




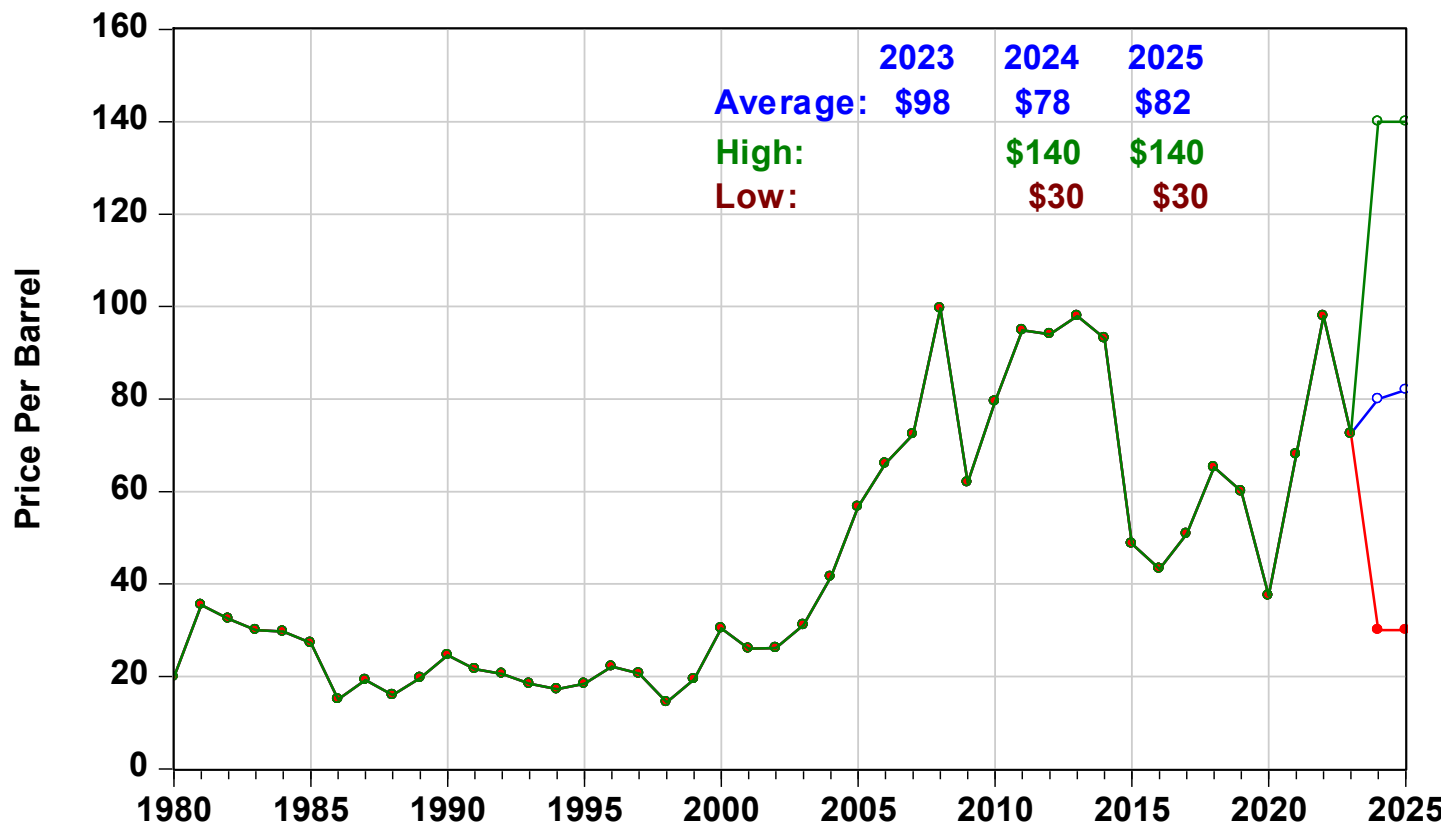
“Outlook for the Energy Sector”

**FNBB Annual Meeting
June 11, 2024**



Oil Prices
Demand Side – Mixed
The Supply Side:
Egad!!!

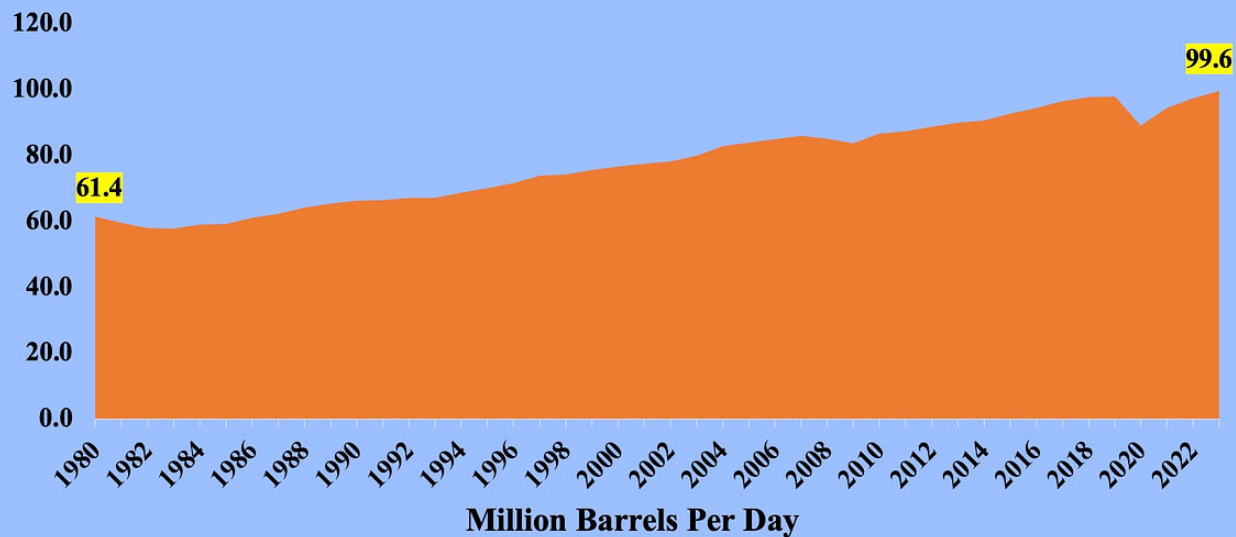
Oil Price Forecasts



Forecasts for 2024:
IEA: +1.2 mmb/d; OPEC: +2.2 mmb/d

Oil Is The Economy

Global Oil Consumption, 1980 to 2023



Source: Statistical Review of World Energy, IEA

© Robert Bryce

RGDP Forecasts(5/24)

<u>Quarter</u>	<u>Wells Fargo</u>	<u>Consensus</u>
23-II	2.1 %	2.1%
23-III	4.9%	4.9%
23-IV	3.2%	3.2%
24-I	1.3%	1.3%
24-II	2.7%	2.1%
24-III	1.9%	1.3%
24-IV	1.5%	1.5%
25-I	1.8%	1.7%
25-II	2.0%	1.8%
25-III	2.4%	1.9%
25-IV	2.4%	2.0%

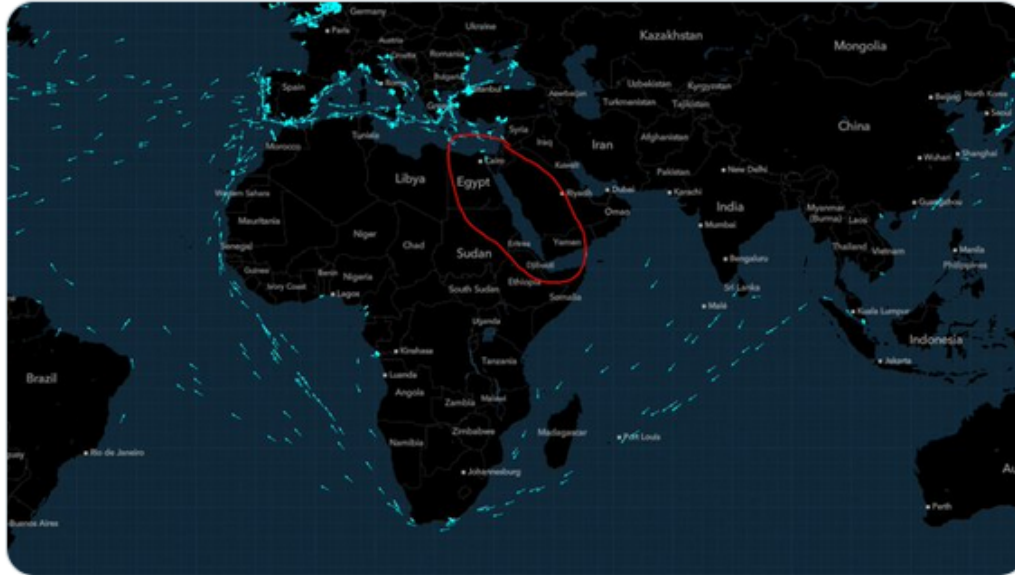
Drought Problems for Panama Canal
25 Ships Versus 40 a day: \$175K-\$700K Per Transit
Normal 2-3 day waiting period now at 15 days



Go Around Cape Horn?

- **+ 21 days** to trip
- Violent, unpredictable weather (*The Wager*)
- **+\$1.14 mm** to transportation costs
- Additional port fees due to delayed arrivals & scheduling berth changes?

More than two weeks after the launch of US-led 'Prosperity Guardian', the Houthis still rule in the Red Sea.



Cape of Good Hope: + 10 days to Transit Time (+\$409,000 in fuel costs)+ Insurance (+bridge hit! Largest claim maritime history)
LNG Transport from GOM to Japan: Panama – 20; Suez – 30 (discounts?); Cape of Good Hope – 40 days (at least schedule is certain); 123 LNG shipments 2024-H1



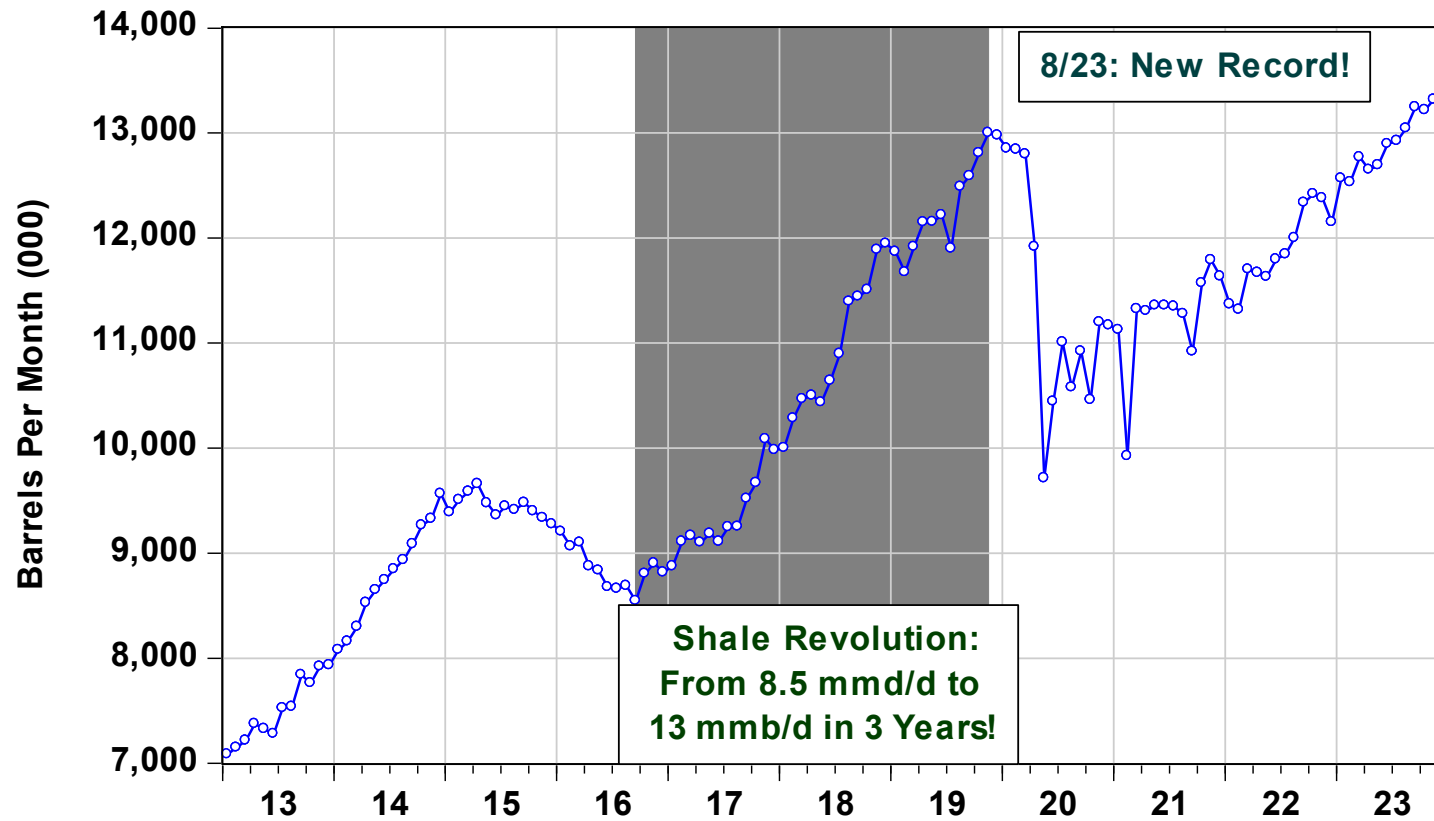
What's the big deal?

