Road to Decarbonization: The United St Electricity Mix

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By **Sponsored Content** Article/Editing: **Omri Wallach**

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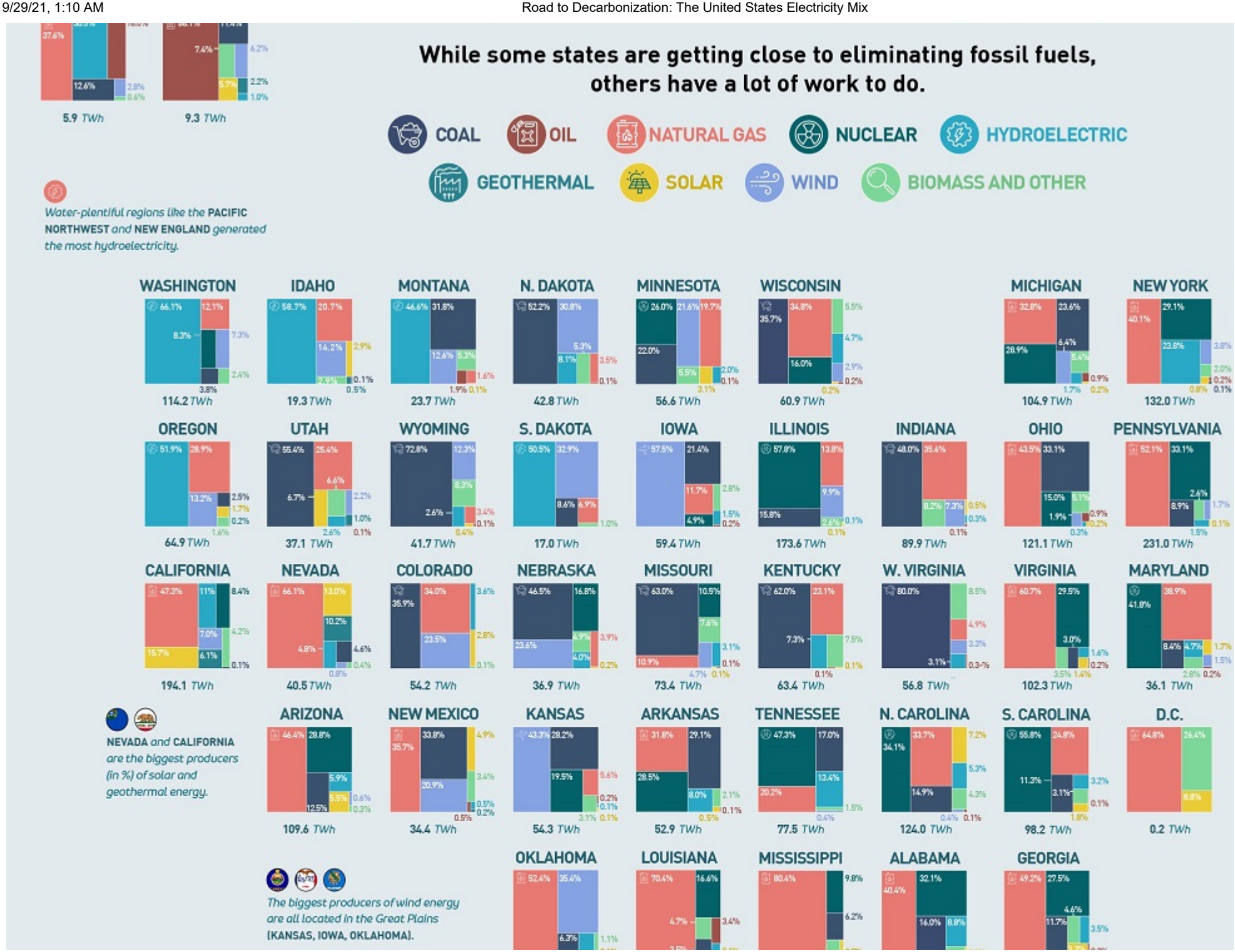
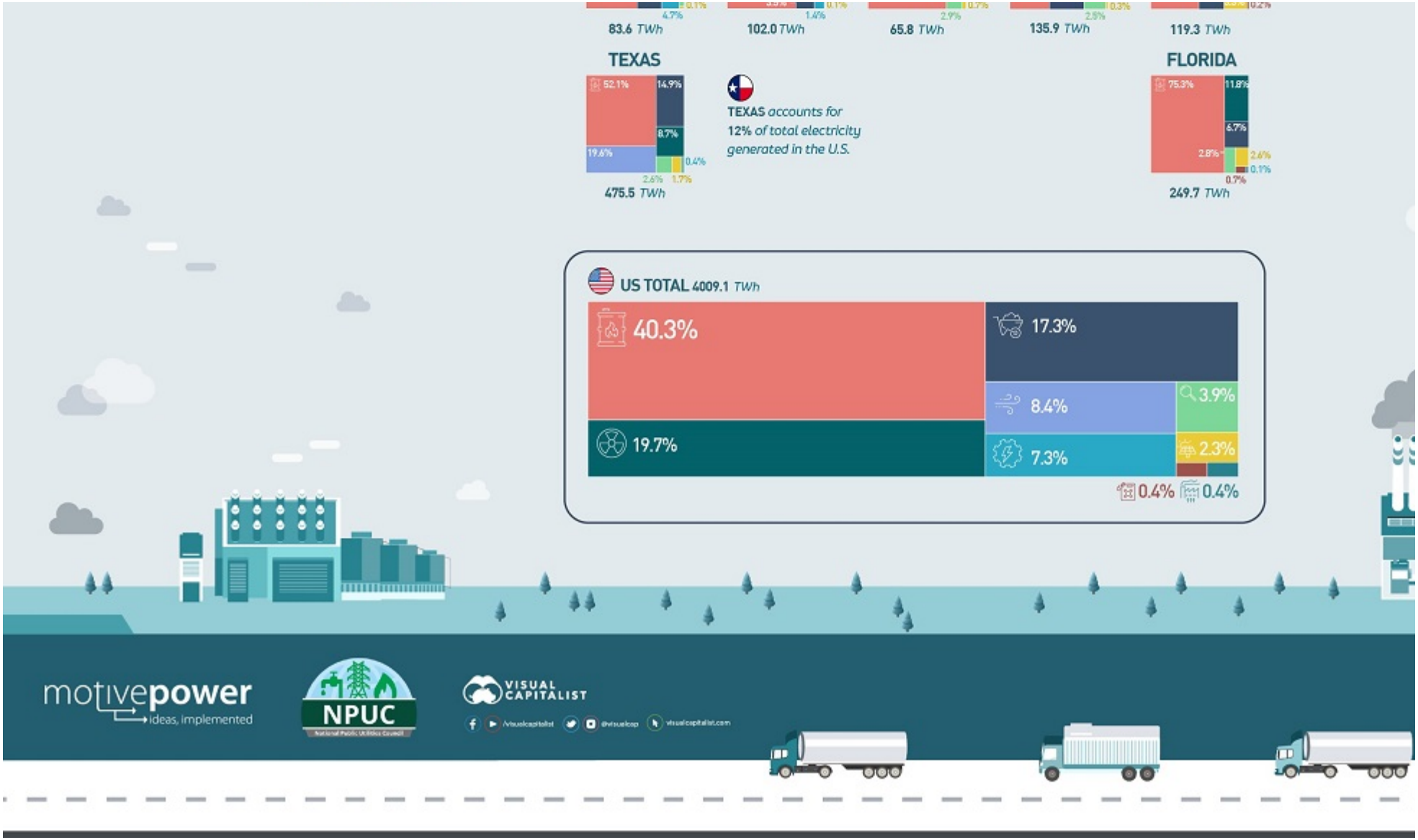

