

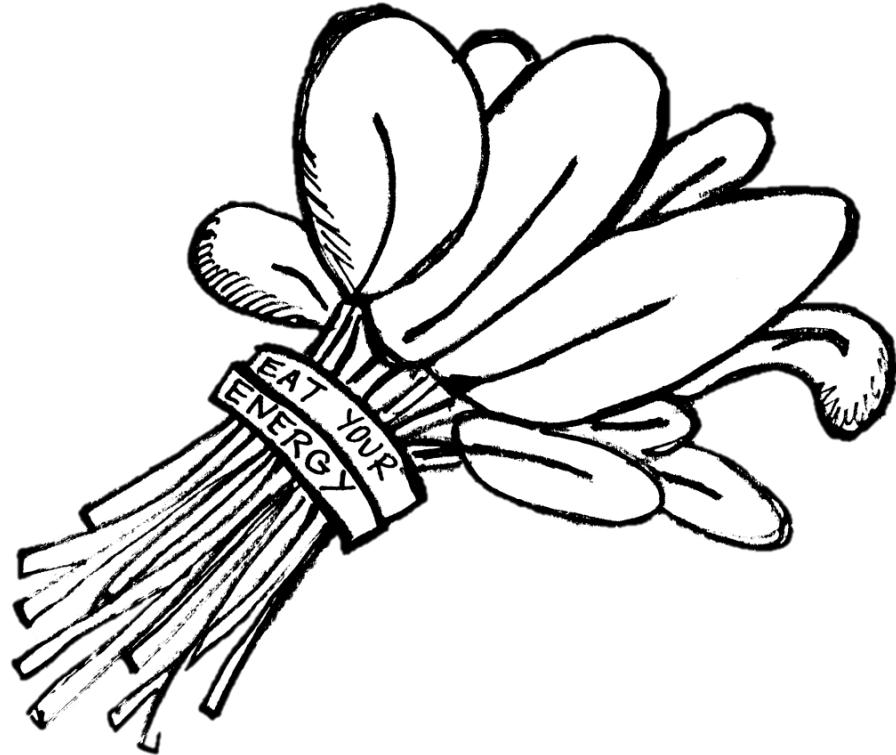
# 24 Energy Story Ideas You Data Driven Localizable Timely Can Do Right Now



CAR 2016, Denver

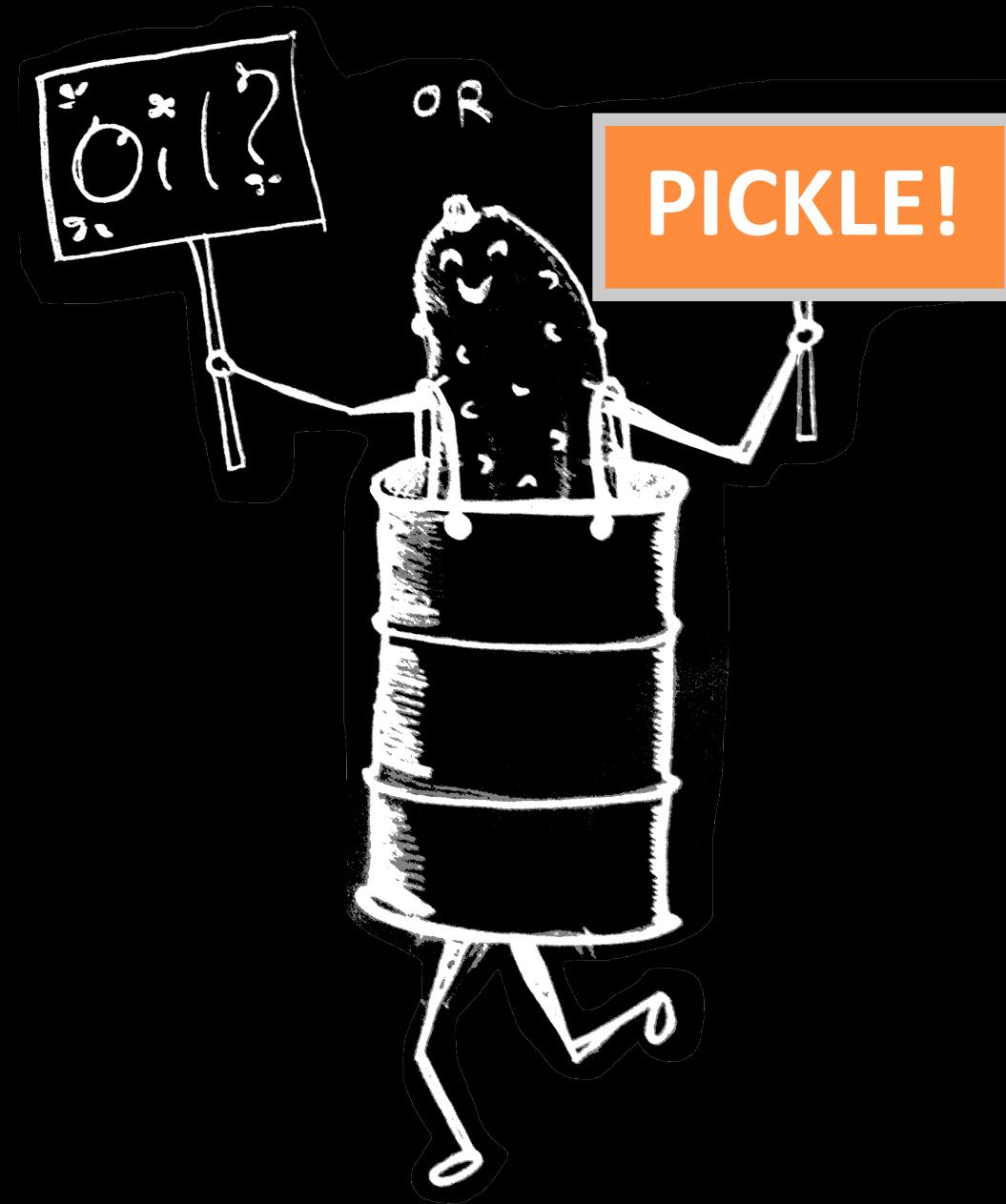
JORDAN WIRFS-BROCK, @jordanwb  
DAN BOYCE, @boycedan  
STEPHANIE JOYCE, @stephaniemjoyce  
LEIGH PATERSON, @sclaterpee  
REBECCA JACOBSON, @rebeccajacobson

# Energy? But that's too...



Boring  
Nerdy  
Businessy  
Jargony  
Boring  
Complex  
Politicized  
Esoteric  
Boring  
Irrelevant  
Unsexy  
Wonky  
Boring

# HALF SOUR



# 1. How Much Electricity Do You Use?



<http://insideenergy.org/2016/02/23/boiling-water-ieq/>

cents per kilowatthour

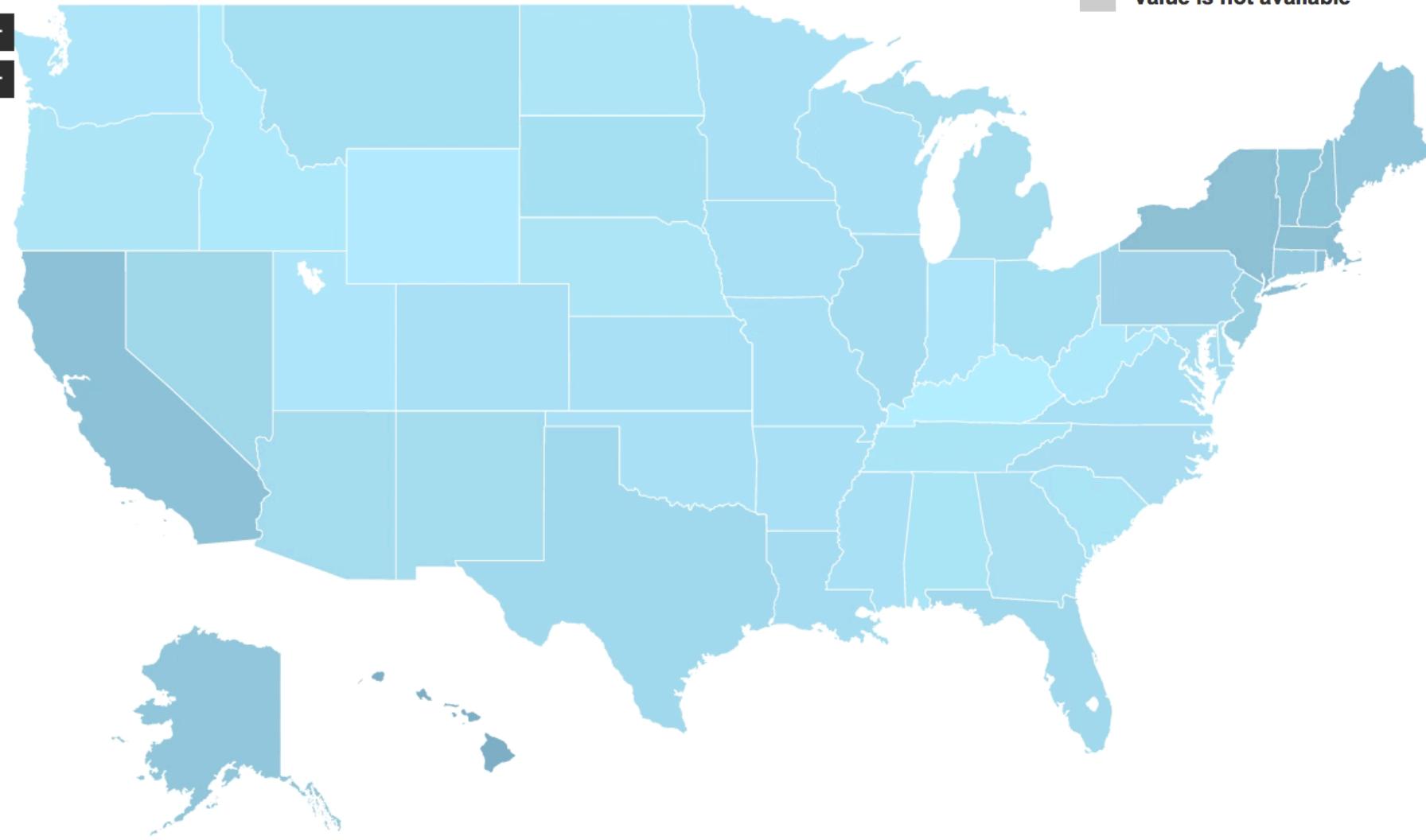
## Average retail price of electricity : all sectors 2001

