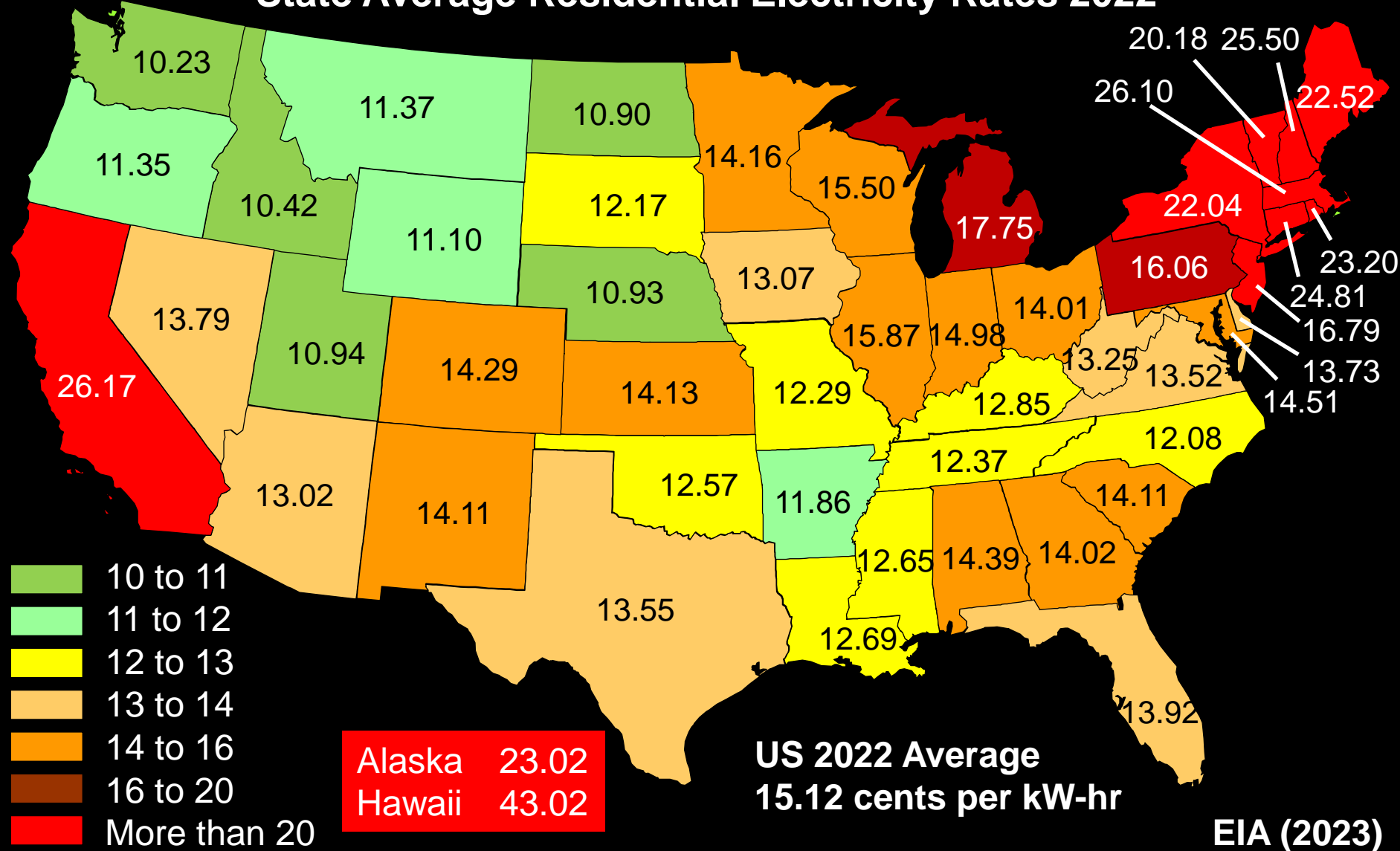
- **Coal Output Up 20 Percent 2021-2022**
 - **Germany Restarted 27 Coal-Fired Plants**
- **Plans Announced to Increase Gas Production**
- **25 LNG Terminals on Order or Under Construction**