There are 99,800 cargo ships plying the oceans

Supply Side: Recent OPEC+ Moves

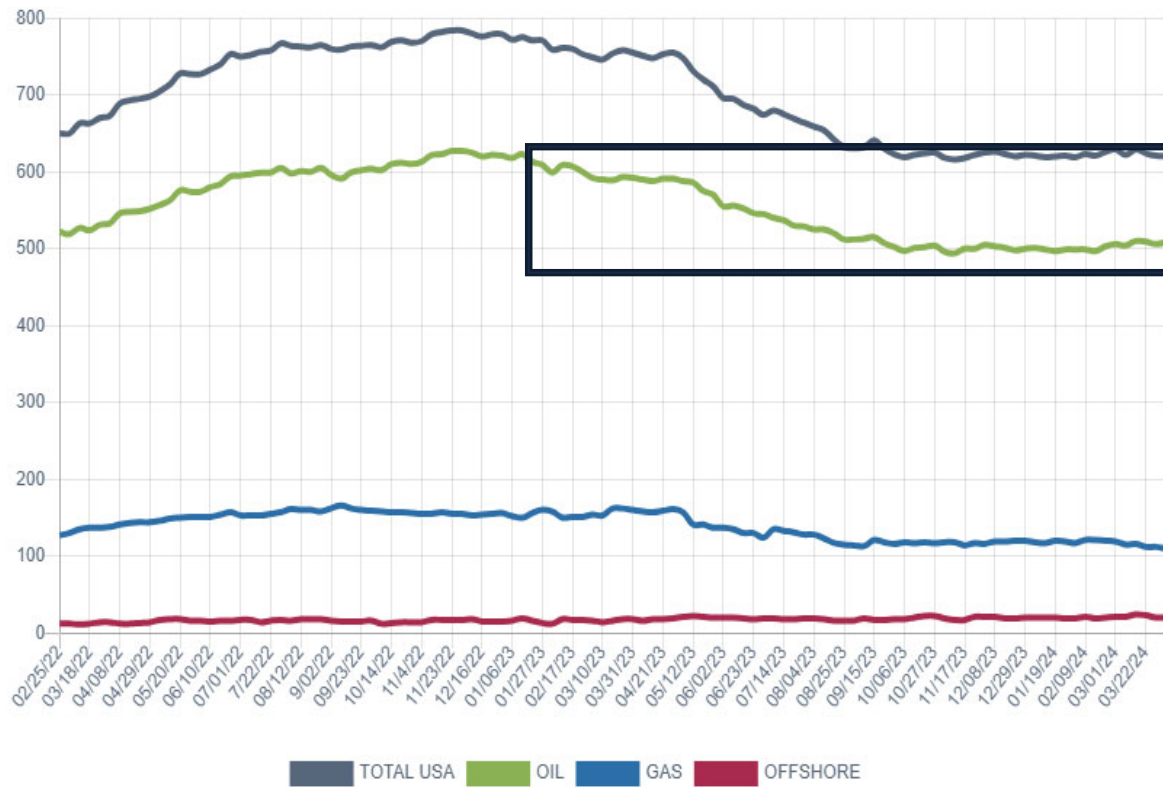
- OPEC+ recently cut 2 mmb/d off market
- 3/24: OPEC extended cuts through **thru 2024-II**
- Remember oil demand is very inelastic.
- Incentive behind cuts: **Saudis need \$81 oil to maintain budget**

U.S. Oil Production Monthly



US Rig Count

Black = Total; Pea Green = Oil; Blue = Gas

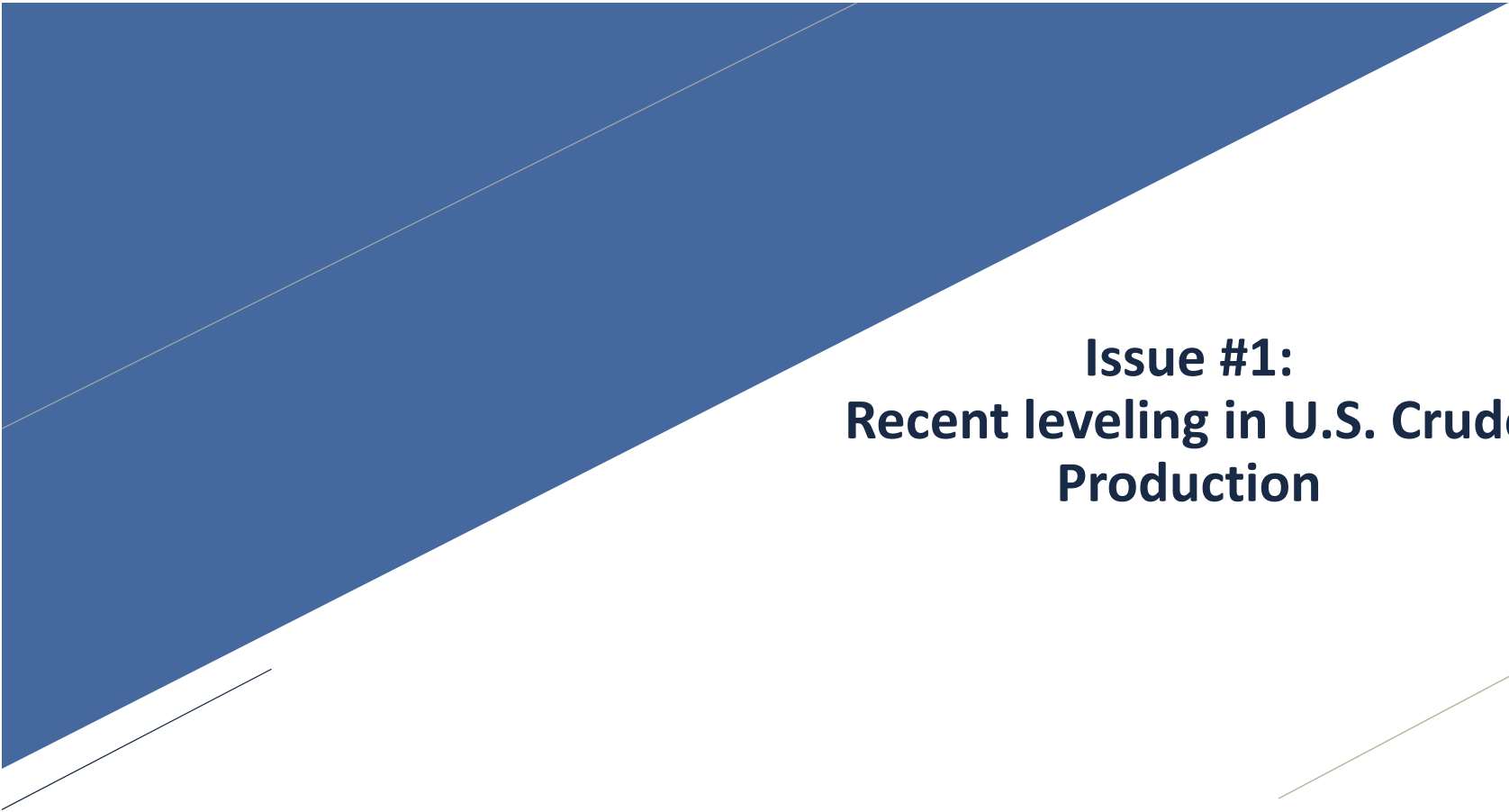


Source of Recent Production Boom

- **Efficiency Gains: Costs Down 36% Since 2014**
 - More fissures in rock
 - More water and sand in fissures
 - Deeper & Longer wells
 - Olympus & EOG: 5 miles down, 4.8 miles laterally
- **Result: Can make as much at \$42 per barrel as \$81 per barrel in 2014!**

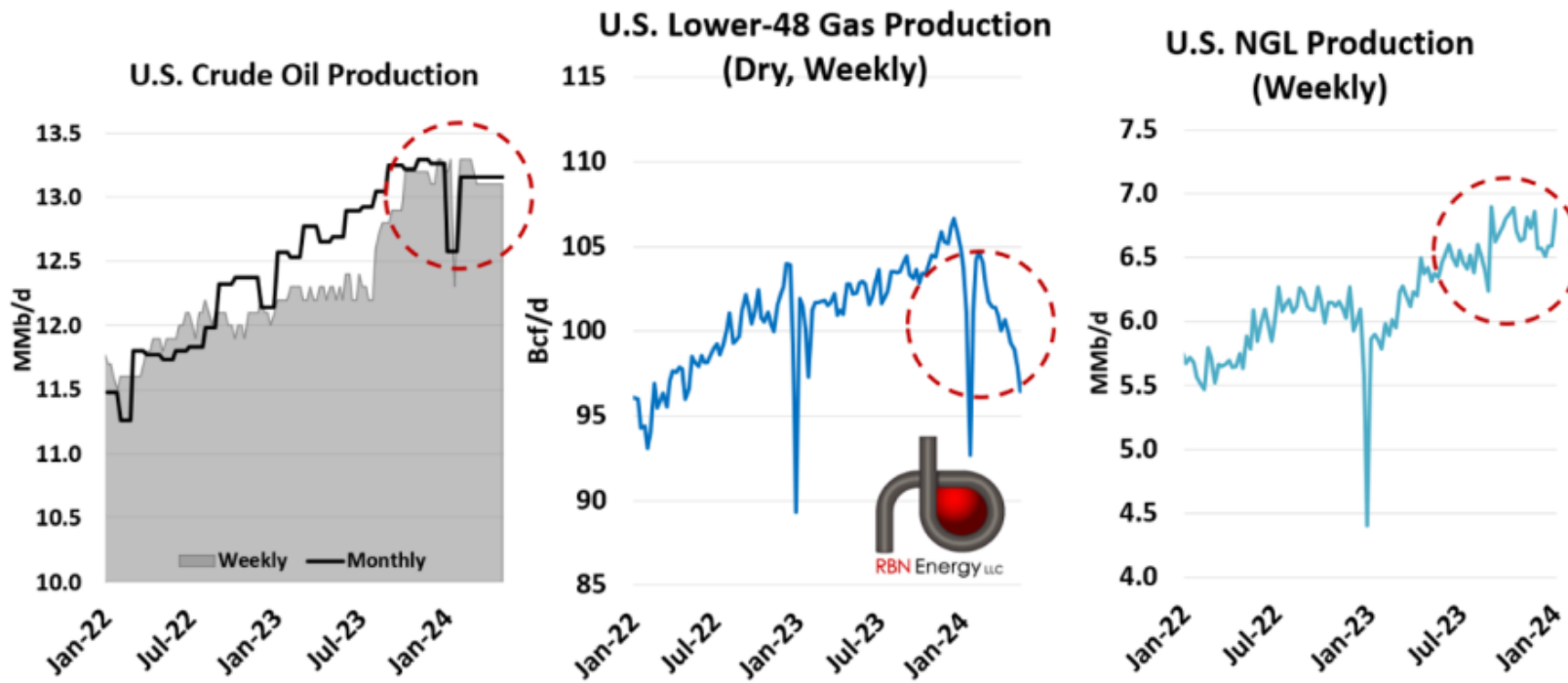


Communicating well? “Your dog bite?”