While some states are getting close to eliminating fossil fuels, others have a lot of work to do.
COAL
OIL
NATURAL GAS
NUCLEAR
HYDROELECTRIC
GEOTHERMAL
SOLAR
WIND
BIOMASS AND OTHER
Water-plentiful regions like the PACIFIC NORTHWEST and NEW ENGLAND generated the most hydroelectricity.
5.9 TWh
9.3 TWh
WASHINGTON 114.2 TWh
IDAHO 19.3 TWh
MONTANA 23.7 TWh
N. DAKOTA 42.8 TWh
MINNESOTA 56.6 TWh
WISCONSIN 60.9 TWh
MICHIGAN 104.9 TWh
NEW YORK 132.0 TWh
OREGON 64.9 TWh
UTAH 37.1 TWh
WYOMING 41.7 TWh
S. DAKOTA 17.0 TWh
IOWA 59.4 TWh
ILLINOIS 173.6 TWh
INDIANA 89.9 TWh
OHIO 121.1 TWh
PENNSYLVANIA 231.0 TWh
CALIFORNIA 194.1 TWh
NEVADA 40.5 TWh
COLORADO 54.2 TWh
NEBRASKA 36.9 TWh
MISSOURI 73.4 TWh
KENTUCKY 63.4 TWh
W. VIRGINIA 56.8 TWh
VIRGINIA 102.3 TWh
MARYLAND 36.1 TWh
NEVADA and CALIFORNIA are the biggest producers (in %) of solar and geothermal energy.
ARIZONA 109.6 TWh
NEW MEXICO 34.4 TWh
KANSAS 54.3 TWh
ARKANSAS 52.9 TWh
TENNESSEE 77.5 TWh
N. CAROLINA 124.0 TWh
S. CAROLINA 98.2 TWh
D.C. 0.2 TWh
The biggest producers of wind energy are all located in the Great Plains (KANSAS, IOWA, OKLAHOMA).
OKLAHOMA
LOUISIANA
MISSISSIPPI
ALABAMA
GEORGIA