**Floating
LNG Terminal,
Germany**

Grid Under Pressure: Rising Electricity Prices

State Average Residential Electricity Rates 2022



The Coming Green Breakdown

Green Energy Means:

- Higher Energy Prices
- Electricity Blackouts
- Limited Stove and Car Choices
- Transnational Energy Shocks

**People Will Demand a
Return to
Low-Cost, Reliable Energy**



GREEN BREAKDOWN

The Coming
Renewable Energy Failure

STEVE GOREHAM

Foreword by Mark P. Mills

Takeaways — Implications for Oil & Gas

- Continued Domination by Petroleum Fuels
- Shared Hydrocarbon/Renewable Future
- EV Risk: 20% of Vehicles by 2050?



Recommendations

- **Stop Selling Guns to the Enemy**
 - **Don't Fund Environmental Groups**
- **Let's Get the Language Right**
 - **Not "Carbon," but "Carbon Dioxide"**
- **Don't Call Natural Gas "Renewable"**



**Forget Green Energy,
Carbon Credits, and
Counting Emissions,
Unless Required by Law**

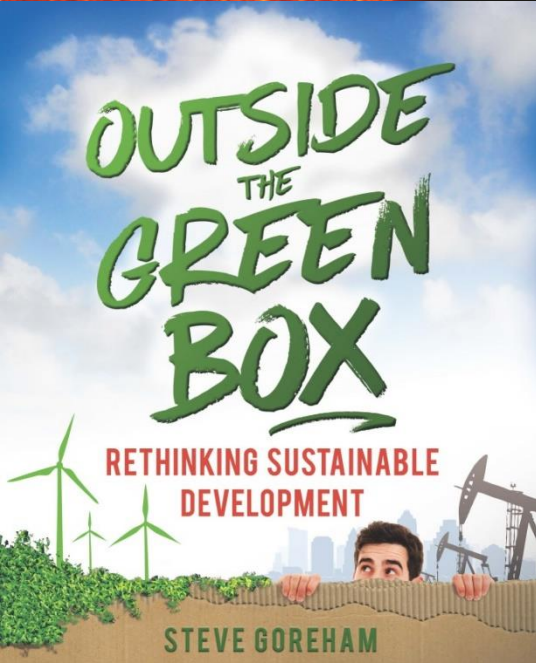




Climatism!

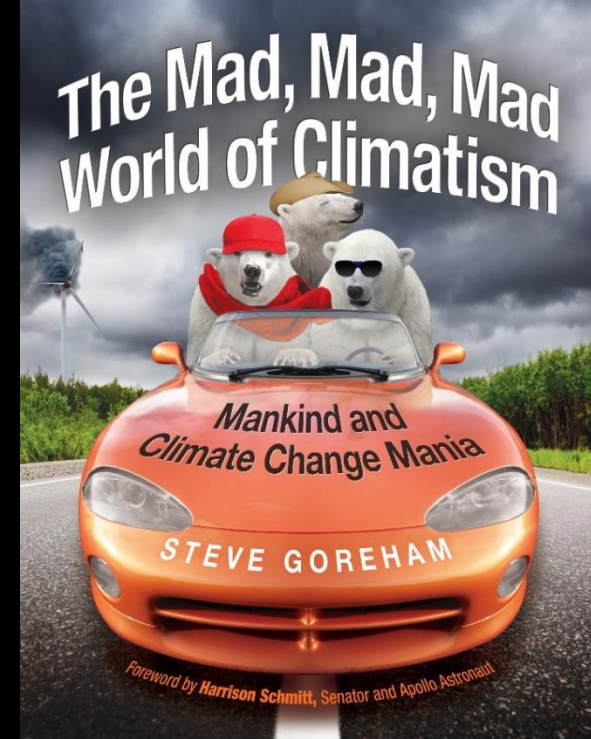
Science, Common Sense,
and the 21st Century's
Hottest Topic

Steve Goreham
Foreword by John Coleman, Meteorologist



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