4.24

34.04

Value is not available

2. And  
What's  
The Price  
Of Your  
Kilowatt  
Hour?

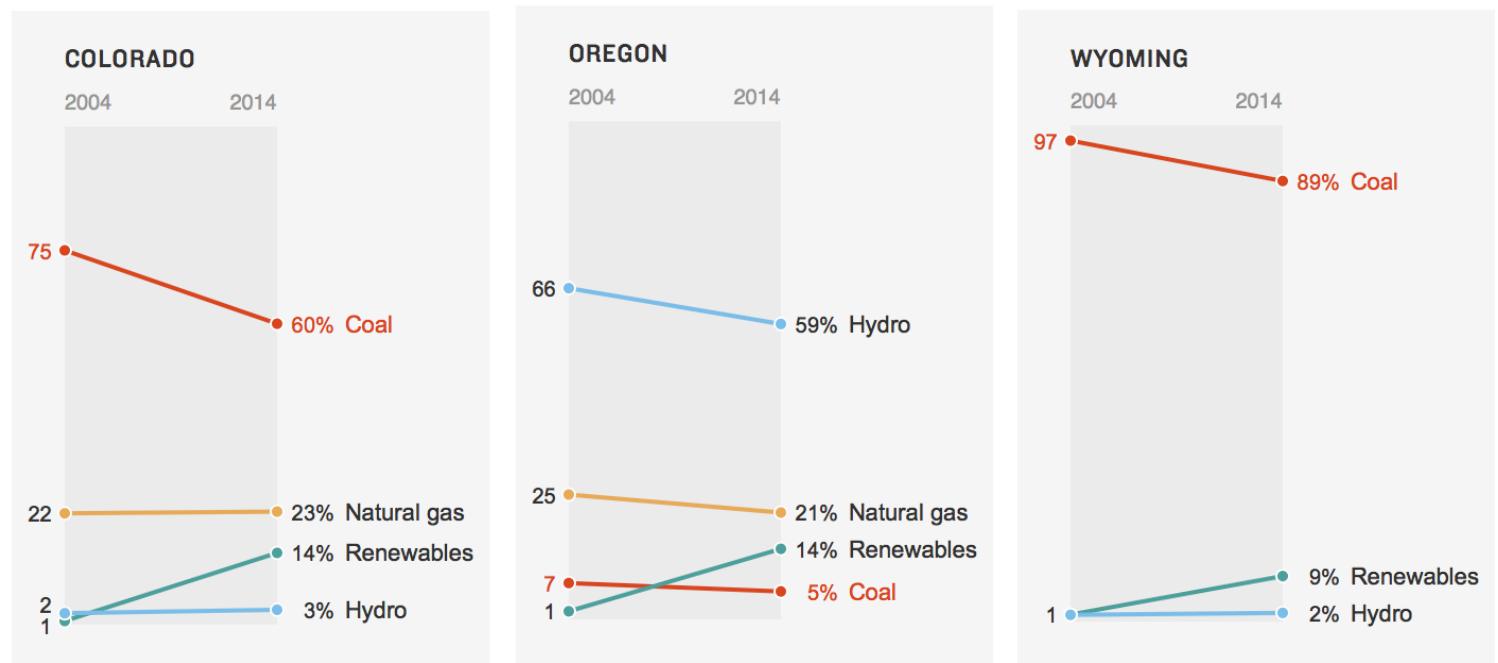


# 3. And Where Does It Come From...?



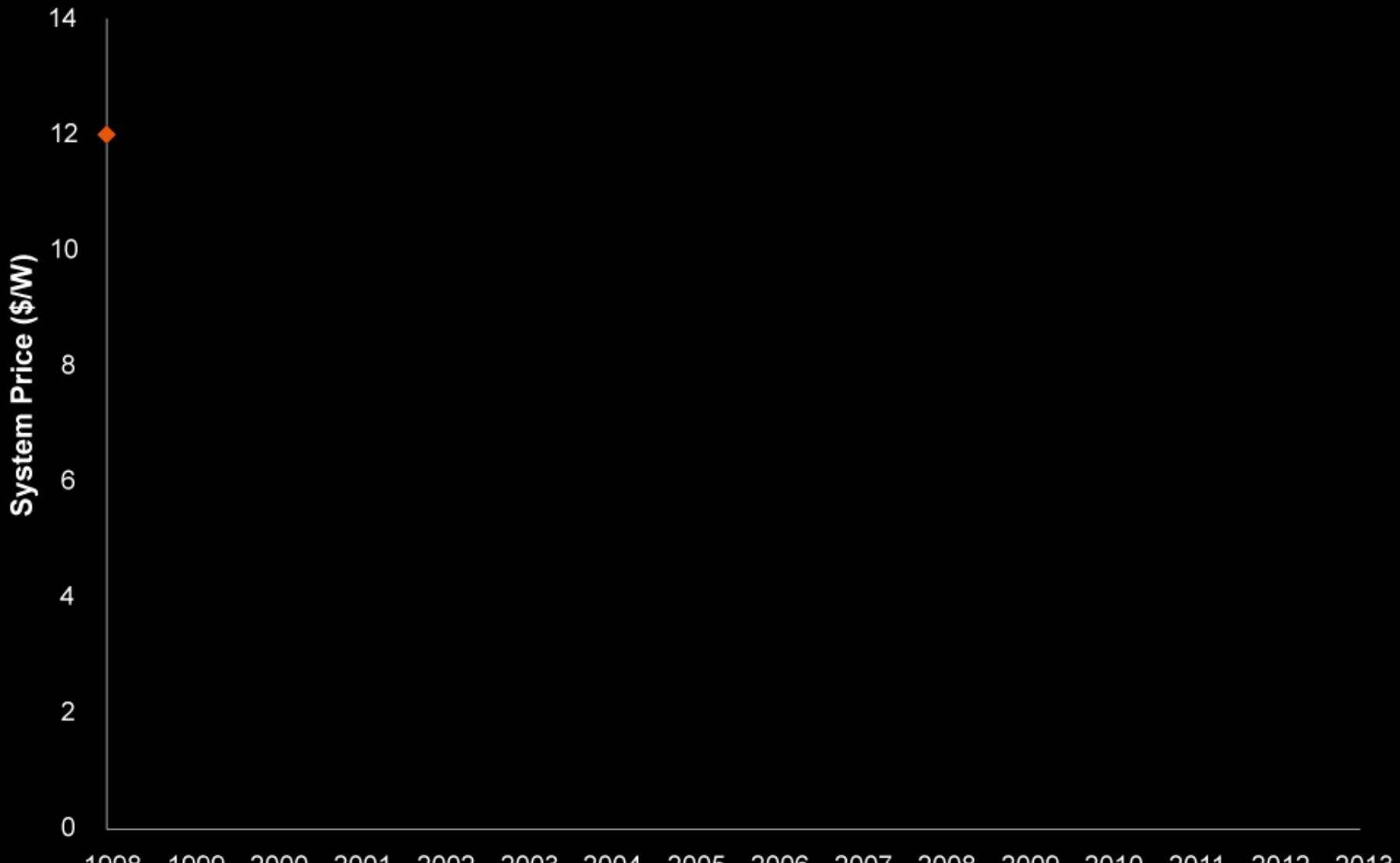
ENERGY

## Coal, Gas, Nuclear, Hydro? How Your State Generates Power



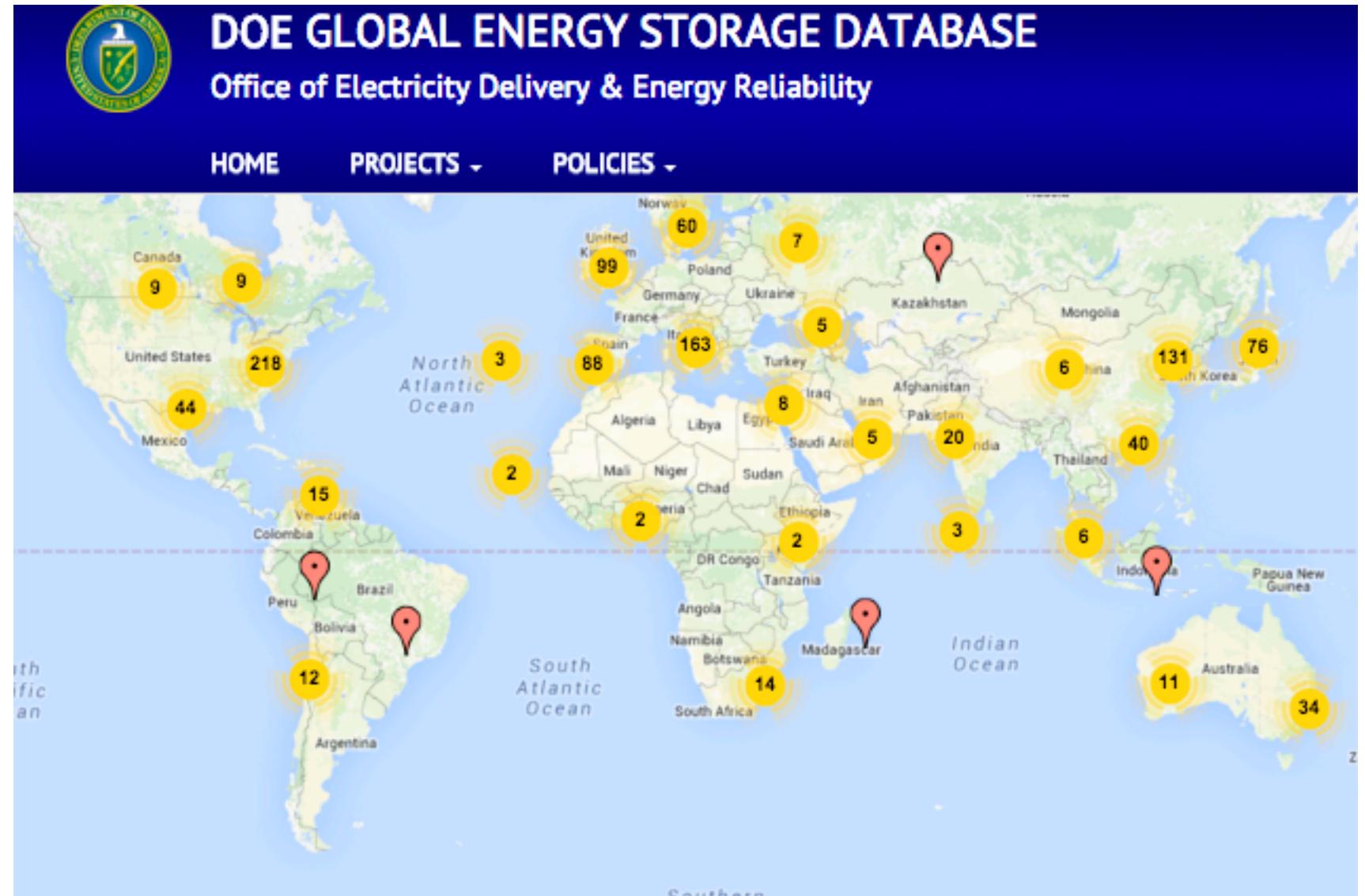
# 4. Whatever Happened to Rooftop Solar?

