

# Planet Pulse

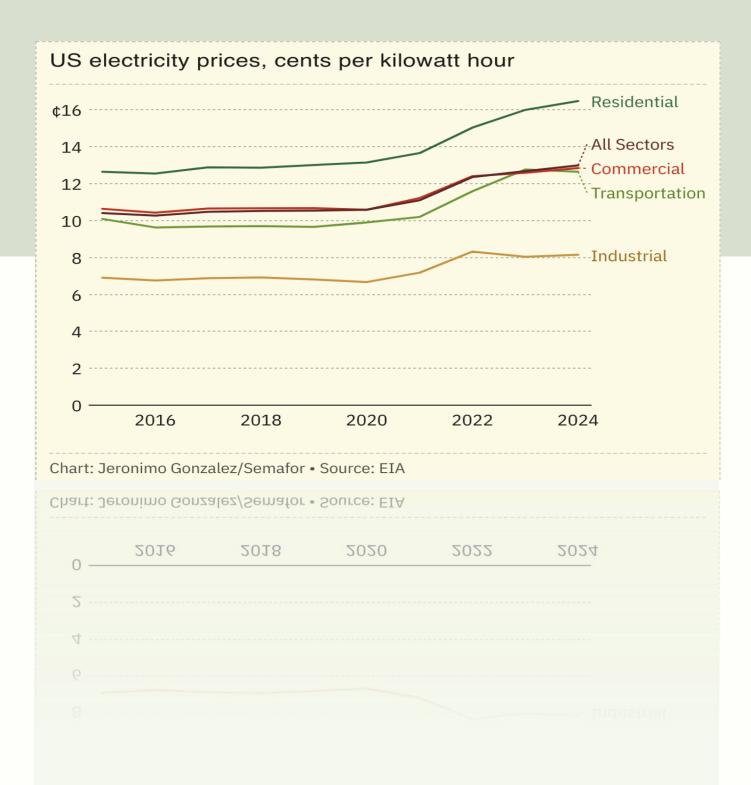
A rhythmic check-in on climate issues







- The price of eggs haunted the Biden administration. Will the price of power haunt Republicans?
- As an issue that impacts virtually every American, there's major buzz around soaring electricity costs.
- Energy Secretary Chris Wright is concerned that the government is "going to get blamed." He's right.
- Of course, Wright blames Obama-Biden policies which is somewhat truthful.
- But Trump policies are poised to make matters worse.
- Expect electricity prices to become an election issue.

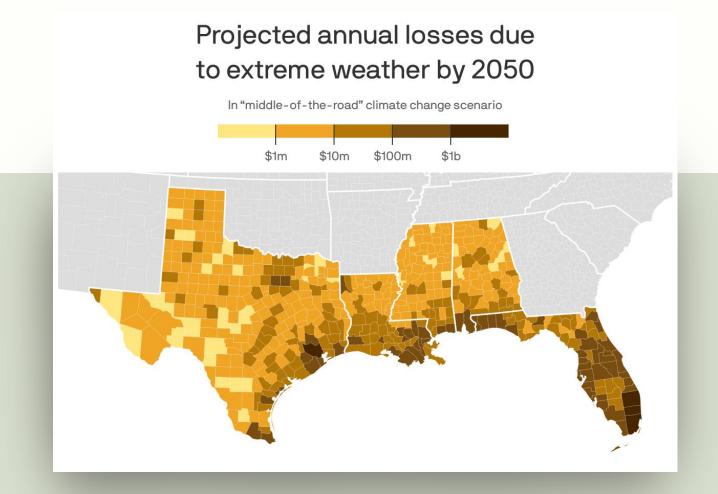




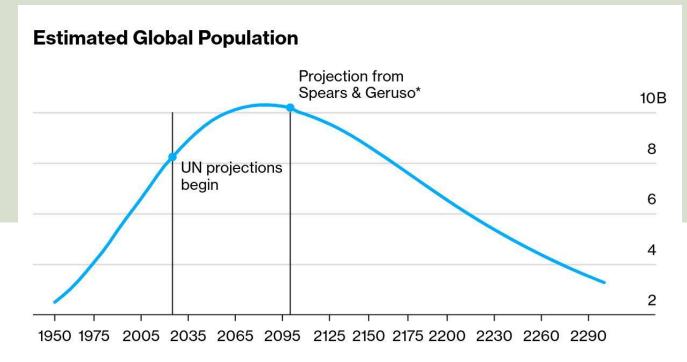
### Sun Belt is becoming no fun belt

- One of my recurring themes is that the climate movement should hammer home the cost of climate change to average people.
- Once the mecca for migration in the U.S., the Sun Belt is bearing the brunt of extreme weather.
- According to the Urban Institute, the Gulf Coast is staring in the face of billions of dollars of property losses by 2050.
- Using FEMA data, it estimates that by 2050, the damage from extreme weather will cost \$32 billion annually across Texas, Louisiana, Mississippi, and Florida.
- Based on current populations, that would equal a cost of \$514 for each man, woman, and child living in those states or over \$2,000/year for a family of four.









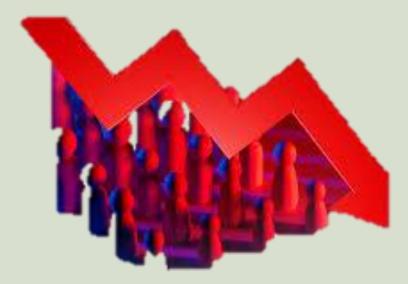
Source: UN Population Division; "After the Spike" by Dean Spears and Michael Geruso

Note: \*After 2100 is a scenario from Spears/Geruso where global fertility rates converge at 1.6. the current US level.

**Bloomberg** 

Experts believe that by the end of this century the global population will start shrinking.

And it will keep shrinking unless the world achieves a first: an increase in global birth rates.



### One way to reduce emissions

- A common response to declining birthrates has been to pay people to have children. The only problem with that strategy is it hasn't really moved the needle.
- One cause of low fertility globally is a shift in what people want from their lives and not the cost of children.
- Another theme is the need to share the responsibility for care, including men being more involved and elder care.
- If the experts are correct, more countries will shift from aging-but-growing to aging-and shrinking.
- That may help reduce emissions on the margin, but it doesn't sound like a good long-term strategy.



#### Four cool startups





#### How it works

- Specialized cold plates often of copper are attached to chips.
- A coolant is then circulated through the plate's channels.
- The coolant flows thru a Coolant Distribution Unit (CDU) where the heat is transferred.

- Predicting the power demands for AI is a fool's bet because the technology is quickly evolving.
- Case in point: one-third of the power needed is just to cool the servers.
- The market for cooling technology is projected to reach \$42.5 billion by 2032.
- One approach of interest: direct-to-chip cooling.













## Unbiased and Unfiltered

An honest assessment of the cleantech industry and the effort to stem climate change.