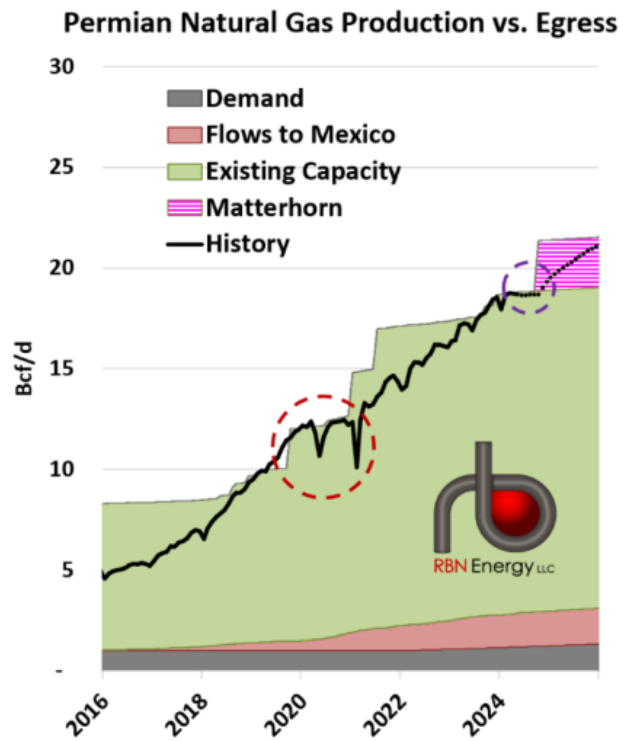


Issue #1: Recent leveling in U.S. Crude Production

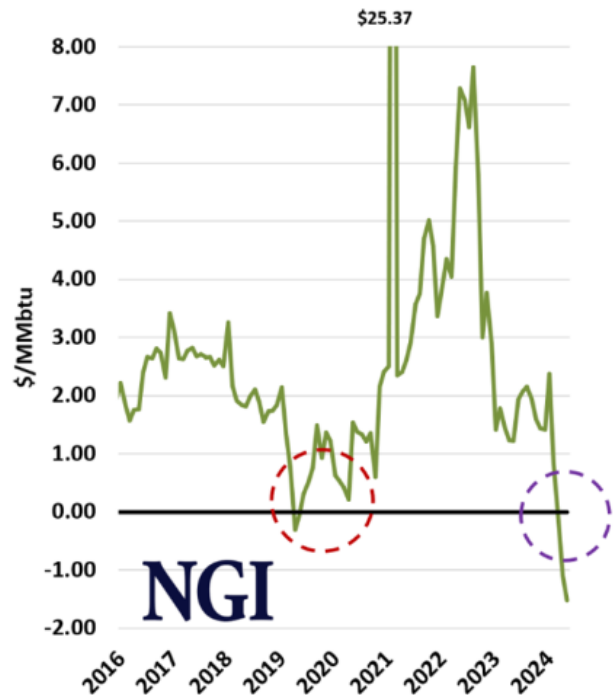
Note Recent U.S. Oil Production



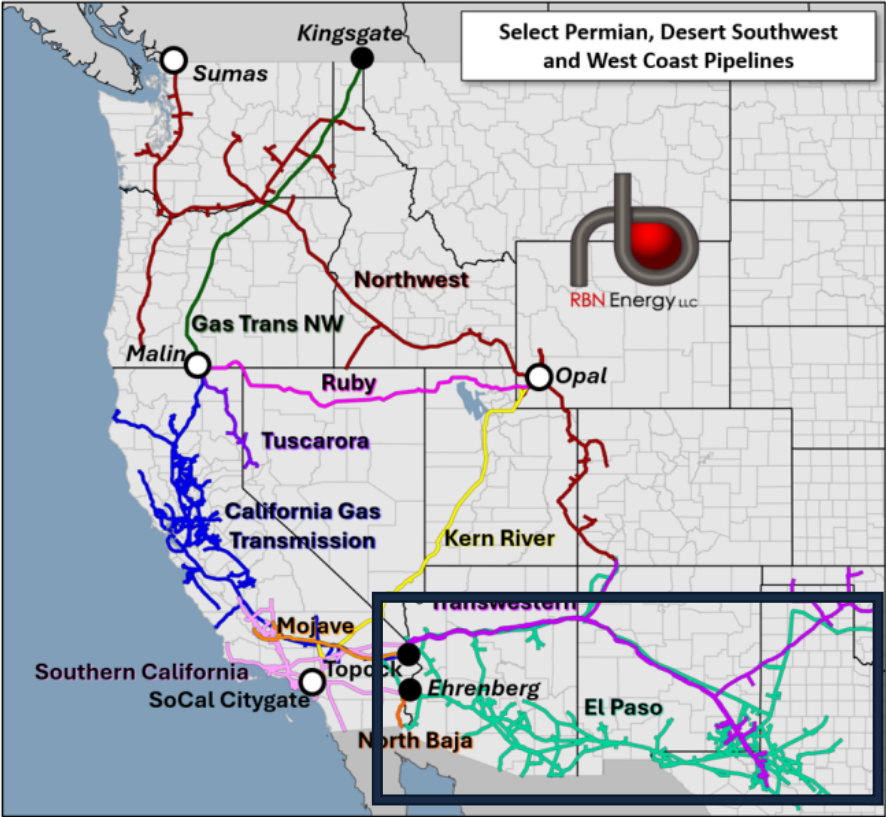
Associated Natural Gas Bottle Neck



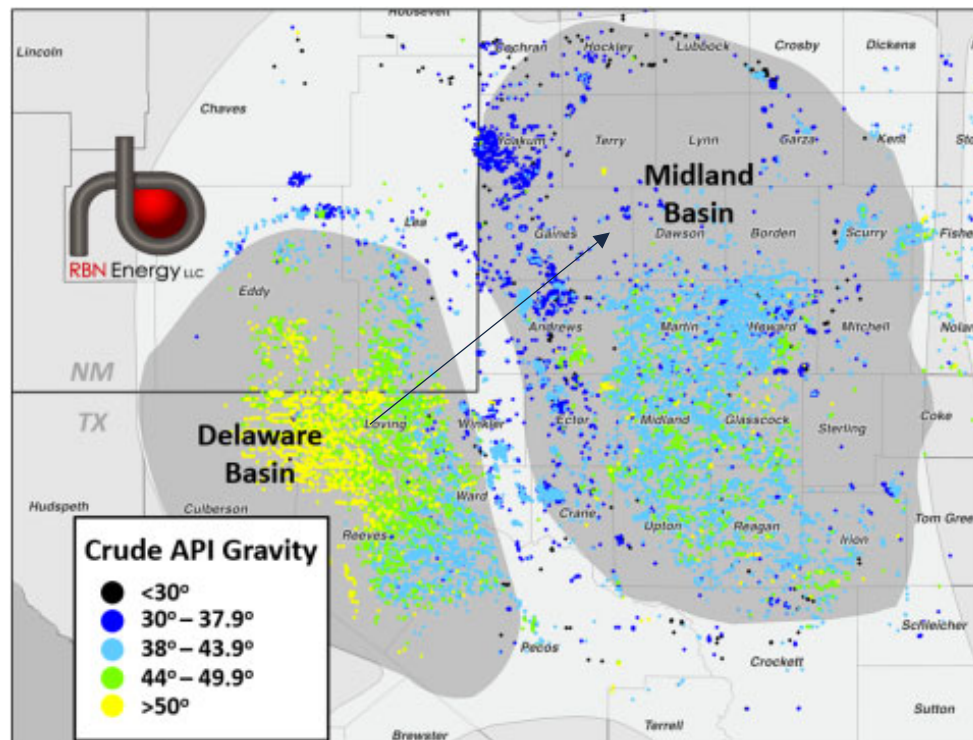
Monthly Average Waha Natural Gas Price



Pipeline Maintenance on EPNG Out of Permian 3.4 Down to 2.4 bcf/d = Negative Price at Waha Hub

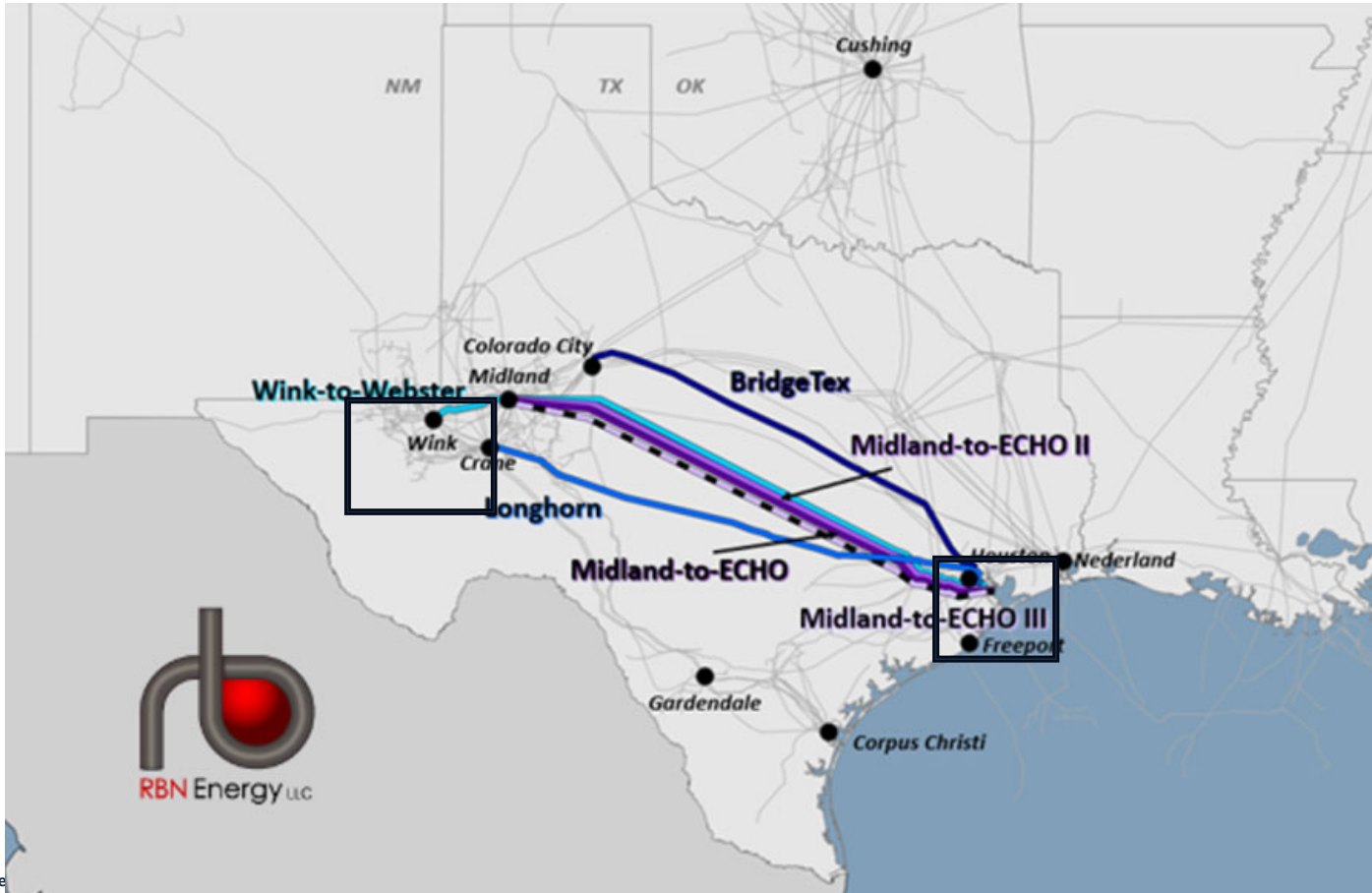


Plus, Older Wells, Higher GOR Ratio & Shifts in Permian



A large blue graphic consisting of a diagonal line from the top-left to the bottom-right, creating a triangular shape on the left side of the page.

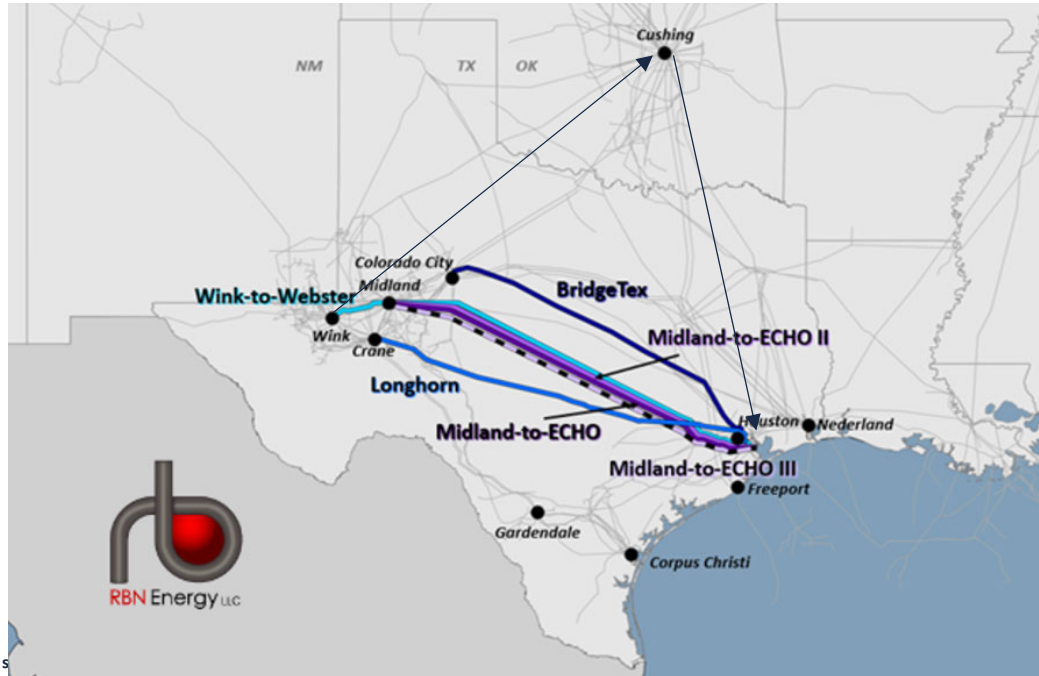
Issue #2: Wink-to-Webster Pipeline Maintenance



Roy Orbison Museum; Wink, Texas



W2W Maintenance 1st 10 Days of June -1.5 mmb/d Store? Ship to Cushing?

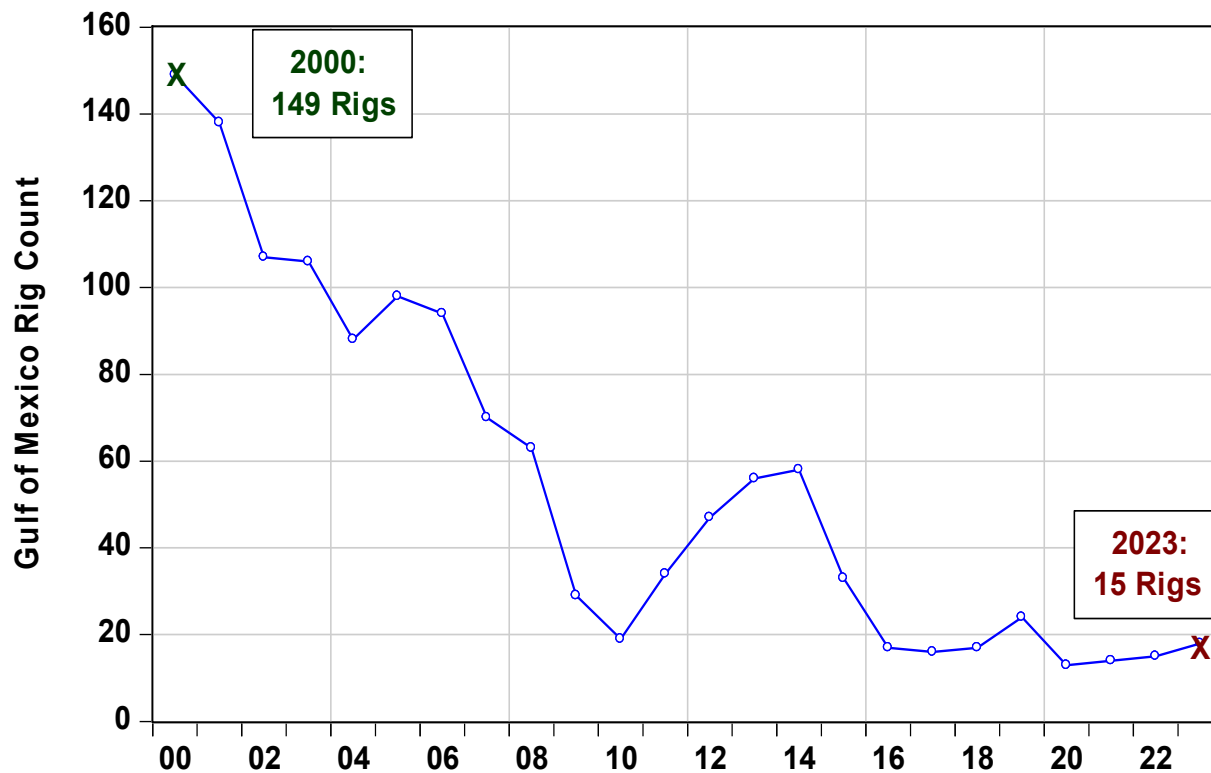




Issue #3: Gulf of Mexico

Is the anchor lifting?