## The Dropping Cost Of Rooftop Solar



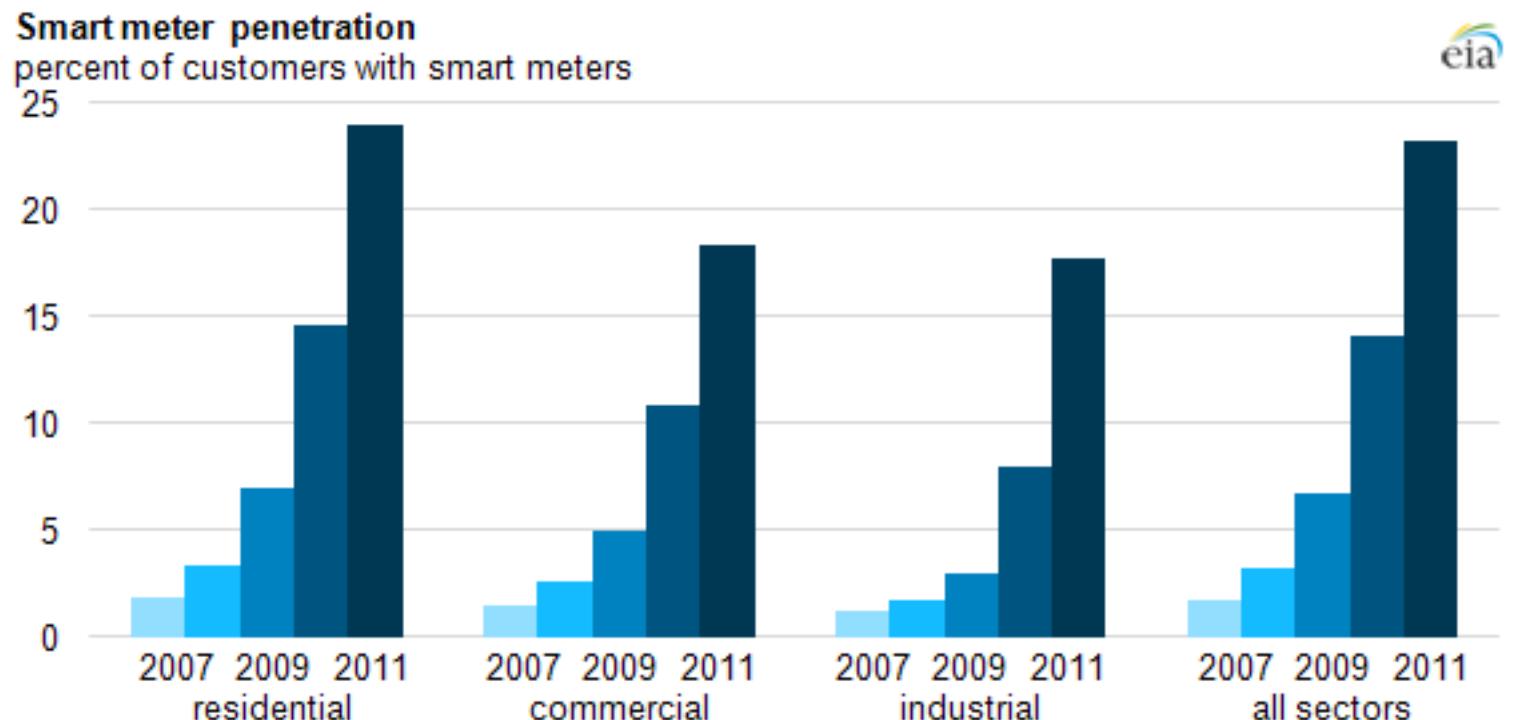
Data Source: Lawrence Berkeley National Labs, "Tracking the Sun VII"

# 5. Energy Storage: Are We There Yet?



<http://www.energystorageexchange.org/projects>

# 6. Smart Meters And The Internet of Things

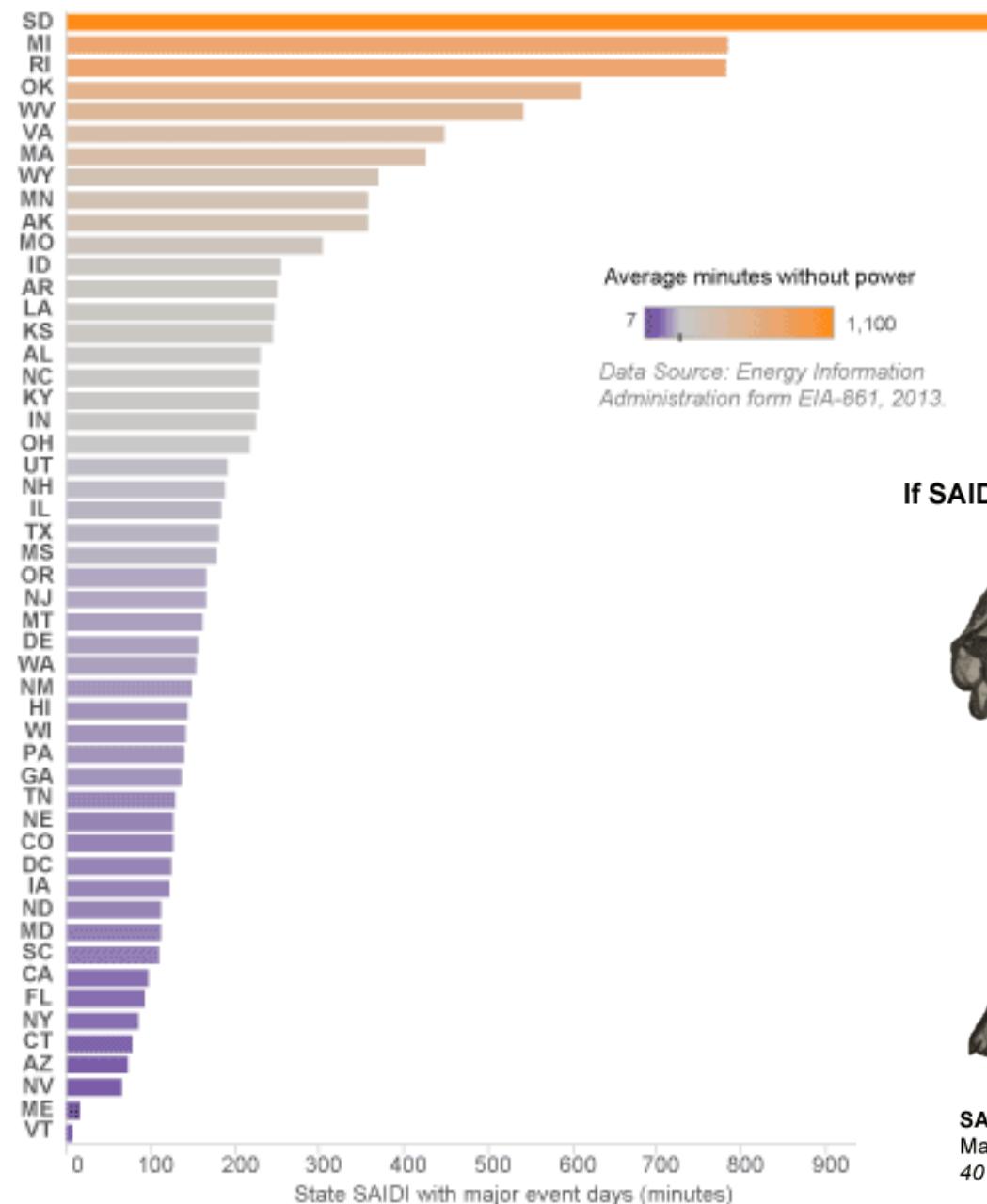


<https://www.eia.gov/todayinenergy/detail.cfm?id=8590>

# 7. When the Power Goes Out...

## Minutes Without Power Per Customer in 2013

(including major event days)



Average minutes without power

7 1,100

Data Source: Energy Information  
Administration form EIA-861, 2013.

If SAIDI and SAIFI were dogs instead of grid reliability metrics...



