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Lab section: CGT270-009

Show your work!!!

<u>Acquire</u>

Week: 8

Date: Feb 18th Year: **2019** Data: American Wind Energy

Association via Choose Energy

Source Article/Visualization:

Ranking	State	Installed Capacity (MW)	Equivalent Homes Powered
1	TEXAS	23,262	6,235,000
2	OKLAHOMA	7,495	2,268,000
3	IOWA	7,312	1,935,000
4	CALIFORNIA	5,686	1,298,000
5	KANSAS	5,110	1,719,000
6	ILLINOIS	4,464	1,050,000
7	MINNESOTA	3,699	1,012,000
8	OREGON	3,213	604,600
9	COLORADO	3,106	889,100
10	WASHINGTON	3,075	695,300
11	NORTH DAKOTA	2,996	1,021,000
12	INDIANA	2,117	440,700
	MICHIGAN	1,904	471,700
13	NEW YORK	1,829	366,500
15	NEW MEXICO	1,682	422,100
16	WYOMING	1,489	408,700
	NEBRASKA	1,445	486,700
17	PENNSYLVANIA	1,369	314,000
18	SOUTH DAKOTA	977	293,100

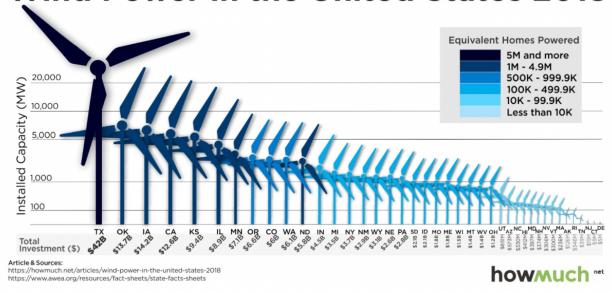
20	IDAHO	973	228,000
21	MISSOURI	959	181,100
22	MAINE	923	206,500
23	WISCONSIN	746	142,100
24	MONTANA	720	199,800
25	WEST VIRGINIA	686	149,300
	ОНІО	617	145,300
26	UTAH	391	86,900
27	ARIZONA	268	54,600
28	NORTH CAROLINA	208	43,800
29	HAWAII	206	59,800
30	MARYLAND	191	47,500
31	NEW HAMPSHIRE	185	38,500
32	NEVADA	152	33,600
33	VERMONT	149	25,900
34	MASSACHUSETTS	113	20,500
35	ALASKA	62	15,200
36	RHODE ISLAND	54	14,200
37	TENNESSEE	29	2,800
38	NEW JERSEY	9	1,900
39	CONNECTICUT	5	1,300
40	DELAWARE	2	NA
41	ALABAMA	0	NA
NA	ARKANSAS	0	NA
NA	FLORIDA	0	NA
NA	GEORGIA	0	NA
NA	KENTUCKY	0	NA
NA	LOUISIANA	0	NA
NA			

NA NA	MISSISSIPPI	0	NA
NA	SOUTH CAROLINA	0	NA
NA	VIRGINIA	0	NA

https://www.makeovermonday.co.uk/data/data-sets-2018/

Represent

Wind Power in the United States 2018



Critique

I like this data visualization about how it uses the windmill to represent the wind power and the bigger and darker windmill represent the more wind power. However, it is hard to read the number that show the exact the installed capacity like at the end of the graph the number becomes so small and the windmill also tiny which is hard to see. I will use informative visualization which make the visualization interactive. I will choose map to represent. The overview is the whole US map, and we can zoom in to see the detail of each top ten states.

NEW: Based on your knowledge of the Periodic Table of Visualization Methods (discussed in class this week), discuss which one of the 6 categories does the visualization you provided in the Represent stage falls in. Identify the method most closely related to the visualization in the Represent Stage and discuss the characteristics: overview, detail, detail AND overview, divergent thinking, convergent thinking. Refer to Week 10 Readings to assist with categorizing the visualization.