Gulf of Mexico Rig Count: Month of August




Source: Baker Hughes & Loren C. Scott & Associates, Inc. Data are for Louisiana & Texas

Good News in the Gulf

- **Graph was drill bit activity; large number of production platforms added to Gulf**
 - **2016-2020: 5 new platforms added**
 - **2021-25: 7 more will be added**
 - **FIDs expected soon on 5 more platforms**
 - **Shell's Sparta & Leopold**
 - **BP's Kaskida**
 - **Equinor's Monument**
 - **LLOG's Blacktip**

Good News in the Gulf

- **20,000psi (HT/HP) breakthrough**
 - **Transocean 2 new 8th generation drillships**
 - **Deepwater Atlas**
 - **Deepwater Titan**
 - **3.4 mm pound hoisting equipment for heavier, larger diameter casing strings**



Wisdom
**Importance of not jumping
to conclusions:**
The case of the kissing nun

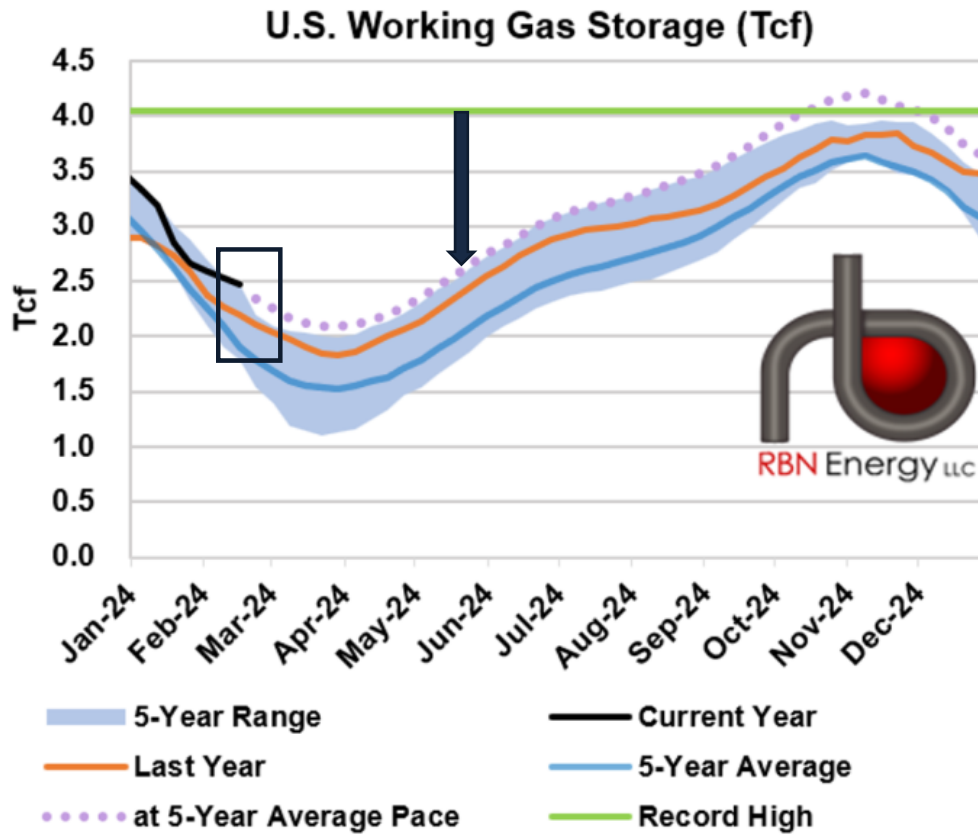
Price of Natural Gas: Henry Hub



What's With Latest Drop?

- **Supply Side:**
 - Strong oil prices = associated gas production way up
- **Demand:**
 - El Nino weather pattern 1st time in 4 years---unseasonably mild temps in northern tier of US

Storage 25% Above 5-Year Average

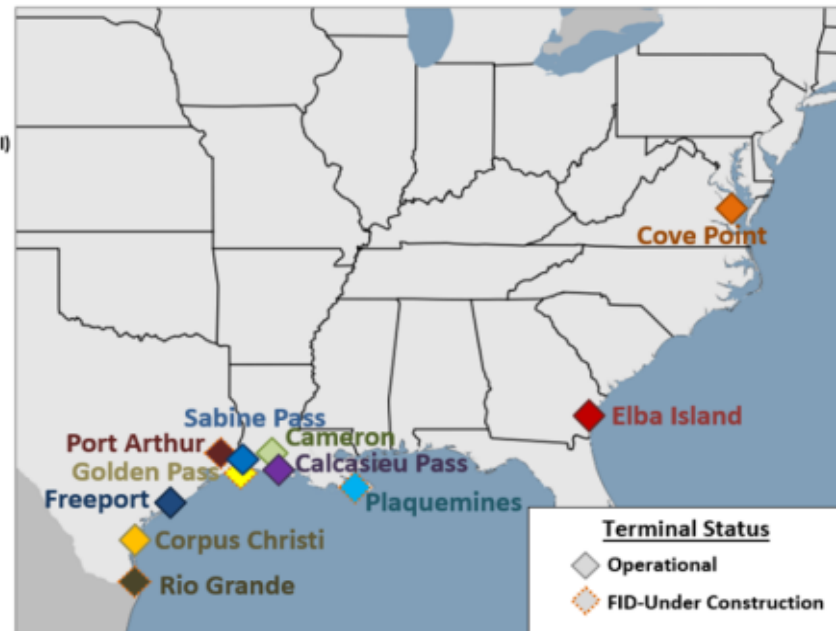
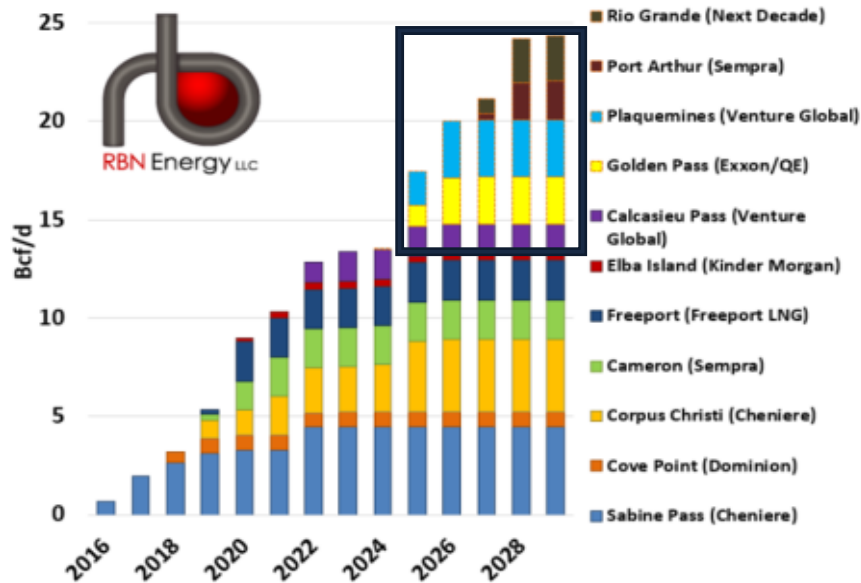


**Watch for significant
CAPEX cutbacks in dry
plays (Haynesville and
Marcellus)**

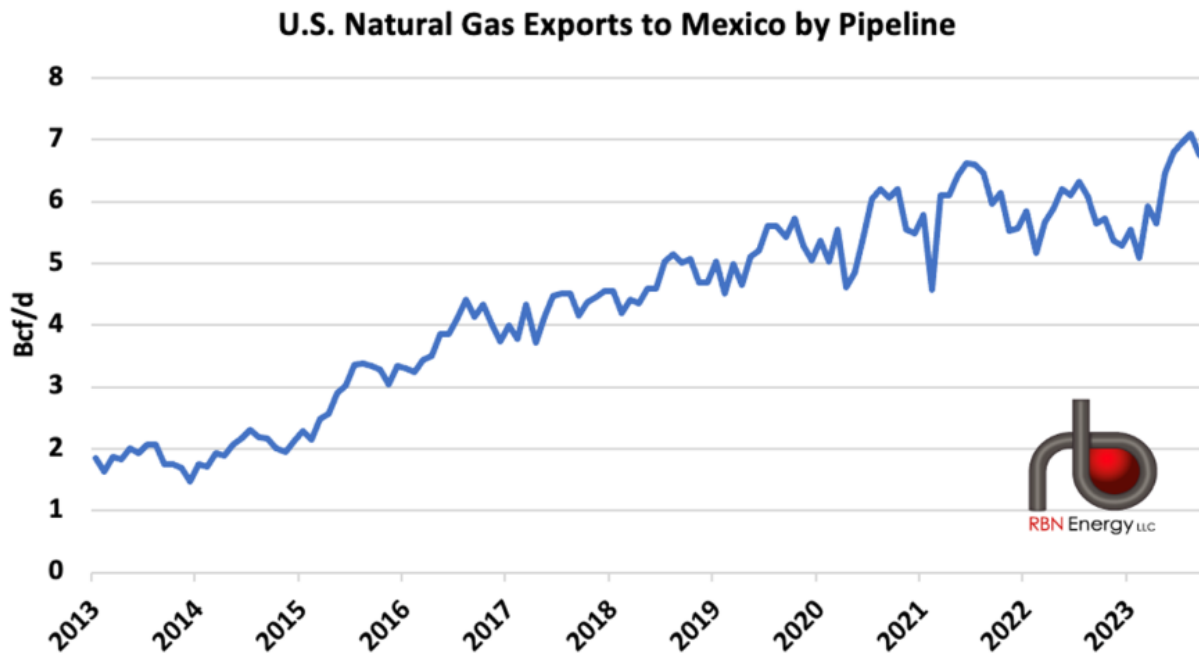
**Haynesville rig count
last 13 months: 80
down to 41**

Future? Note Looming 78% Bump

U.S. LNG Export Capacity by Terminal



Exports to Mexico: Up 3X Last Decade



2/3rds of Demand for Gas-Fired Power Plants with Eleven New ones Under Construction

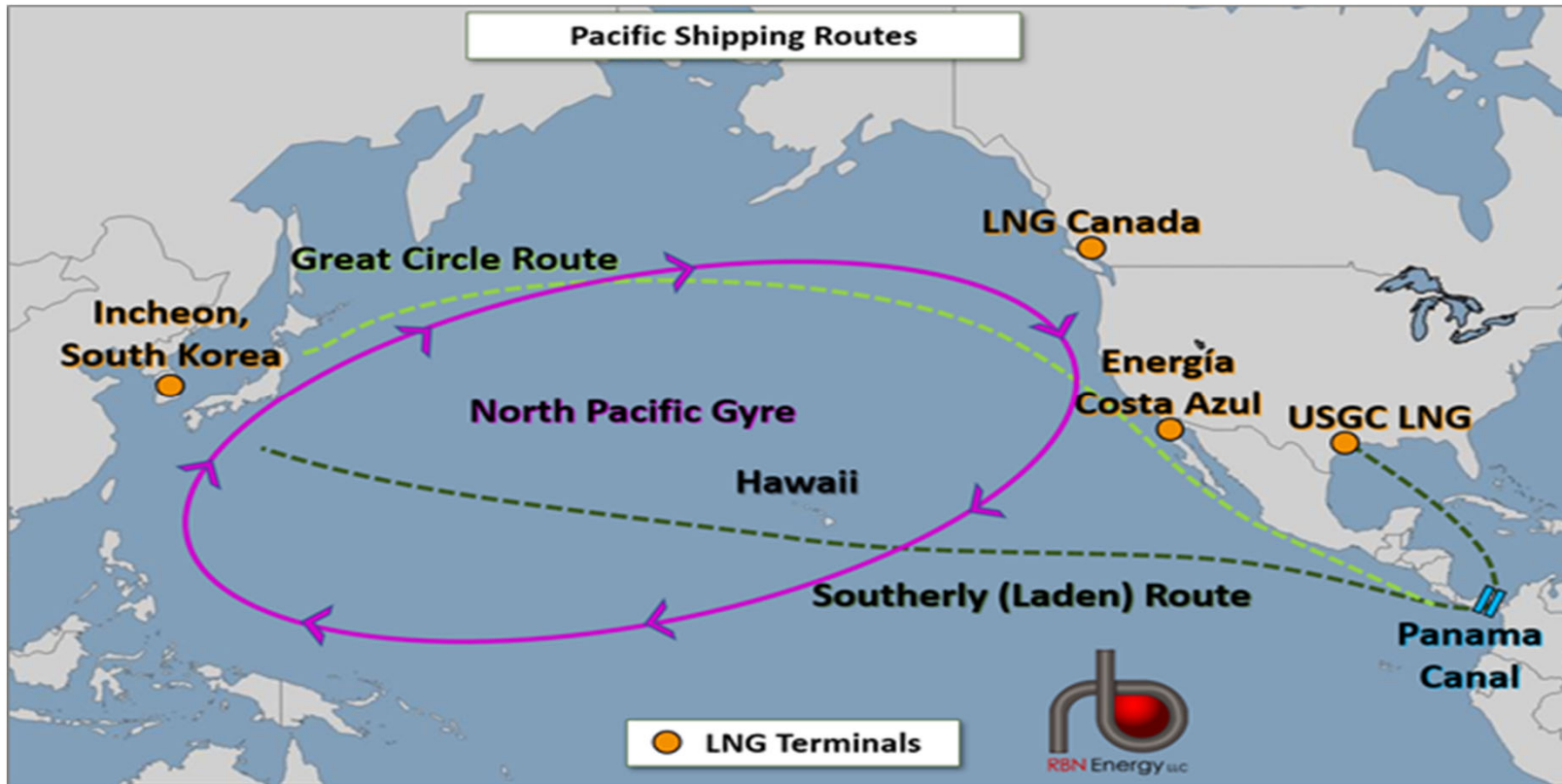
CFE Gas-Fired Power Plants Under Construction