**SAIDI's care instructions:**  
Make sure she goes out  
40 minutes every day.

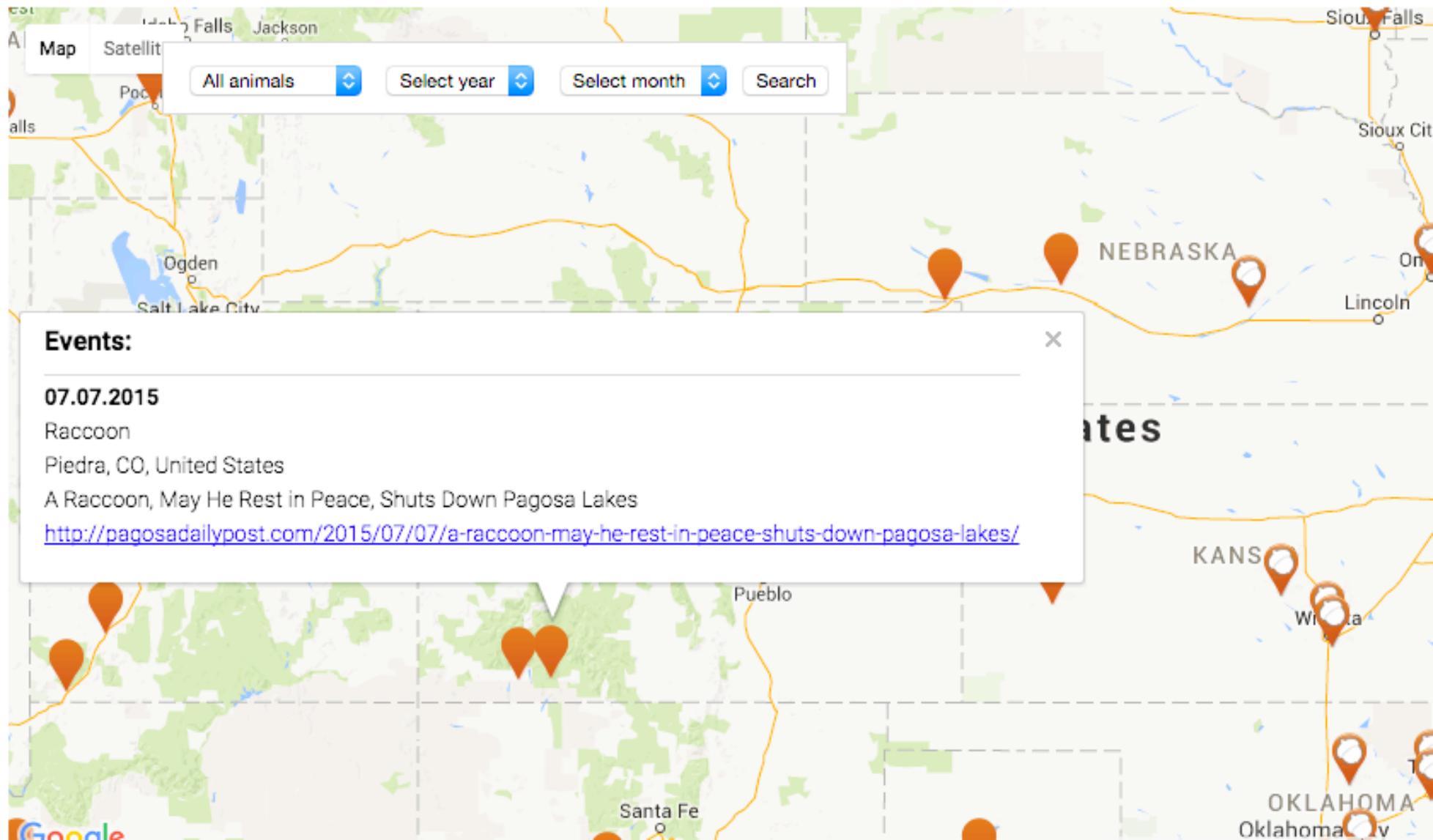


**SAIFI's care instructions:**  
Make sure she goes out  
4 times every day.

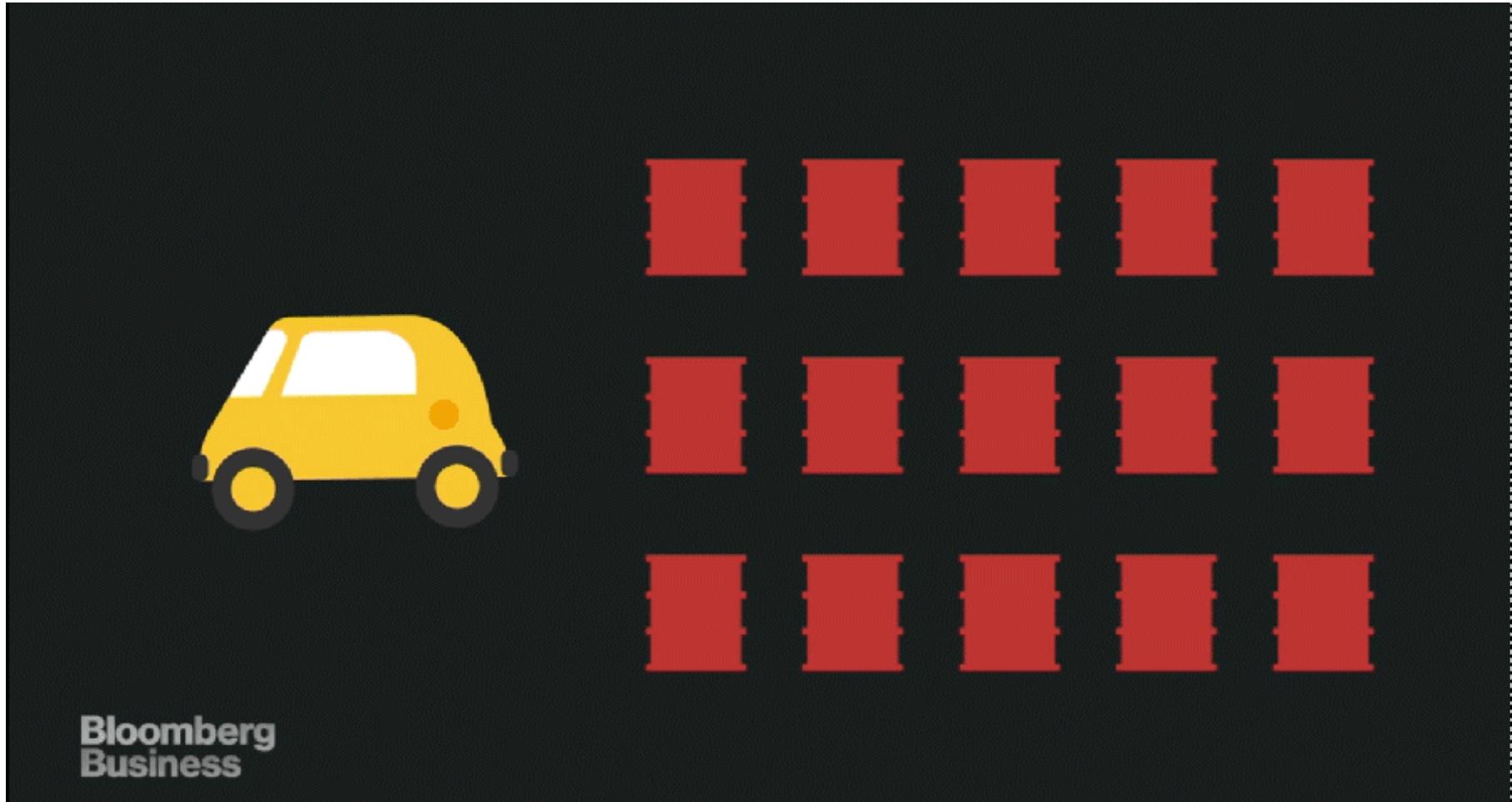
# Cyber Squirrel 1

Disrupting at the highest levels, its #CyberWar4Ever!