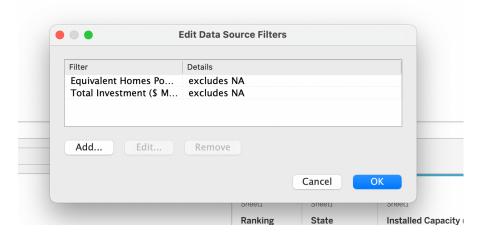
Mine

What is the top 10 wind power in United States and their equivalent home power

Filter

Show (display, list, make it visible) the filtered data.

I exclude the null data and filter the top 10 wind power states



Stakeholders

• Who is your audience? What assumptions did you make? What visualization tool/software did you use?

The people who want to decide where to implement the wind power equipment.

The wind power is the power that generate by wind

Tableau

What to submit: This document in PDF format only (if you do not know how to do this, ask).

Choose the best layout for your makeover visualization: Portrait or **Landscape**, Remove the page of the layout that you DO NOT choose. No blank pages!

Refine (Makeover - Landscape view)

Use an additional page if necessary. Remember, the purpose of visualization is "insight." Take and include a screenshot of your visualization and include it below. Use Data Visualization Best Practices (see data visualization checklist).

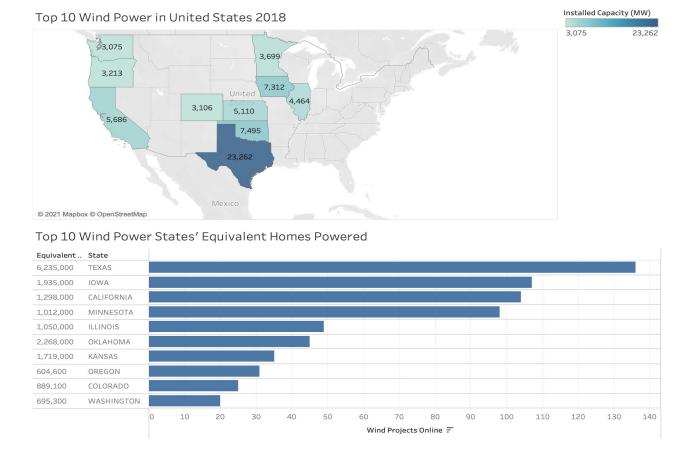


Figure Caption. <A dashboard. 1. A map that shows the top 10 wind power states. Labeled value and Darker color represent the higher wind power. 2. A bar chart that shows the top 10 wind power states' equivalent home power. The longer length represent the larger power>.

Resources

Data Visualization Checklist:

http://stephanieevergreen.com/wp-content/uploads/2016/10/DataVizChecklist May2016.pdf

How to give constructive criticism:

https://personalexcellence.co/blog/constructive-criticism/

Sample Makeovers

https://www.makeovermonday.co.uk/gallery/

Grading Rubric

Excellent	Good	Fair	Needs Improvement
(21-25 pts)	(10-20 pts)	(5 – 9 pts)	(0 – 4 pts)
Meets ALL or most of	Meets MOST of these:	Consistently meets	Little to no evidence
these: Makeover is	Makeover is esthetically	SOME of these:	of the understanding
esthetically pleasing	pleasing (color,	Makeover is	of the data
(color, perception), best	perception), best practices	esthetically pleasing	visualization process.
practices followed	followed (insightful),	(color, perception),	
(insightful), Correct	Correct dataset	best practices	Lackluster makeover
dataset downloaded;	downloaded; provided an	followed (insightful),	or no makeover.
provided an interesting	interesting point of view	Correct dataset	
point of view of the	of the data; critiqued	downloaded;	Little effort.
data; critiqued previous	previous makeover,	provided an	
makeover, critique is	critique is constructive	interesting point of	
constructive (indicates	(indicates one thing that is	view of the data;	
one thing that is done	done well, and one thing	critiqued previous	
well, and one thing that	that could be done	makeover, critique is	
could be done	differently, what will be	constructive	
differently, what will be	done to improve the	(indicates one thing	
done to improve the	visualization),	that is done well, and	
visualization),	assumptions (more than	one thing that could	
assumptions (more than	one) are listed.	be done differently,	
one) are listed.		what will be done to	
		improve the	
		visualization),	
		assumptions (more	
		than one) are listed.	