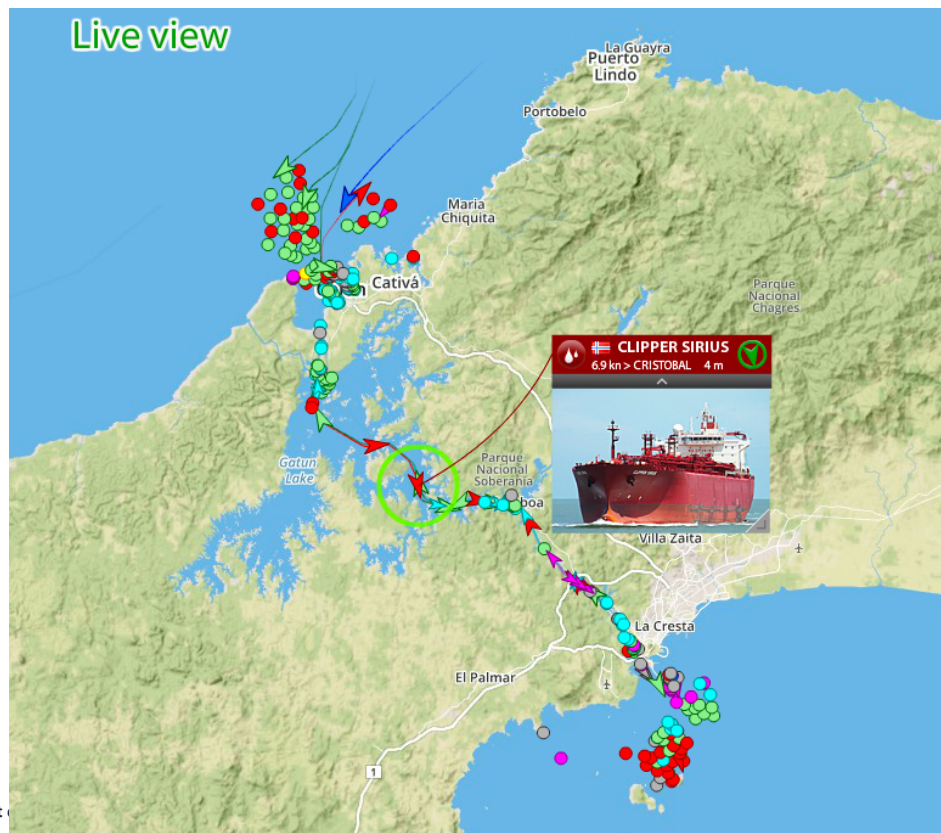
New Pipelines Built to & Within Mexico: Some to Feed New LNG Exporters (Green Diamonds)



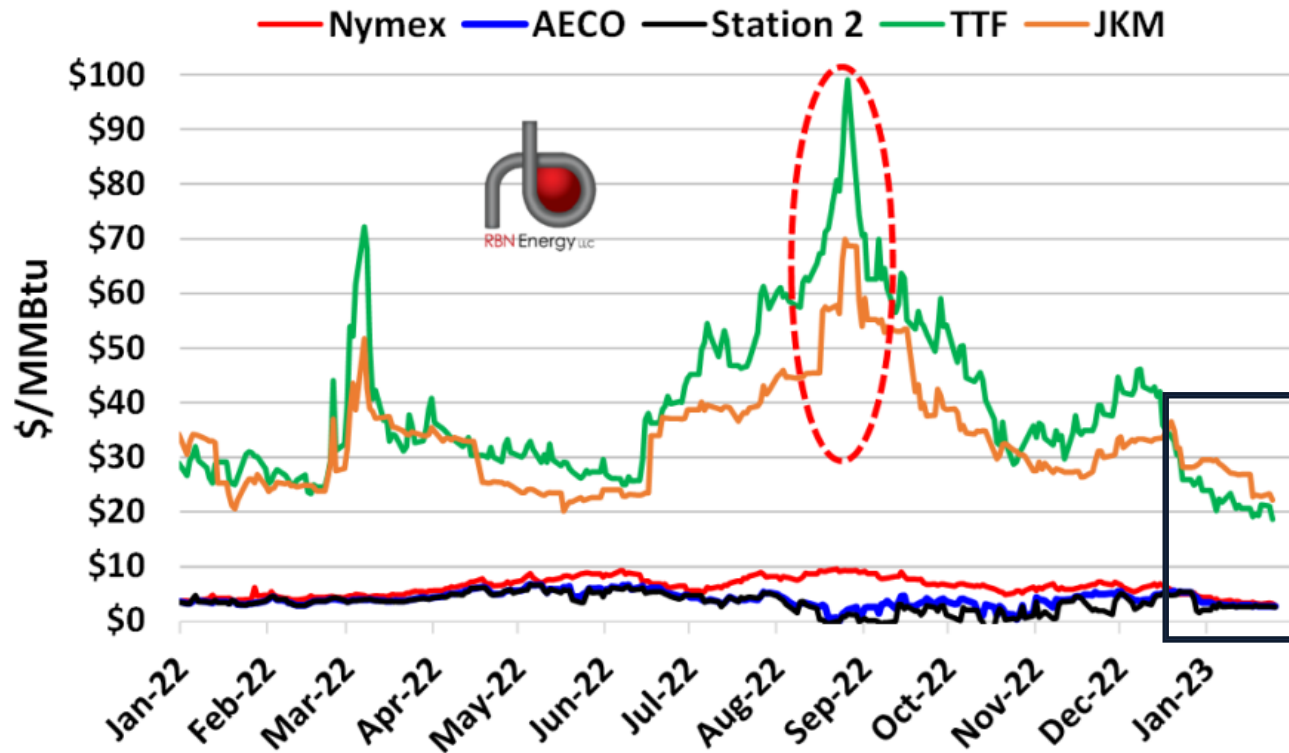
**Via Canal: 1 ship per day each way = 365 max
Laden ships full per year**



Parlor Game: Which direction through Canal Going from Atlantic to Pacific?




Nymex, AECO, Dutch TTF, and JKM Cash Prices



Enormous Construction Boom Ahead

Area	Under Construction	Announced: No FID
New Orleans	\$21.4 Billion	\$39.8 Billion
Baton Rouge	\$11.6 Billion	\$19 Billion
Lake Charles	\$0.8 Billion	\$61.8 Billion
Totals	\$33.8 Billion	\$120.6 Billion



The industry under attack from Biden Administration

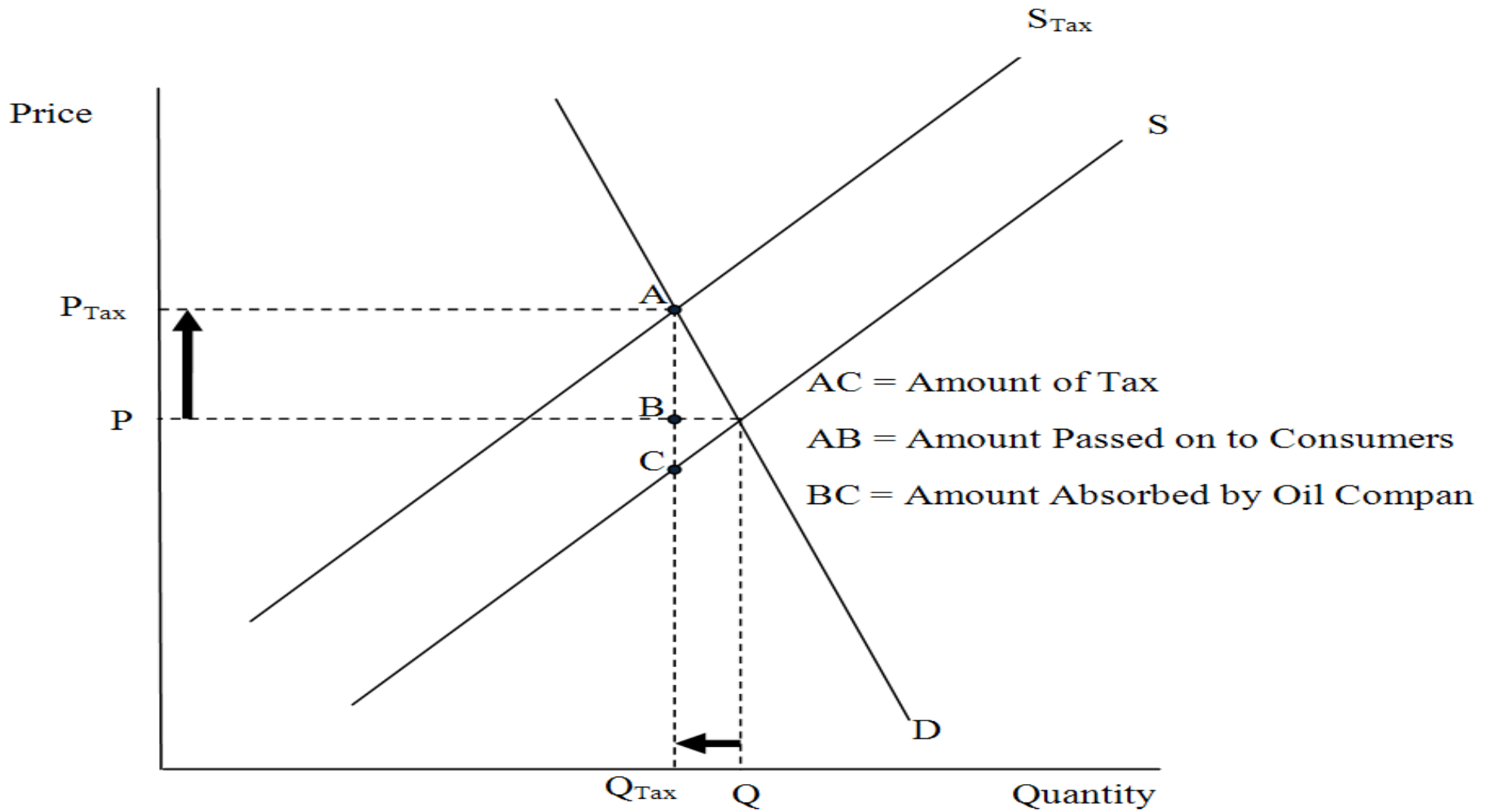
Offshore Lease Sales

- **Historically:**
 - Regular release of 5-year plan
 - Two sales a year
- **Biden:**
 - Irregular release of 5-year plan
 - One sale every other year (-70% change in number of sales!)

Proposed Biden Budget: New Taxes on Fossil Fuels Tax Foundation



- Intangible Drilling Costs: **-\$8.5 billion**
 - Supplies, surveyors, well maintenance
 - Expense over 5 years instead of immediately
- Geological & Geophysical Costs: **-\$2.8 Billion**
 - Independents deduct over 7 years instead of 2
- Depletion of oil & gas wells: **-\$13.9 Billion**
 - Instead of % depletion from gross income, use cost depletion
- **WHO PAYS?**



Pause in LNG Permitting

- Hammered Lake Charles
 - Driftwood: \$16.8 billion
 - **VG-CP2: \$13.5 billion**
 - Energy Transfer: \$10.9 billion
 - **Cameron #6: \$4.0 billion**
 - **Cheniere Stage 5: \$4.0 billion**
 - **Commonwealth: \$4.0 billion**
 - **Total: \$53.2 billion**
- **Plus Texas Gulf Coast**
- Can financing be kept secure?



Declaration of National Climate Change Emergency?



**Our President is prone to
mis-communicating**
President Biden's discussion
with Queen Elizabeth

Intensity of these policy changes
based on climate change as
“existential threat”

Will President Biden declare a
“climate emergency”?



Use of Statistics

Always Consider Incentives

Cui Bono: “Who Benefits?”