## 8. Those Pesky Squirrels

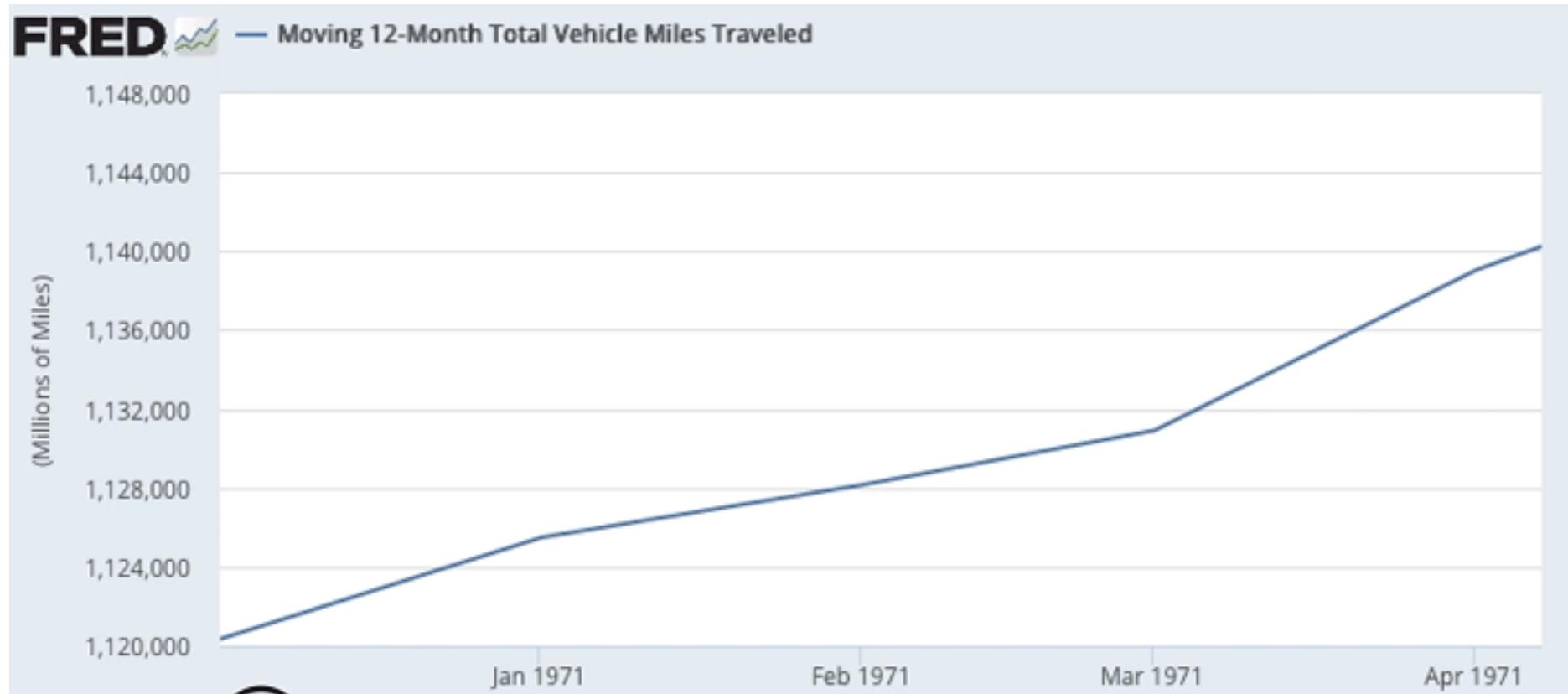


# 9. Who Resurrected The Electric Car?



<http://www.bloomberg.com/features/2016-ev-oil-crisis/>

# 10. How Much Do We Drive?

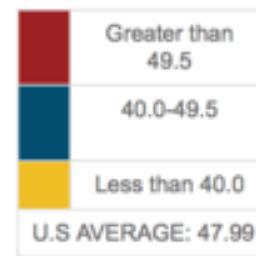
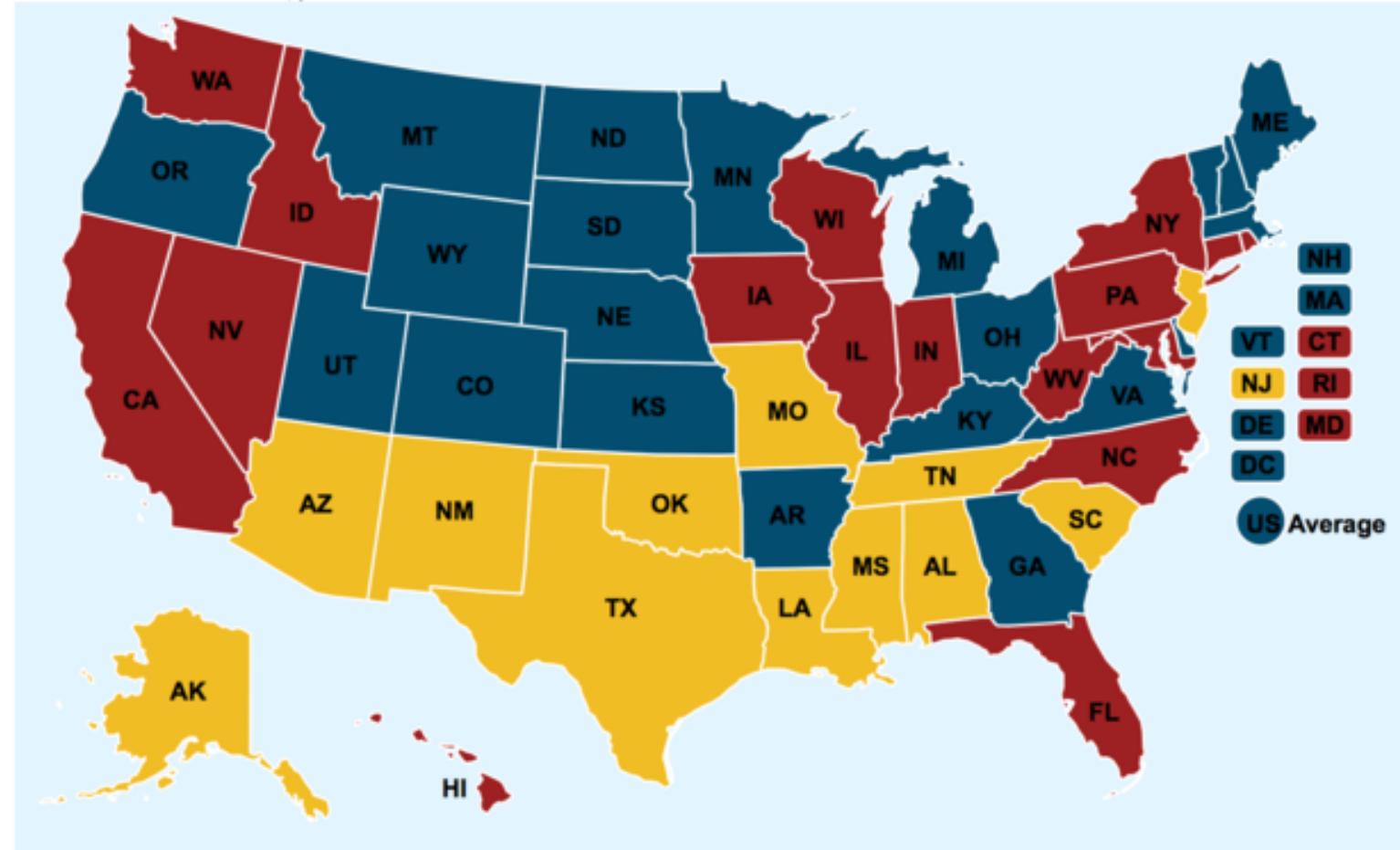


<https://research.stlouisfed.org/fred2/series/M12MTVUSM227NFWA>

# 11. Gas Taxes, Love 'Em Or Hate 'Em?

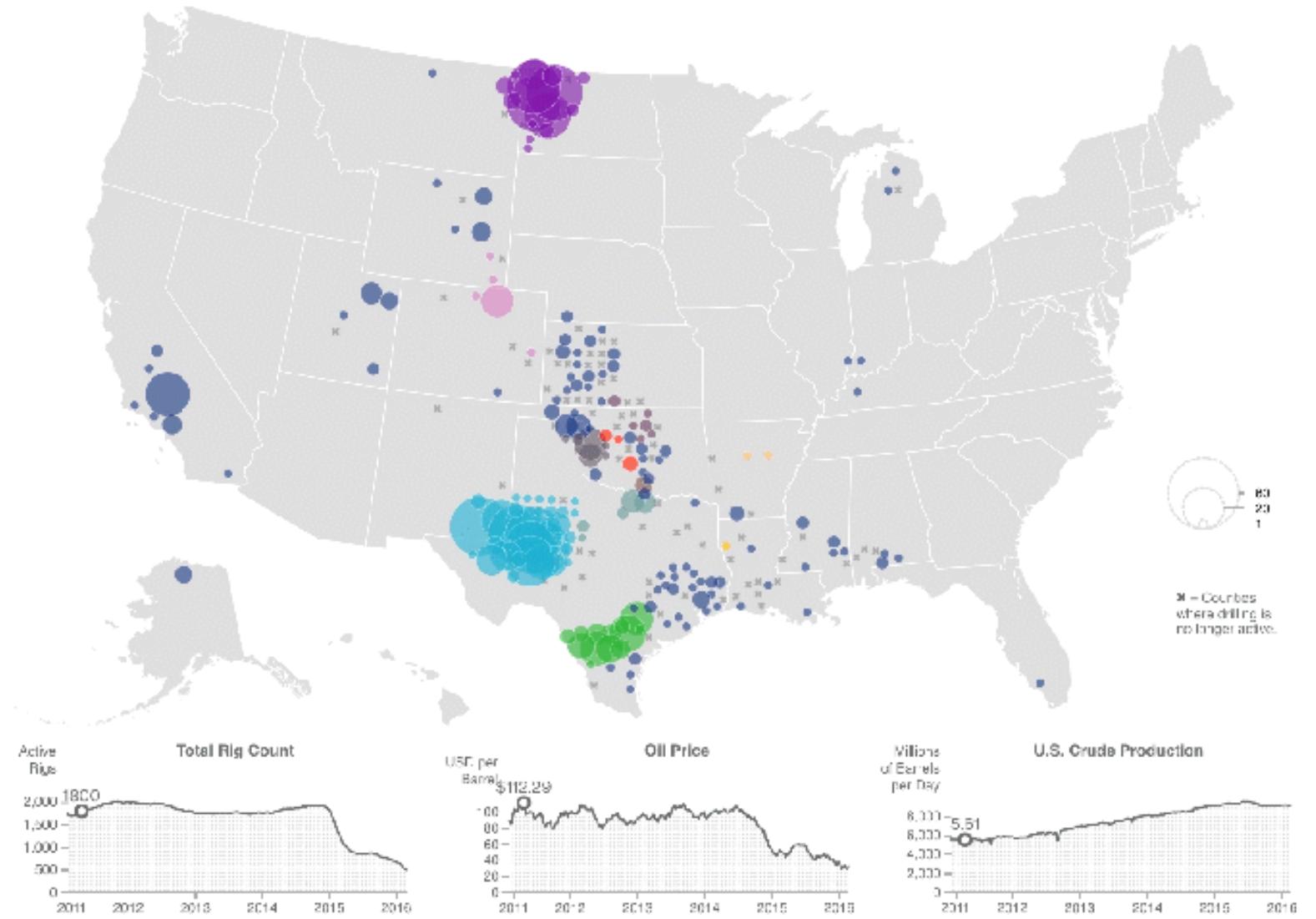
## Gasoline Tax

For more detailed information, please click on the state.