Road to Decarbonization: The United States Electricity Mix

The U.S. response to climate change and decarbonization is ramping up, and putting a focus on the country's electricity mix.

As pressure has increased for near-term and immediate action after the UN's latest IPCC report on climate change, major economies are starting to make bolder pledges. For the United States, that includes a carbon pollution-free utilities sector by 2035.

But with 50 states and even more territories—each with different energy sources readily available and utilized—some parts of the U.S. are a lot closer to carbon-free electricity than others.

How does each state's electricity mix compare? This infographic from the National Public Utilities Council highlights the energy sources used for electricity in U.S. states during 2020, using data from the U.S. Energy Information Administration.

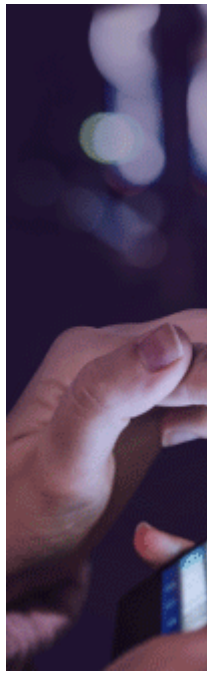
The U.S. Electricity Generation Mix By State

How does the United States generate electricity currently?

Over the course of 2020, the U.S. generated **4,009 TWh** of electricity, with the majority coming from fossil fuels. Natural gas (40.3%) was the biggest source of electricity for the country, accounting for more than nuclear (19.7%) and coal (17.3%) combined.

Including nuclear energy, non-fossil fuels made up **41.9%** of U.S. electricity generation in 2020. The biggest sources of renewable electricity in the U.S. were wind (8.4%) and hydro (7.3%).

But on a state-by-state breakdown, we can see just how different the electricity mix is across the country (rounded to the nearest percentage).



Search:

State (Electricity Source 2020)	Coal	Gas	Oil	Nuclear	Hydro	Geothermal	Solar	Wind	Biomass and Other
Wyoming	73%	3%	0%	0%	3%	0%	0%	12%	8%

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At a glance, regional availability of a fuel source and historical use is clear.

For example, coal is the most-used electricity source in **West Virginia**, **Kentucky**, and **Wyoming**, historical coal rich regions and economies.

On the flip side, the **Pacific Northwest** and **New England** generated the most hydroelectricity, and the biggest producers of wind energy were all located in the **Great Plains**. Even the biggest percentage producers of solar and geothermal energy, **California** and **Nevada**, have plenty of access to sunlight and geothermal activity.

The Changing Electricity Landscape

But for the U.S. to reach its ambitious carbon-free goal by 2035, the biggest impact will need to come from the biggest electricity producers.