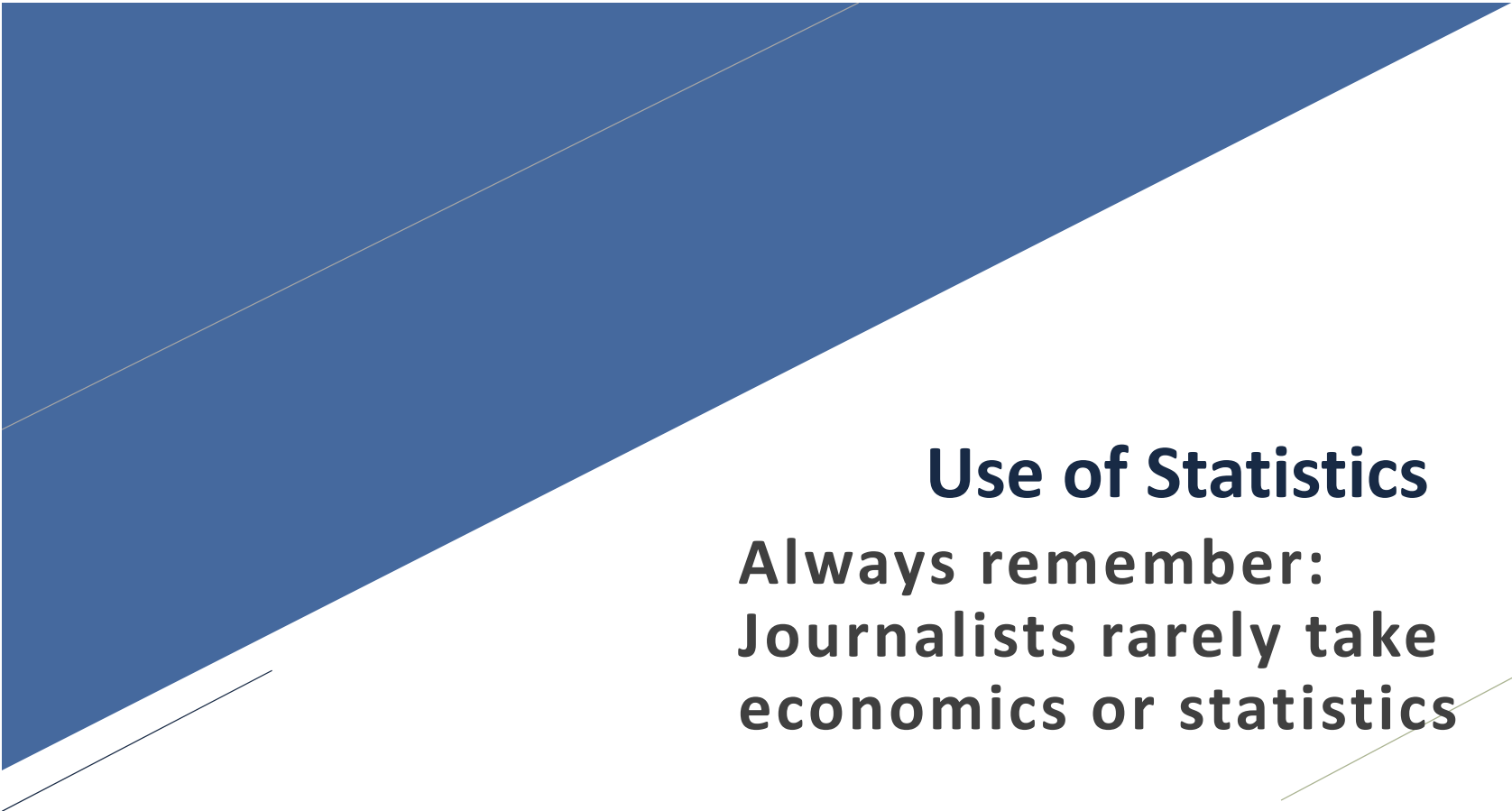
Annual Revenues Of The Groups Applauding The LNG “Pause”

Climate Power	n/a	Alliance For Climate Protection (Cli. Protection Proj)	\$23
Natural Resources Defense Council	\$186	350.org	\$22
NRDC Action Fund	\$16	Public Citizen Foundation	\$19
Sierra Club	\$167	Food & Water Watch	\$19
Sierra Club Foundation	\$88	Friends of the Earth	\$18
Earthjustice	\$150	Friends of the Earth Action	\$1
Center for W. Priorities (Resources Legacy Fund)	\$89	Rainforest Action Network	\$13
League of Conservation Voters	\$69	Public Citizen	\$8
League of Conservation Voters Education Fund	\$54	Action For The Climate Emergency	\$8
Third Act (Sustainable Markets Foundation)	\$42	Oil Change International	\$6
Center for American Progress	\$40	Sunrise Movement Education Fund	\$5
Center for American Progress Action Fund	\$9	Alliance For Affordable Energy	\$3
Greenpeace	\$32	Evergreen Action	\$2
Center for Biological Diversity	\$28	Total	\$1,142
Greenpeace Fund	\$25		

Latest-year revenue, \$Millions

Sources: Form 990s, group annual reports

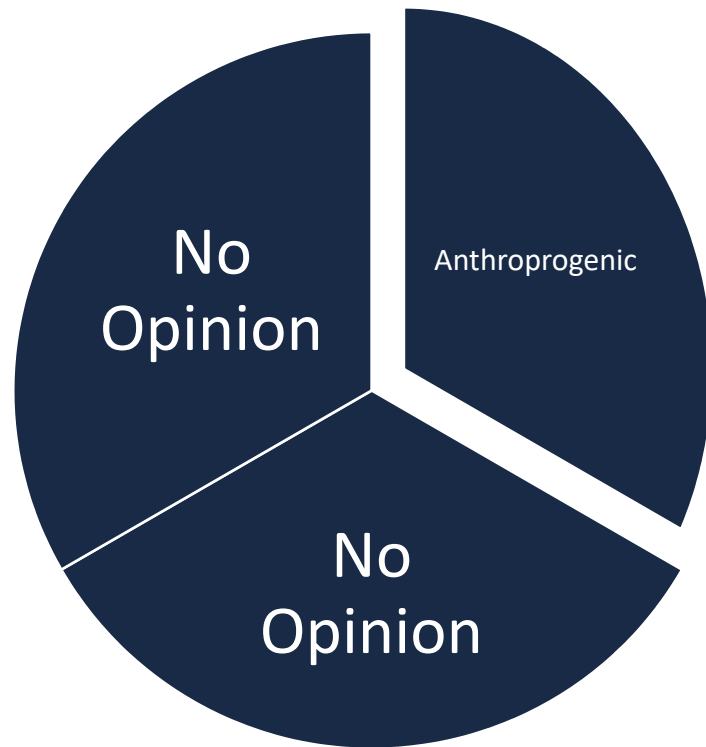
©Robert Bryce



Use of Statistics

**Always remember:
Journalists rarely take
economics or statistics**

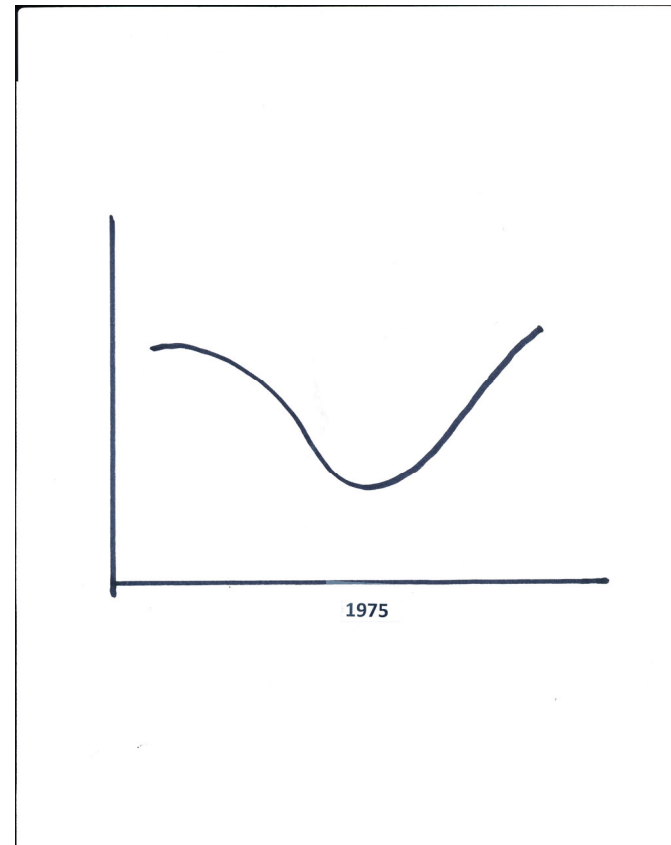
**97% of Scientist Agree?
11,000+ Articles Surveyed**



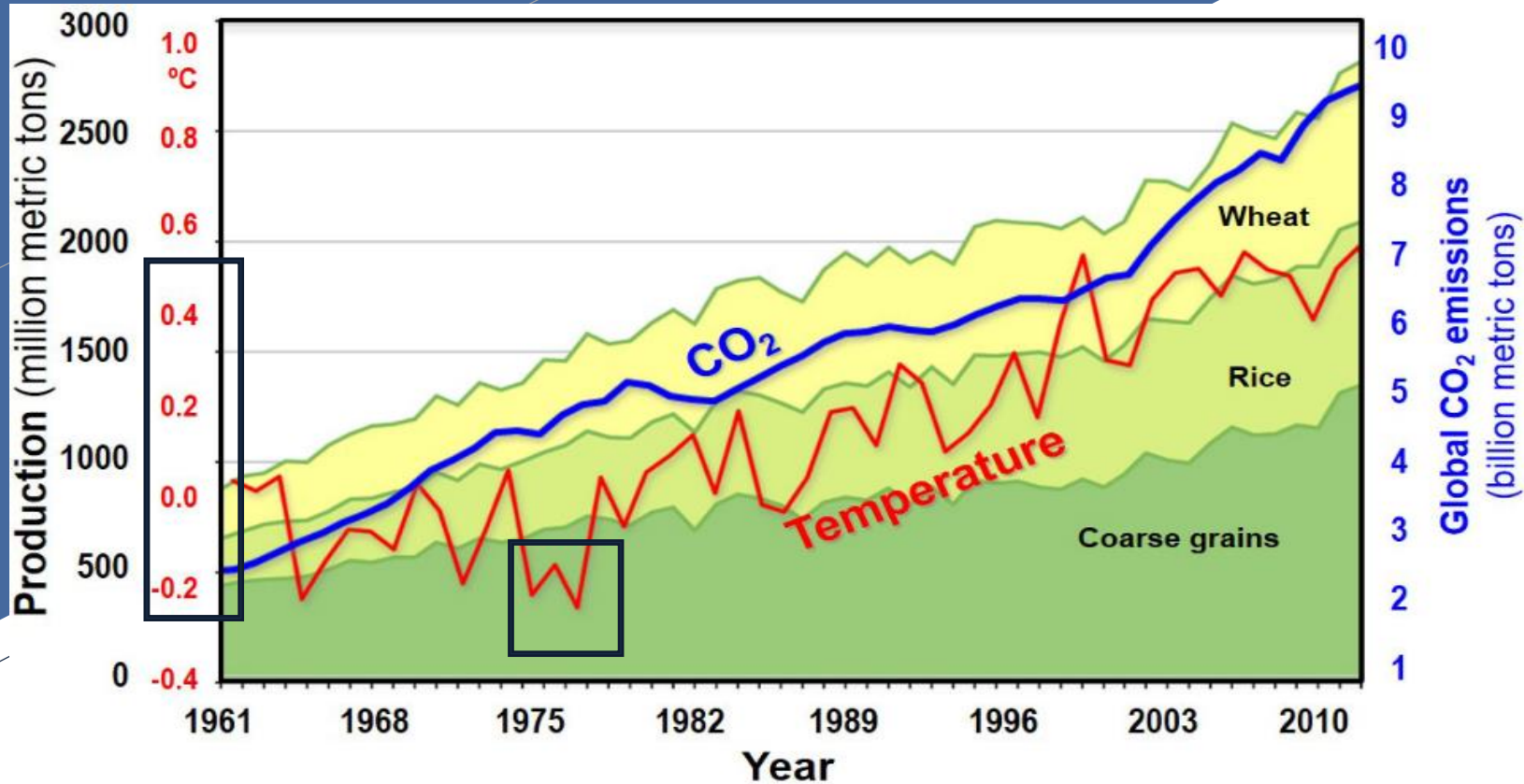
World Climate Declaration - 2022

- **Signed by 1,100+ scientists & professionals from all over the world**
 - Led by Nobel Prize in Physics---Laureate Ivar Giaever
 - Earth's climate has varied for as long as it has existed
 - No statistical evidence global warming is intensifying hurricanes, tornados, floods, droughts or making them more frequent
- **Discover of nuclear anti-matter Professor Antonio Zichichi (Italy) led 48 local science professors in stating "human responsibility for climate change is unjustifiably exaggerated & catastrophic predictions are not realistic".**

The Starting Point Matters---A Lot!