# 12. Why Is Everyone Always Talking About *Rig Count*?

Watch Five Years of Oil Drilling Collapse in Seconds



# 13. Earthquakes And Oil And Gas



<https://www.revealnews.org/article/watch-oklahomas-earthquake-explosion/>

Reveal

The Oklahoma Shakes

SOUNDCloud

Share

1:15

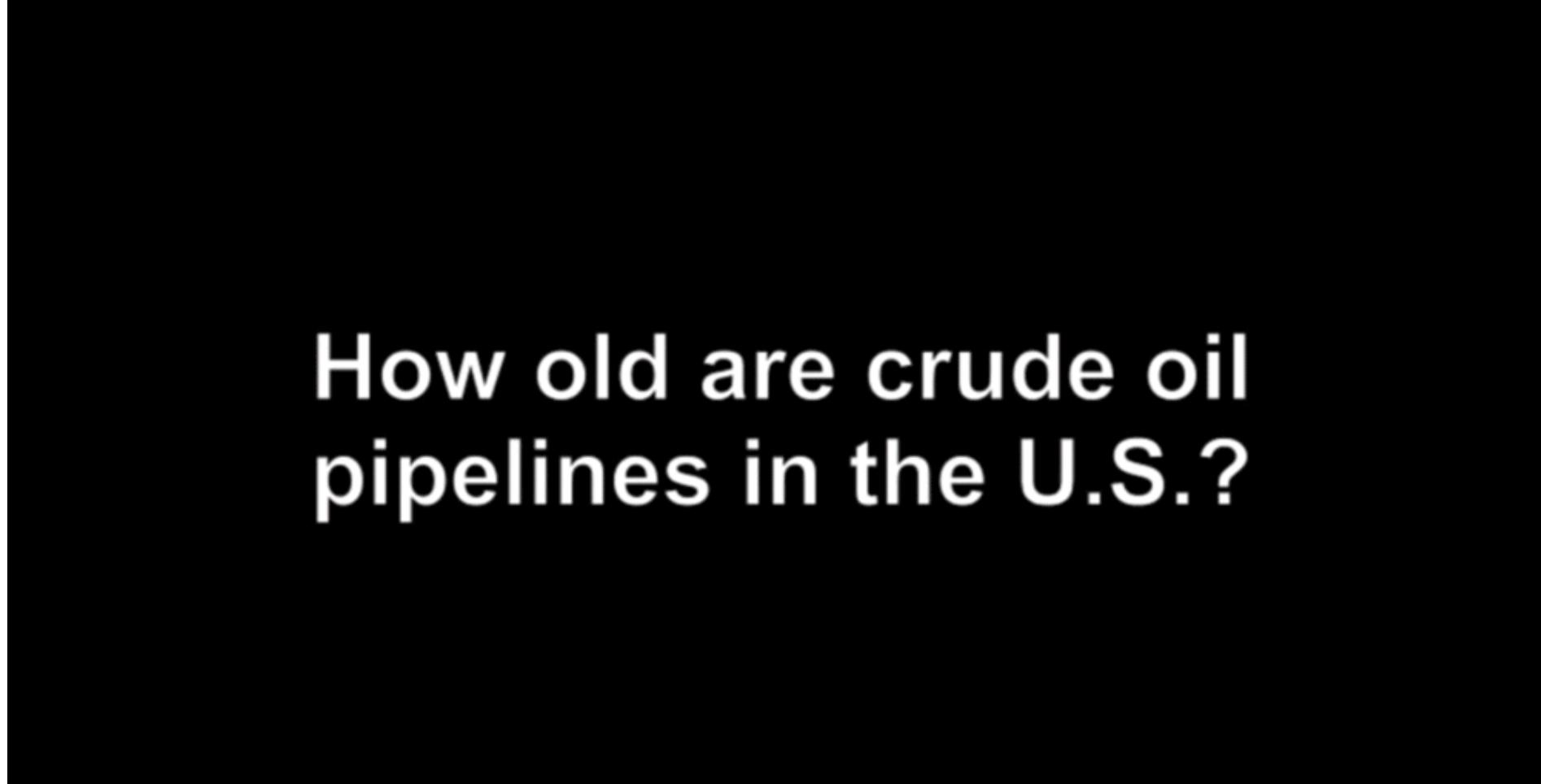
2.7K

CIR PRX

Cookie policy

<https://www.revealnews.org/article/listen-to-the-music-of-seismic-activity-in-oklahoma/>

# 14. Pipelines: Hidden Fluid Highways



**How old are crude oil  
pipelines in the U.S.?**

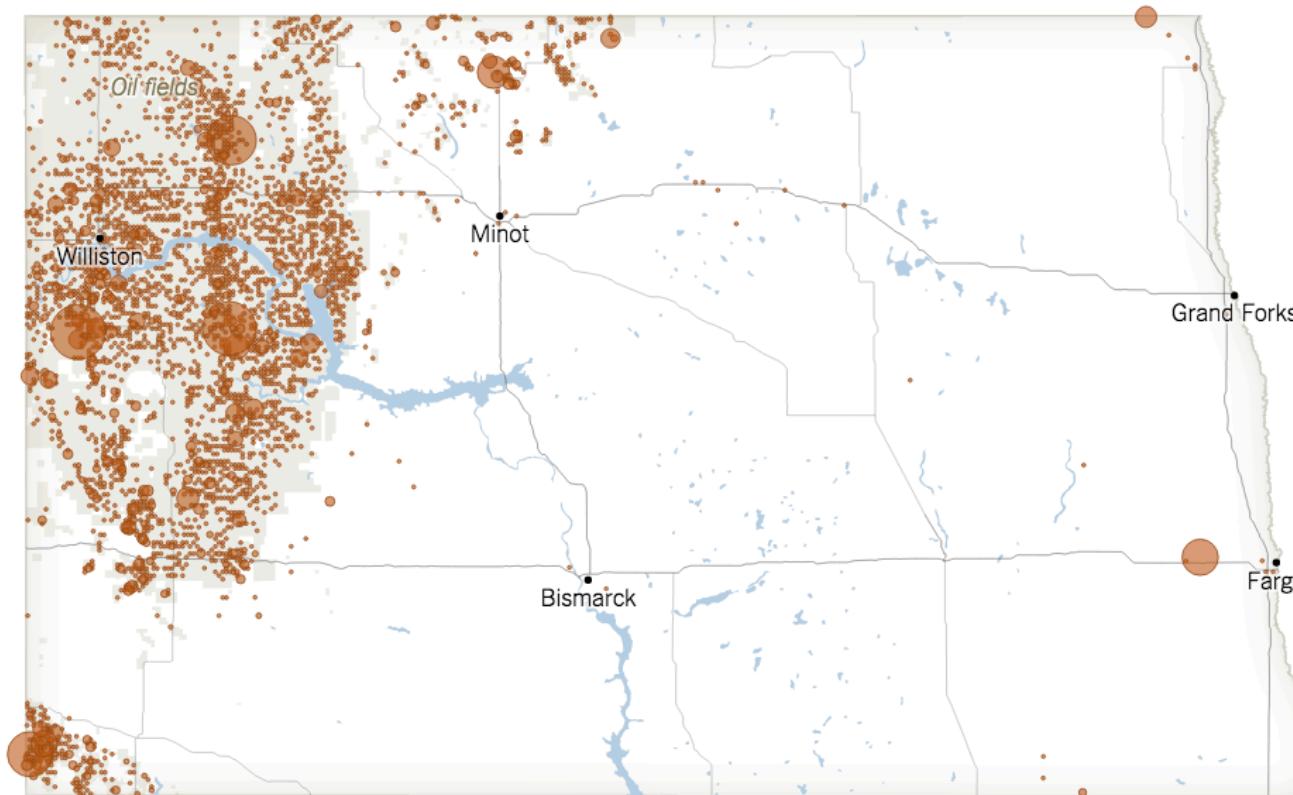
<http://insideenergy.org/2014/08/01/half-century-old-pipelines-carry-oil-and-gas-load/>

# 15. Spills Happen

## Reported Environmental Incidents in North Dakota's Oil Industry

NOV. 21, 2014

This database contains all reported incidents from Jan. 1, 2006, to Oct. 13, 2014.



Filter by company name

Spill containment

- both
- contained
- uncontained

Spilled chemicals

- all
- oil
- brine
- other

Incident type

- all -

County

- all -

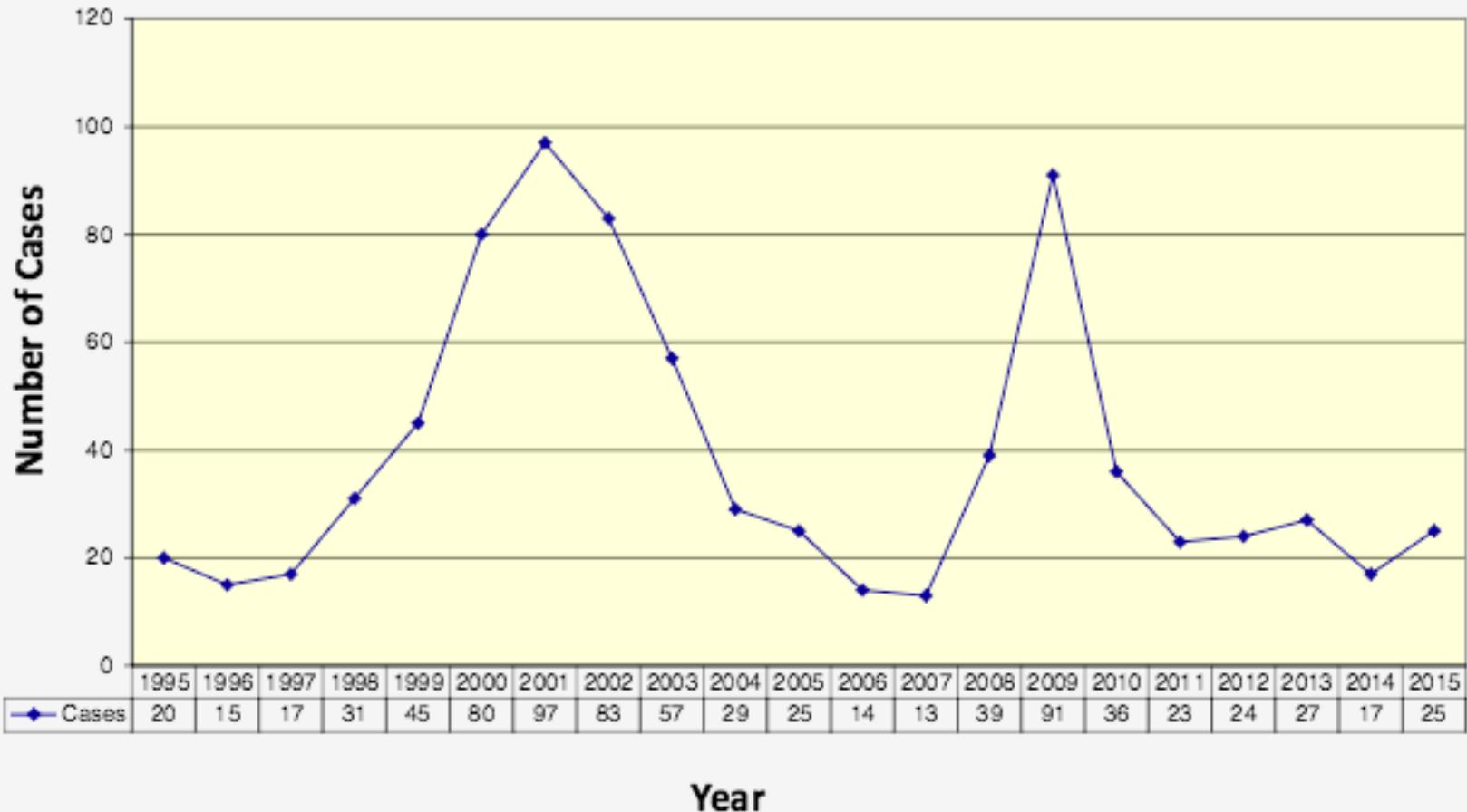
CLEAR FILTERS

[http://www.nytimes.com/interactive/2014/11/23/us/north-dakota-spill-database.html?\\_r=0](http://www.nytimes.com/interactive/2014/11/23/us/north-dakota-spill-database.html?_r=0)