That title currently goes to **Texas**, which generated **12% of total U.S. electricity in 2020**. Despite being the most populous state, California generated less than half Texas' output, and less than both **Florida** and **Pennsylvania**.

Search:

State	Electricity Generated 2020 (TWh)

State	Electricity Generated 2020 (TWh)
D.C.	0.2

Previous Next

So although it's positive that many states in the Pacific Northwest and New England have more plentiful non-fossil fuel electricity, their overall impact on the total U.S. picture is lessened.

Still, more and more states (and countries) are increasing their efforts and ambitions to decarbonize, and that progress makes it easier and more affordable over time. States that might struggle to attain carbon-free electricity, or where costs are too high, face less hurdles as technology improves and subsidies increase.

And with most major U.S. based utilities focusing on improving their ESG reporting and keeping up with decarbonization pledges of their own, the total electricity mix is expected to shift rapidly over the next decade.

National Public Utilities Council is the go-to resource for all things decarbonization in the utilities industry. Learn more.

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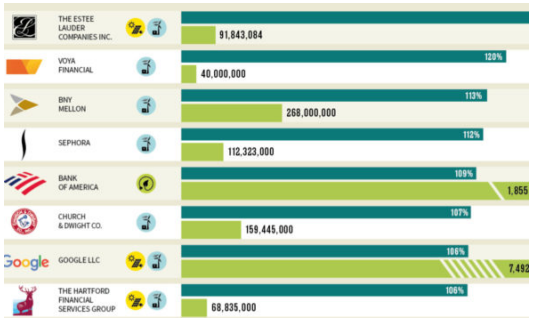

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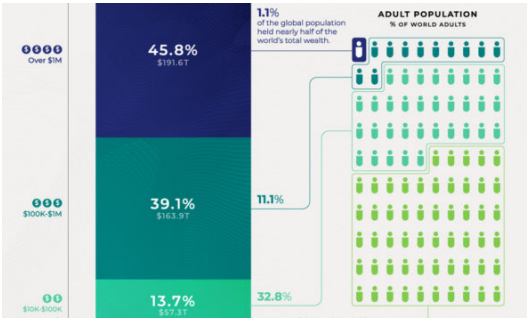

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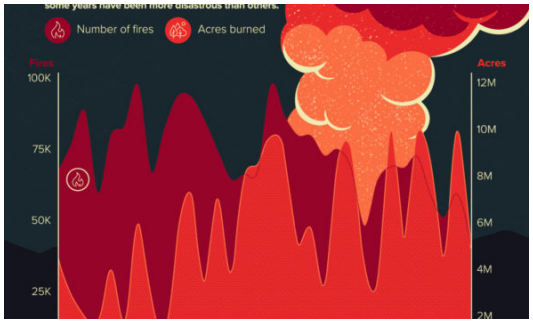

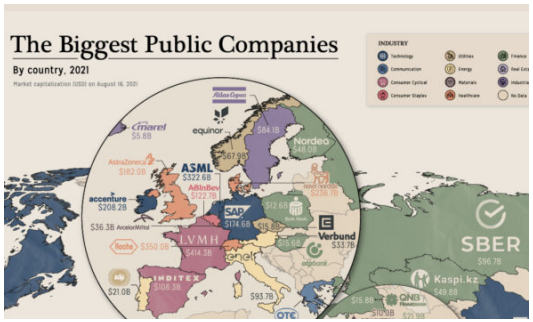

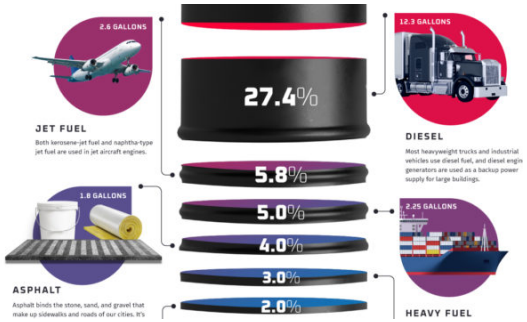

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Want to invest in ESG, but not sure where to start? Begin with these 7 ESG essentials every investor should know.