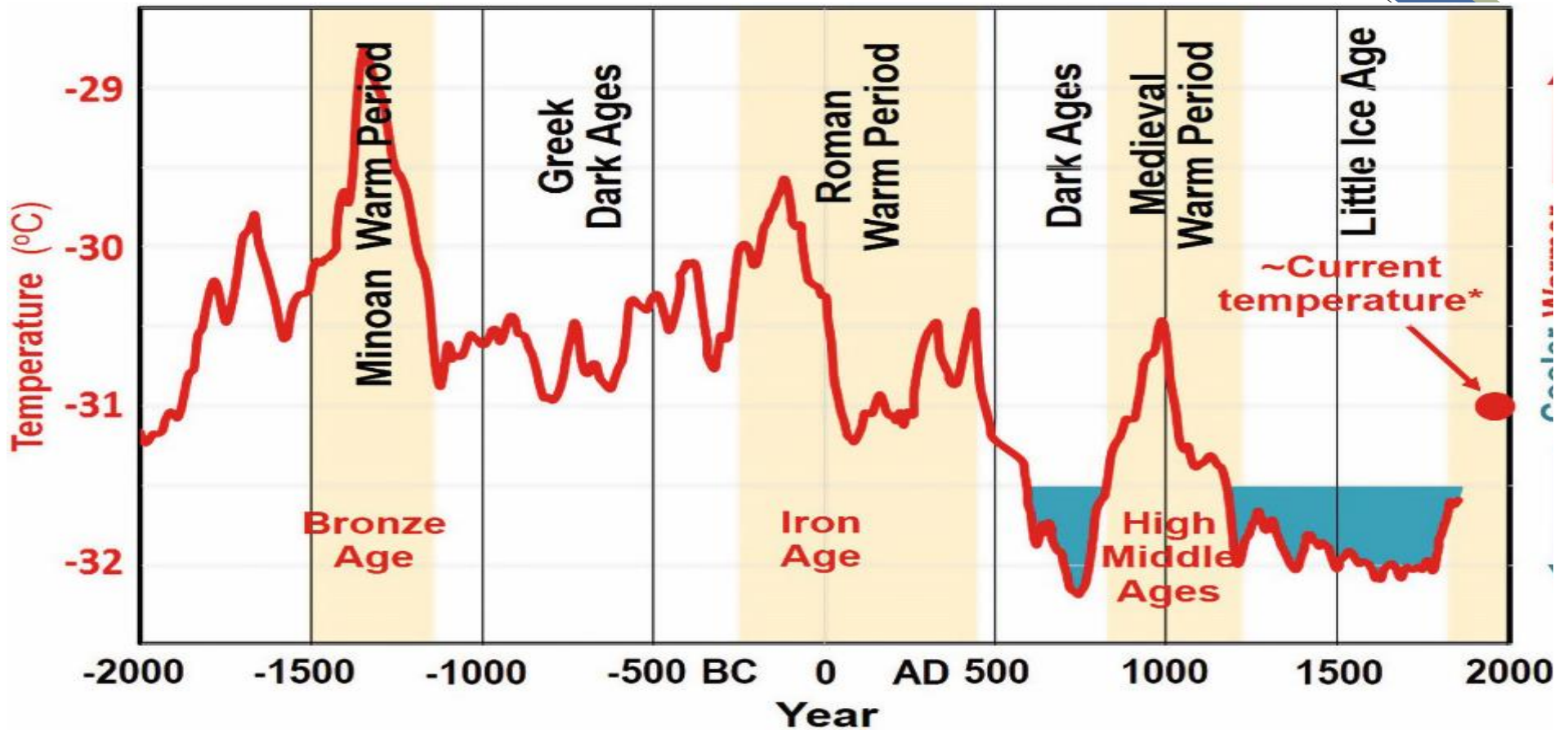


Food/grain production excels



Daniel Fahrenheit: 1st reliable measure 1714

Proxies: Bore Holes in Greenland; Tree Rings



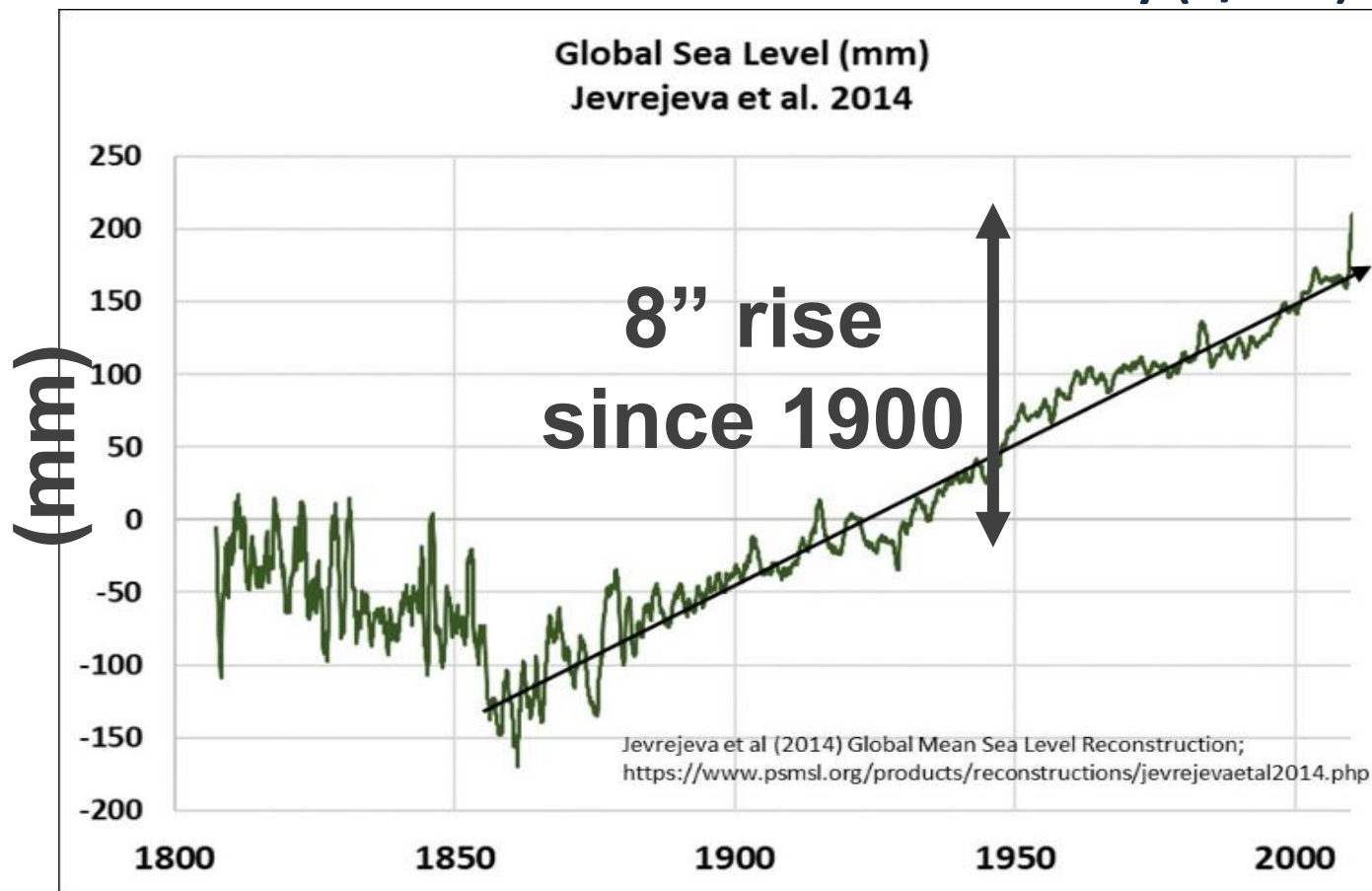
Parlor Game

How much has the sea level
risen since 1990?

0.07" Per Year Since 1900

Recent Advocate Article : 7 millimeters Annually (1/4th")

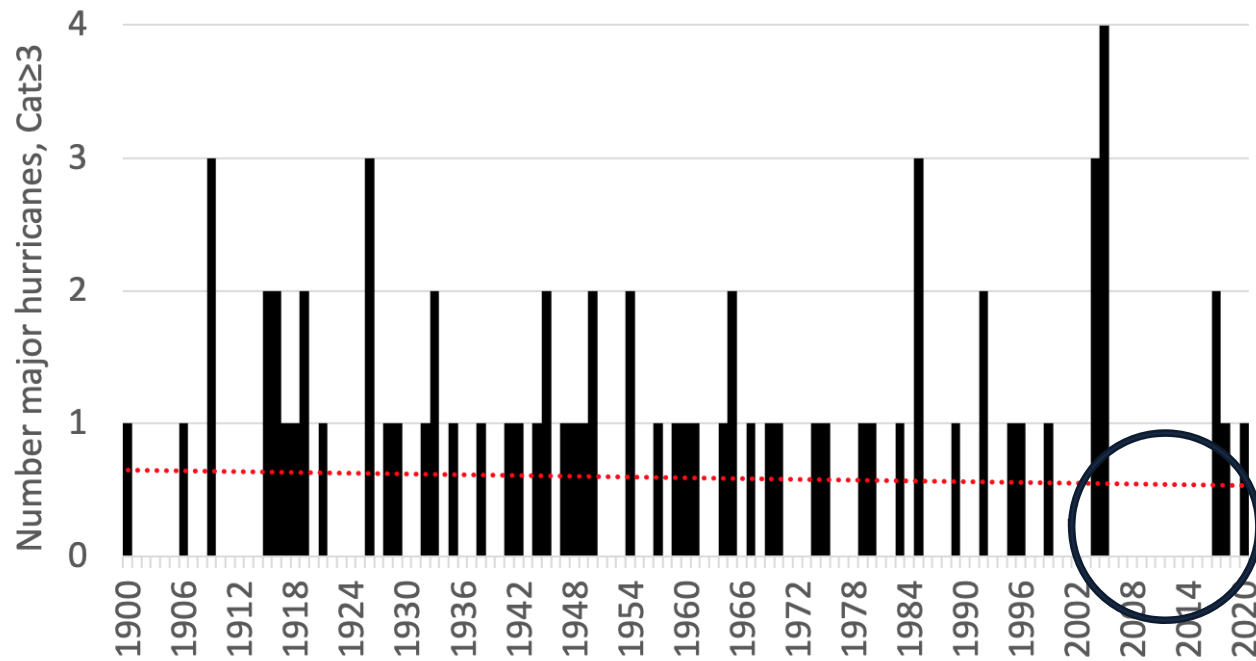
Global sea level
(mm)



330 mm Estwing
Rock Pick
H/T to David
Middleton for Estwing
use

Number of Cat 3+ By Year 2005-2017: No Hit to Florida coast

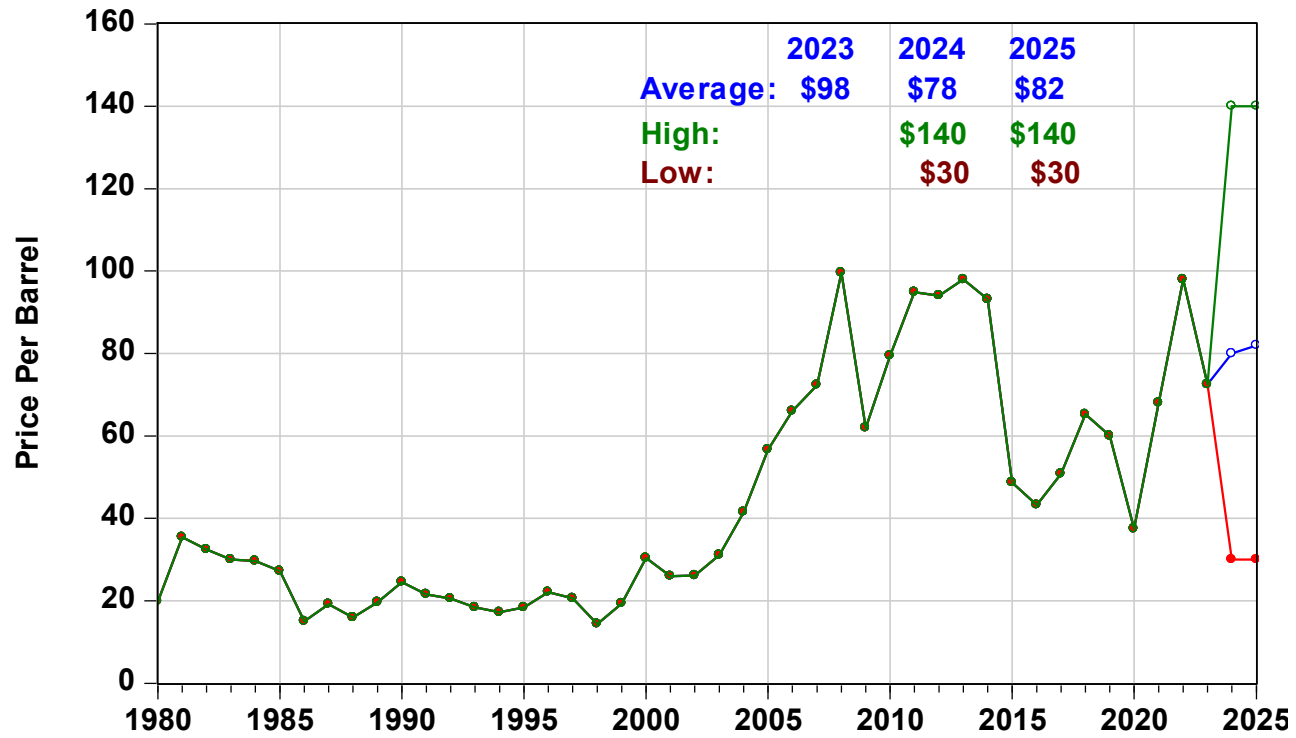
US major landfalling hurricanes 1900-2020



Source: <https://journals.ametsoc.org/bams/article/99/7/1359/70330/Continental-U-S-Hurricane-Landfall-Frequency-and>, updated with data from lead author, red line least-square linear fit