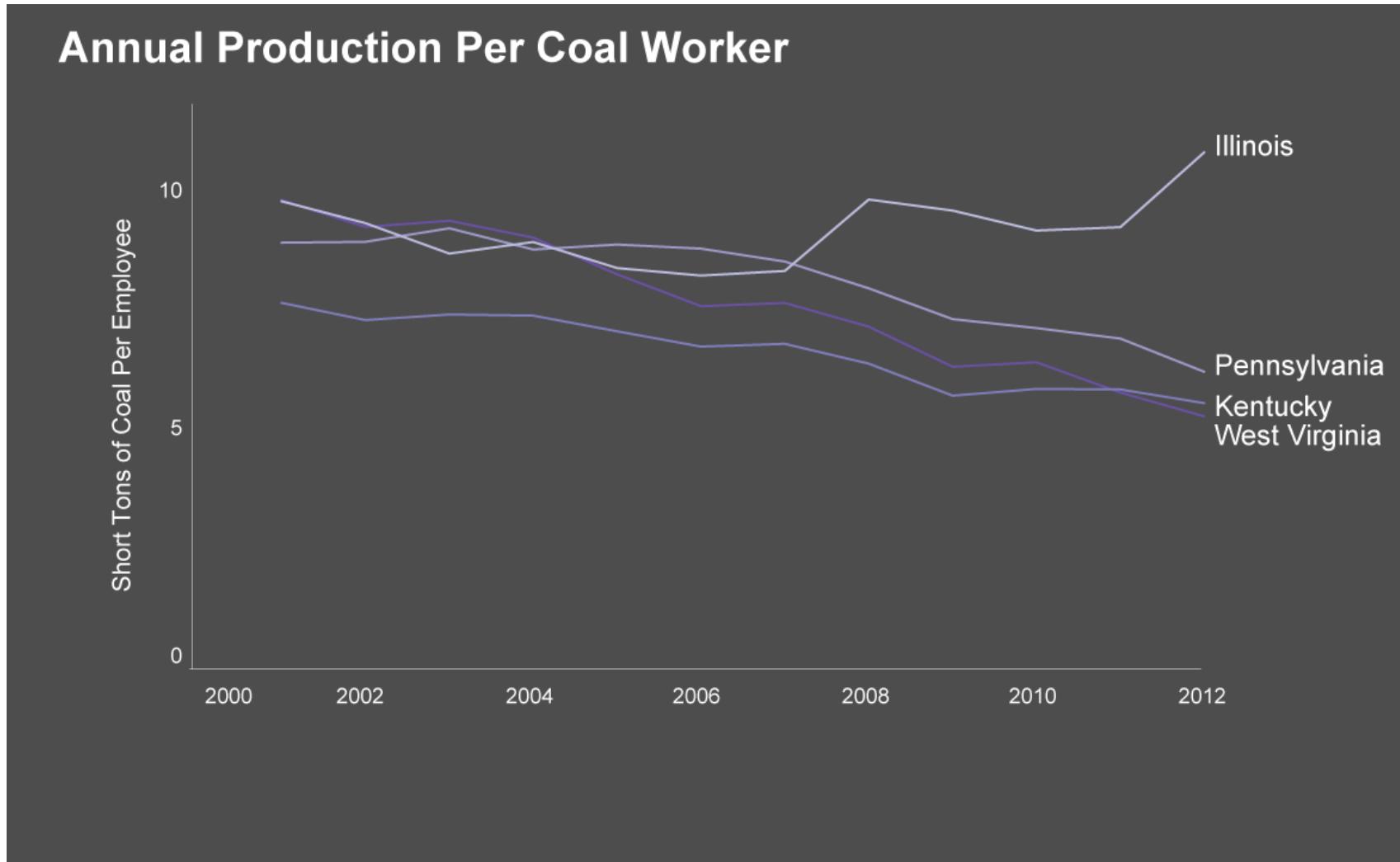
# 16. So Do Bankruptcies

## Large, public company bankruptcies filed in the United States, by year, 1995 – 2015

Source: UCLA-LoPucki Bankruptcy Research Database

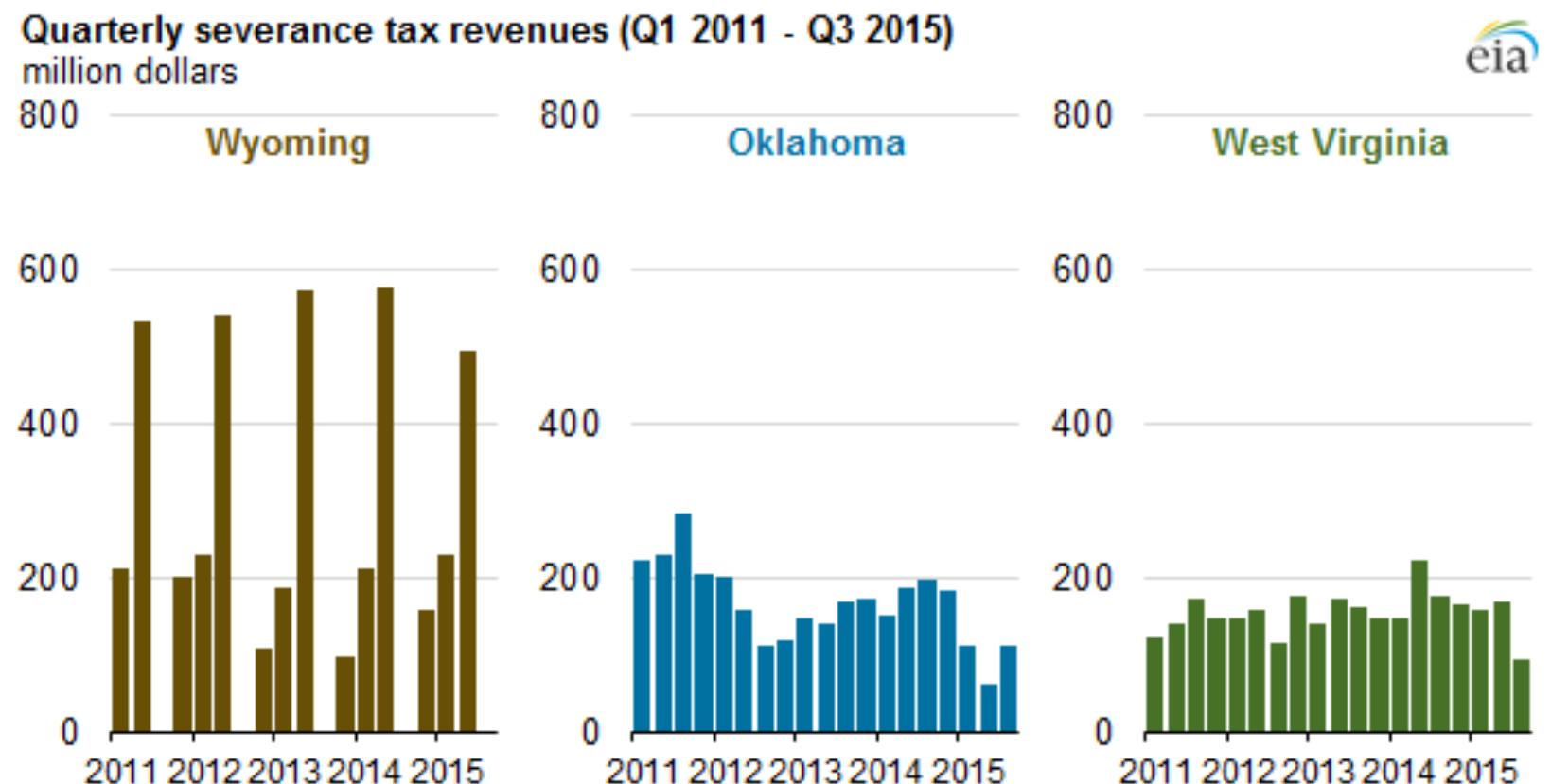


# 17. Jobs: Who Works In Energy?



<http://insideenergy.org/2015/04/28/ie-questions-in-wyoming-how-much-coal-does-a-miner-mine/>