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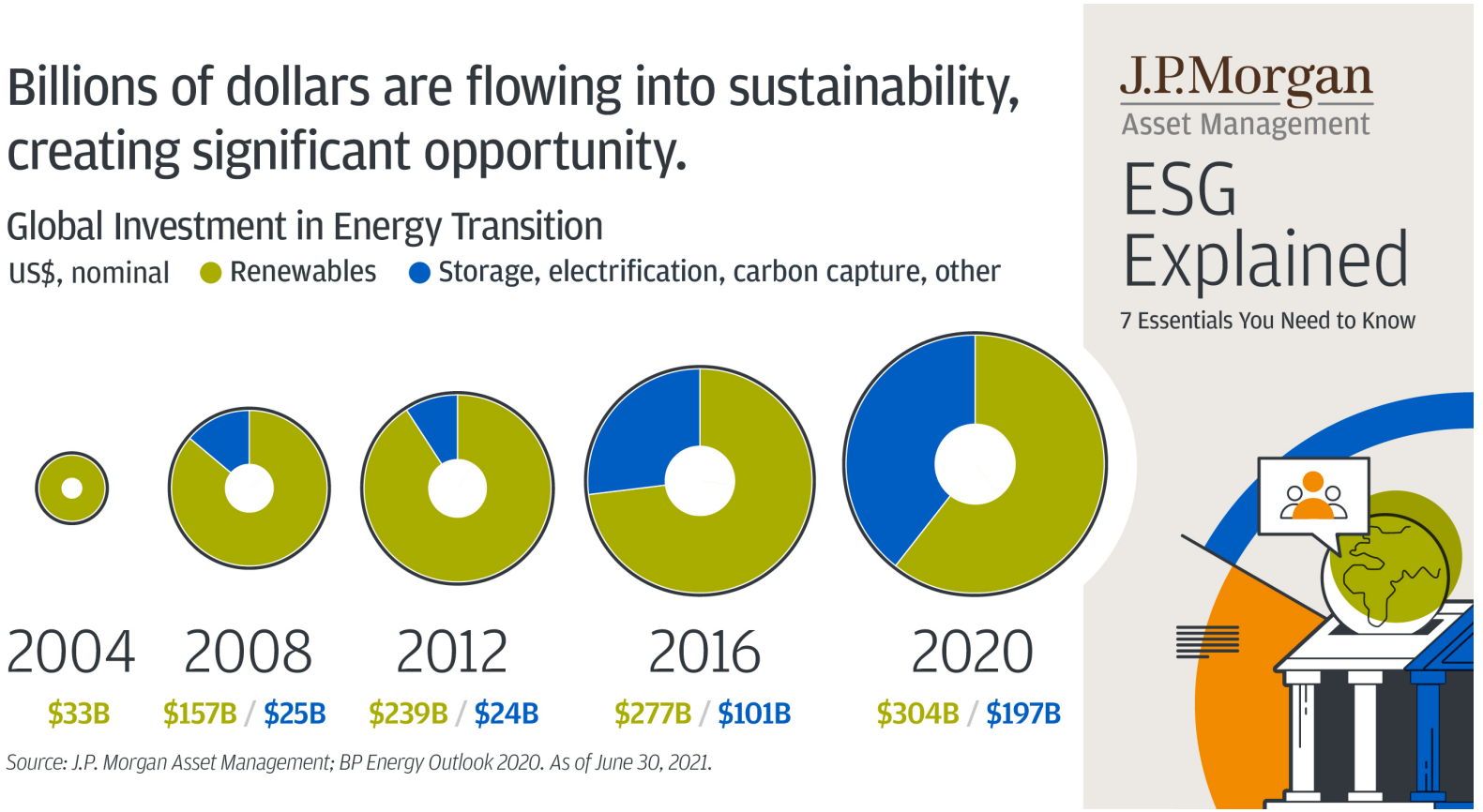

7 ESG Essentials Investors Need to Know

From consumers to policy makers, many economic actors are backing sustainability—and creating a powerful portfolio opportunity for investors.

The use of environmental, social, and governance factors (altogether known as ESG) is increasingly informing investment decisions. But although ESG investing has grown in prominence in a few short years, there's a disconnect:

- 69% of retail investors are interested in ESG, yet...
- Only 10% actually invest in products that incorporate ESG factors

To properly capitalize on this trend, it's important to first fully understand it.