Scientific Statistical Issue

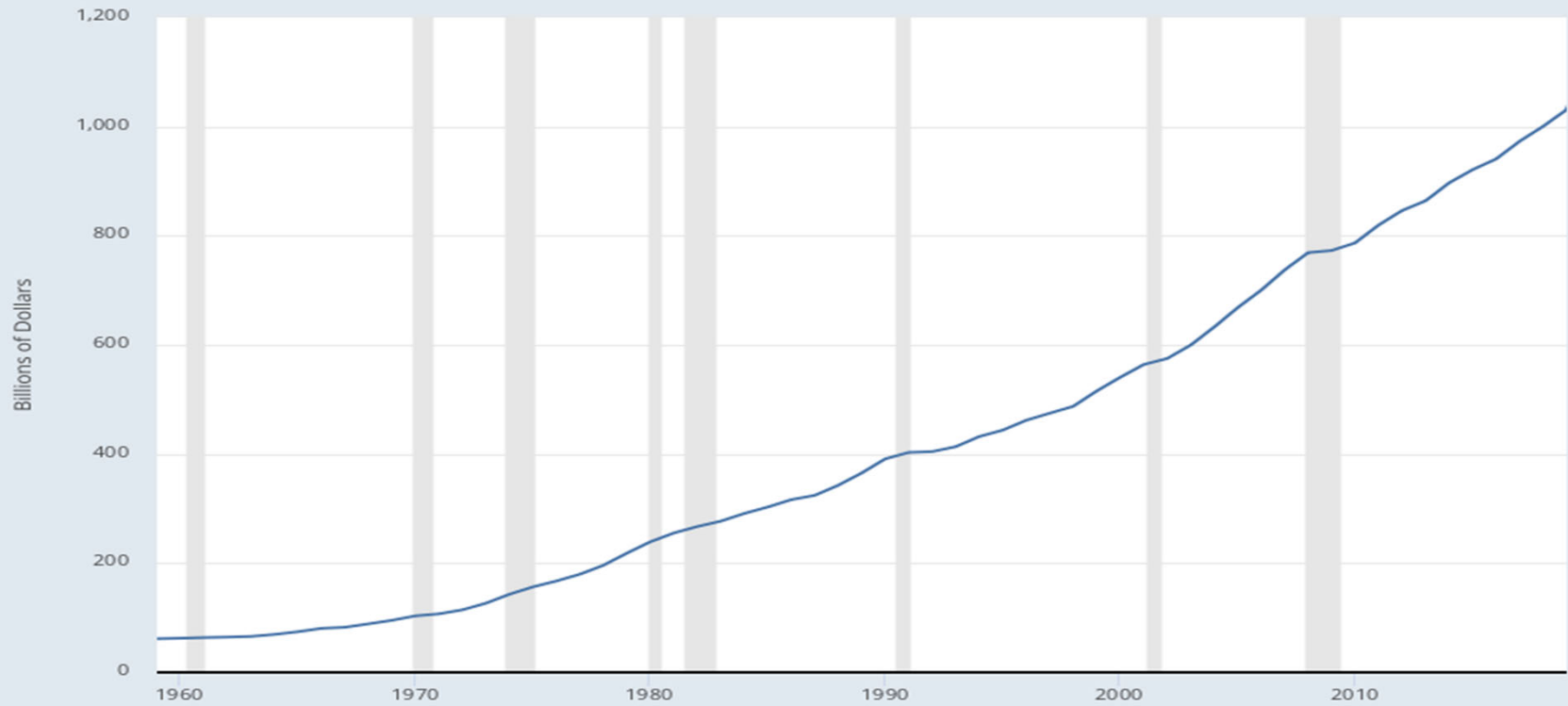
Oil Price Forecasts



FRED



— Personal consumption expenditures: Food



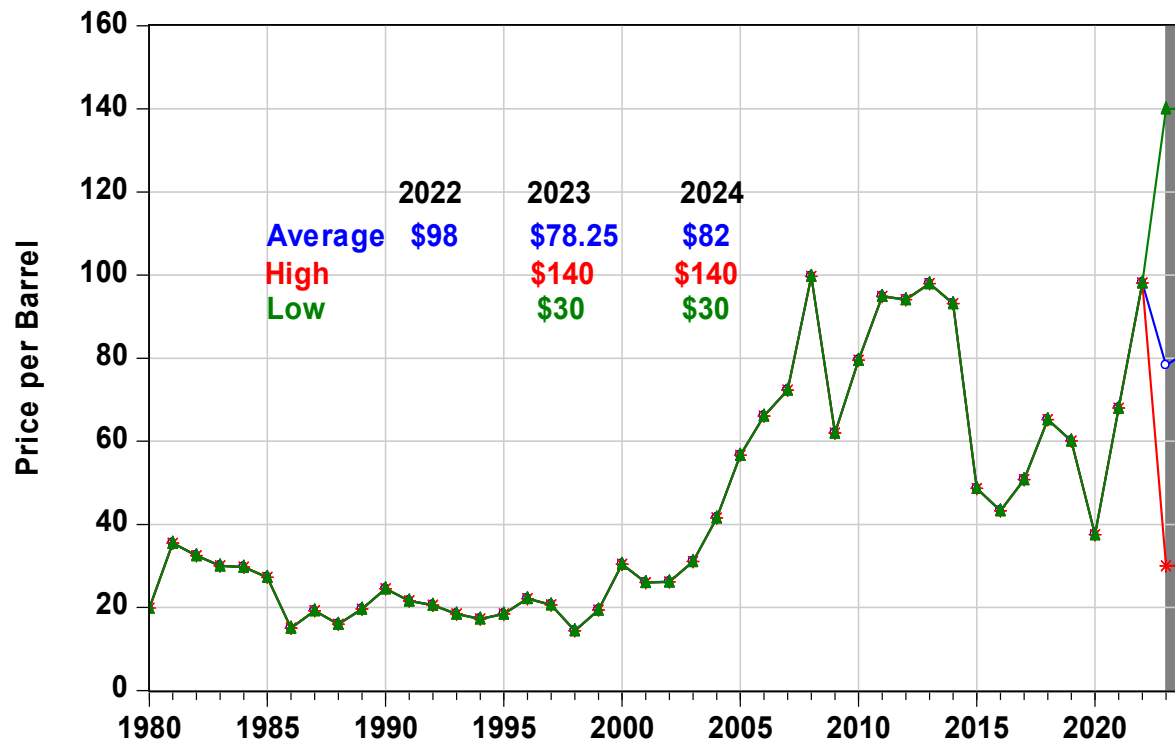
Shaded areas indicate U.S. recessions.

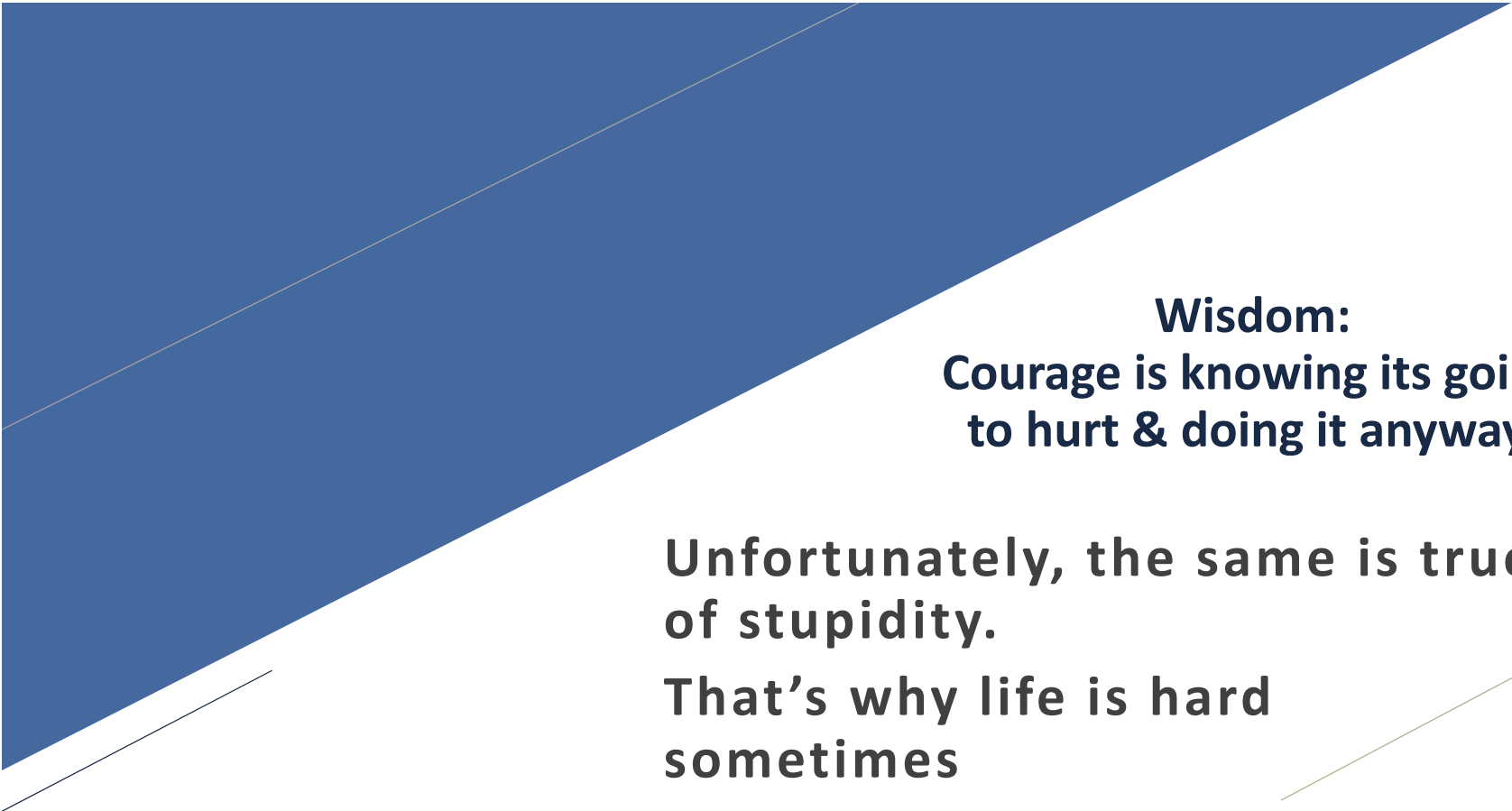
Source: U.S. Bureau of Economic Analysis

myf.red/g/OTp8

Scientific Statistical Issue

Oil Price Forecasts





**Wisdom:
Courage is knowing its going
to hurt & doing it anyway.**

**Unfortunately, the same is true
of stupidity.
That's why life is hard
sometimes**

**Scott Peck: *The Road
Less Traveled*
“Life is difficult”**

**A life in which it is easy to fail
Great people are just ordinary people
who had an **extraordinary amount of
determination****

John Creasy: British Author

- Received 753 rejection letters before 1st acceptance
- Published over 600 novels





Rowland Hussey Macy
Failed 7 times at retailing
before creating Macy's
Department Store

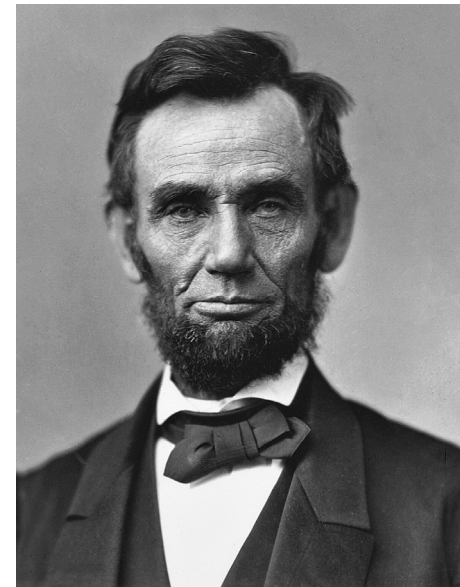
The “Loser” Politician

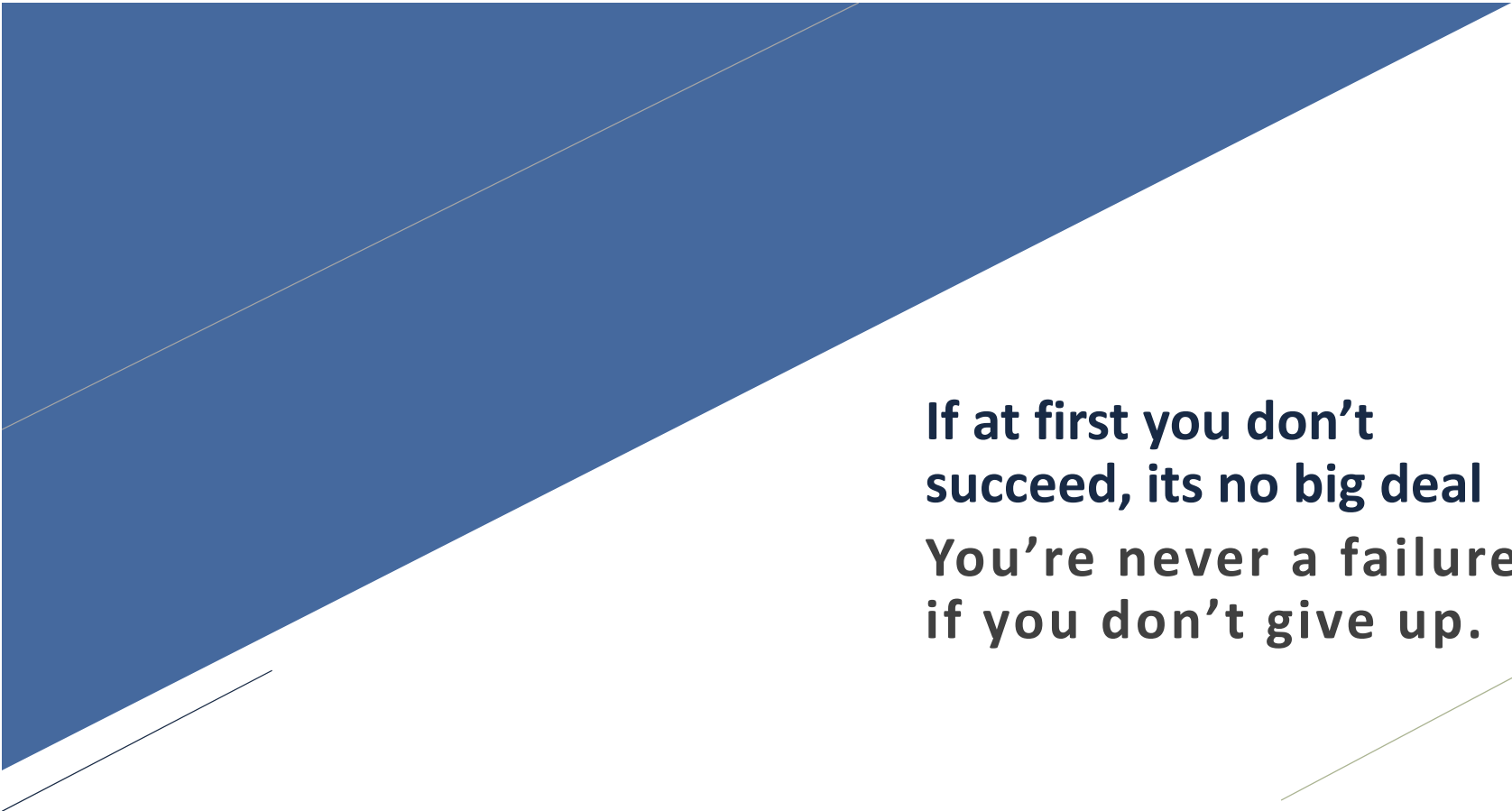


- Started 1st business - **failed**
- Ran for state legislature – **lost**
- Tried for law school – **couldn't get in**
- Borrowed \$ for another business – **failed** – 17 years to pay off debt
- Had total nervous breakdown & spent 6 months in bed
- Sought to become elector – **lost**
- Ran for Congress – **lost**
- Ran for Congress again – won – but **lost re-election**

The “Loser” Politician

- Sought job a state land officer – **rejected**
- Ran for U. S. Senate – **lost**
- Ran for party’s VP nomination – **got less that 100 votes**
- Ran for U.S. Senate again – **lost**
- Ran for Presidency of the U.S.
 - **Won!**
 - Year was 1860





**If at first you don't
succeed, its no big deal
You're never a failure
if you don't give up.**



Thank You!



Dr. Loren C. Scott



225-937-4283



lorencscott@aol.com



www.lorencscottassociates.com