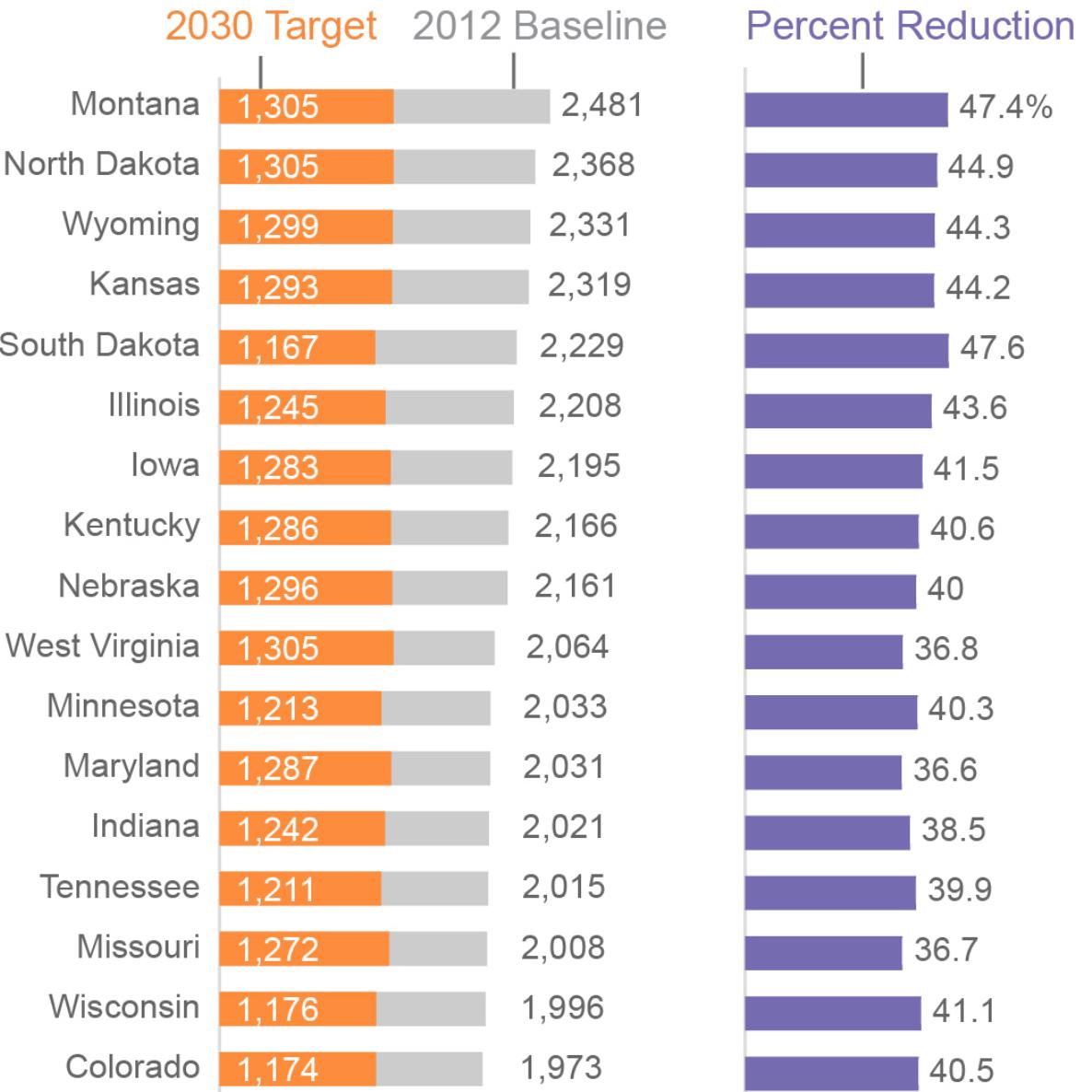
# 18. Quantifying The Collapse of Coal



<http://www.eia.gov/todayinenergy/detail.cfm?id=24512>

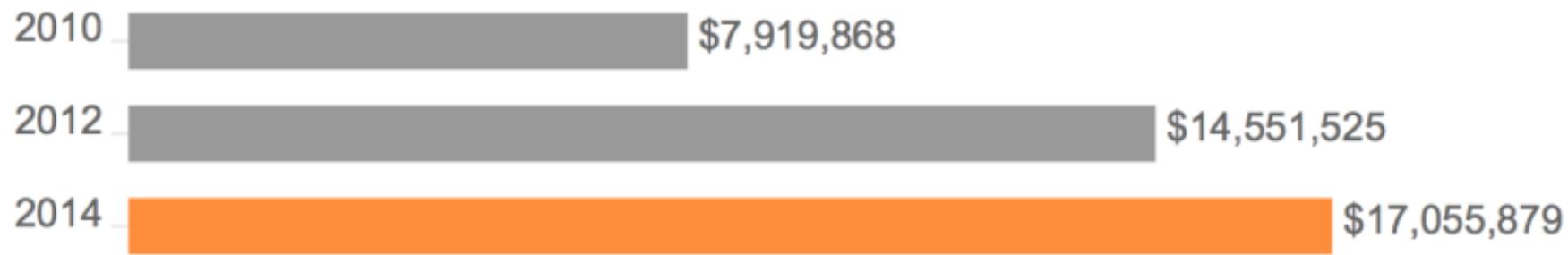
# 19. So About The Clean Power Plan...

## Power Plant Emissions (lbs/MWh): 2012 Baseline and 2030 Target



# 20. Energy Money In Politics

## North Dakota Campaign Contributions



As of October 21, 2014, with two weeks to go before the election, North Dakota's campaign contributions were more than double what they were in 2010 and had exceeded contributions from the last presidential election year.

*Data Source: North Dakota Secretary of State. Note: This reflects direct campaign contributions and not independent expenditures.*

Jordan Wirfs-Brock | Inside Energy

# 21. Energy Money In Your Investments



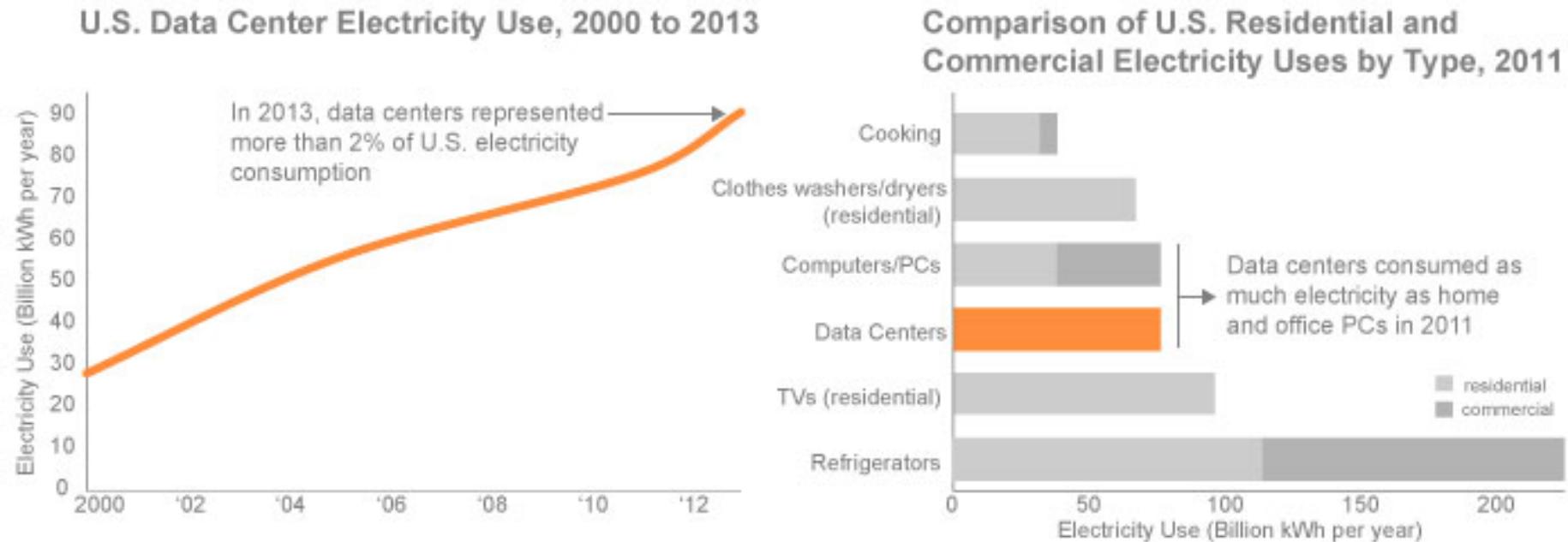
## 22. What Do The 10-Ks Say?



*Understanding how debt plays into the web of a company's finances was a beast - nay, a monster. We faced the Debt Monster with only 10-Ks to protect us.*

<http://insideenergy.org/2015/01/21/slaying-the-debt-monster-finances-of-10-oil-and-gas-companies-in-colorado/>

# 23. How Big Is The Internet's Electricity Bill?



While U.S. electricity use has flattened in recent years, data center electricity use - overall and as a portion of U.S. consumption - has tripled since 2000. As cloud computing replaces personal computing, data center electricity use has been rising while personal and work computer use has been dropping.

*Data Center Electricity Sources: 2000 and 2005, Koomey (<http://www.analyticspress.com/datacenters.html>); 2011 and 2013 are NRDC estimates based on Koomey (<http://www.nrdc.org/energy/files/data-center-efficiency-assessment-IP.pdf>). Other Electricity Consumption Sources: EIA Annual Energy Outlook 2014, tables A4 and A5 (<http://www.eia.gov/forecasts/aeo/index.cfm>).*



# 24. Take A Big Bite Of Energy

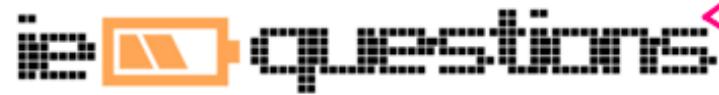
**Which foods use the most energy, farm to fork?** In this quiz, test your knowledge.

Our food system is a giant machine that turns energy from the sun and fossil fuels into caloric energy – 30% of our fossil fuels go into making food.

*Tip: Take every step of the food system into account, from farm to factory to store to kitchen to plate.*

**START THE QUIZ**





What is the annual national loss of energy, in BTUs, from the generation of electric power at the plant to the use at the wall outlet?

(6 characters left)

Ask



Your Energy  
Questions,  
Answered.

# This is just the beginning.

Tip sheet! Notes, data sources and ideas for each of the examples in this presentation:

<https://github.com/InsideEnergy/24-energy-stories-CAR16>

Data Battery! Data we've cleaned and analyzed, along with notes and code:

<https://github.com/InsideEnergy/Data-for-stories>



Peek in our notes! Our go-to energy data sources:

<http://bit.ly/IEDataResources>

We want to nerd out about energy with you.  
Get in touch.

JORDAN WIRFS-BROCK | @jordanwb

DAN BOYCE | @boycedan

STEPHANIE JOYCE | @stephaniemjoyce

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