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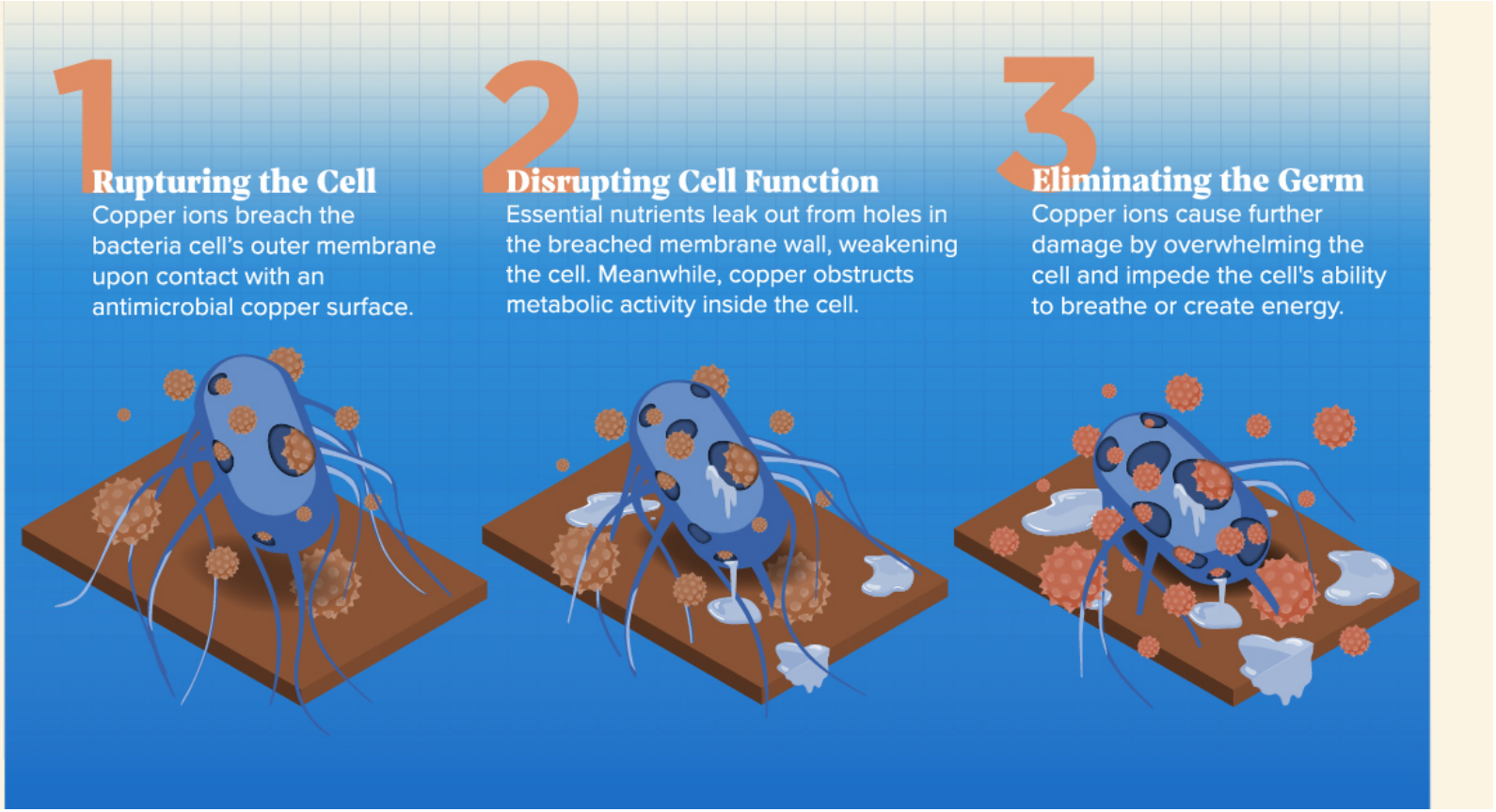

Antimicrobial Copper: The Germ-fighting Metal

Copper has a wide range of uses in electronics, infrastructure, and energy technologies. The red metal is virtually everywhere, from the wires in our devices to the buildings we live in.

However, copper's medicinal applications, which go back thousands of years, aren't as widespread in the modern world.

In this infographic from our sponsor Trilogy Metals, we explore copper's ability to fight bacteria and its expanding role in modern healthcare.

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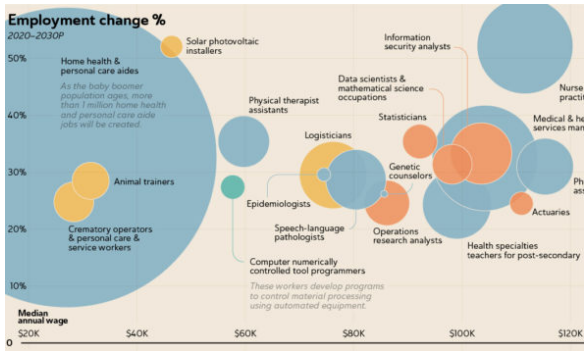

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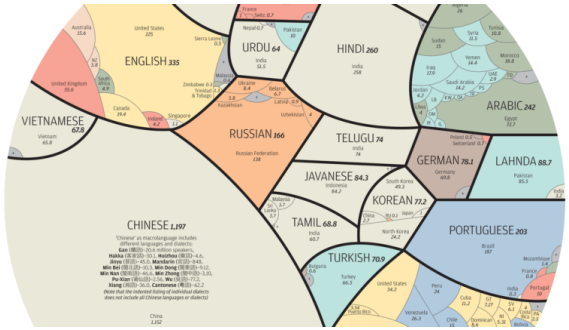

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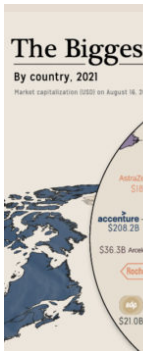

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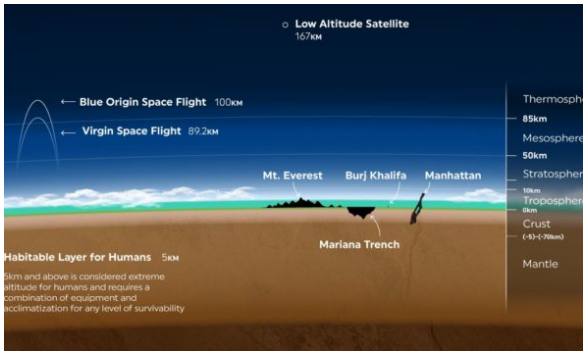

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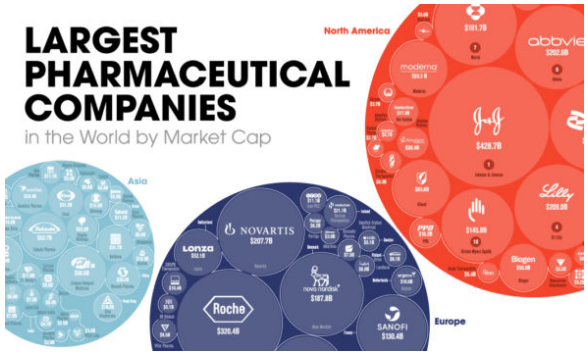

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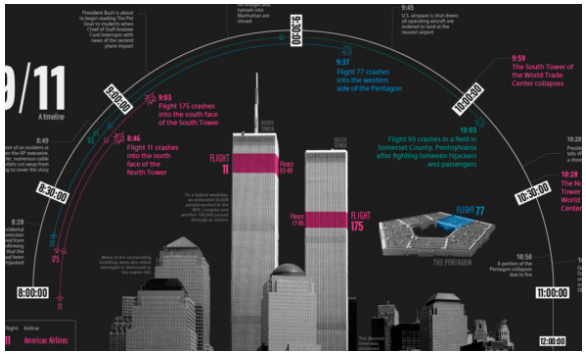

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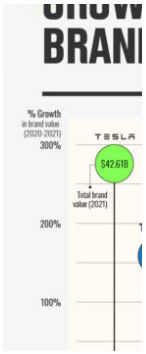

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