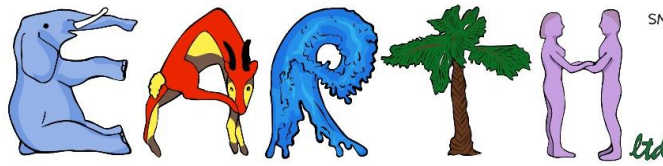




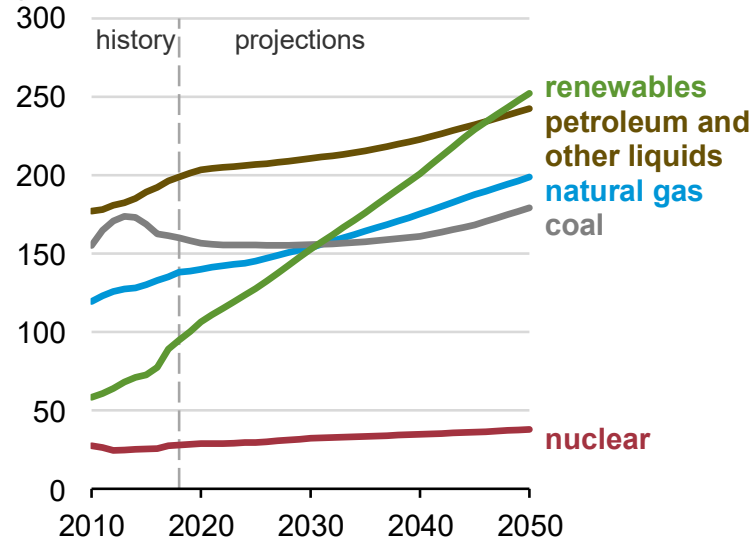
Energy & Resource Consumption

- There are two basic groups of energy: **renewable energy** (biomass, geothermal, solar, water, and wind power) and **nonrenewable** (fossil fuels coal, oil, natural gas, nuclear). Three quarters of the world's energy is generated by burning fossil fuels.
- **Fossil fuels are responsible for** the majority of environmental issues like **global warming, acid rain, air pollution, water pollution** that we are dealing with today. Their production and consumption is one of the biggest contributors to pollution in the world.
- Over 86% of the energy used in the U.S. each year is from the combustion of fossil fuels. **The amount of energy Americans use doubles every 20 years.**
- From 2008 to 2030, world energy consumption **is expected to increase more than 55%.**
- In the last 50 years, **atmospheric CO₂ has shot up to levels unprecedented in the previous 400,000 years**, primarily from the burning of fossil fuels.
- **Electric utilities** are the largest source of greenhouse gas in America.
- The top seven oil consumers combined use more than half of the world's total. **The United States alone uses more than a quarter.**
- **Fossil fuels are not a renewable resource** even though we have not located all of the reserves there are in the world. It is estimated that given our current trend in consumption, and the predictive discovery of new sources of fossil fuels, that **the world will run out of them within 100 to 200 years.**
- It would take the natural process of decomposition of materials **422 years to replace** what we currently consume in a year in fossil fuels.

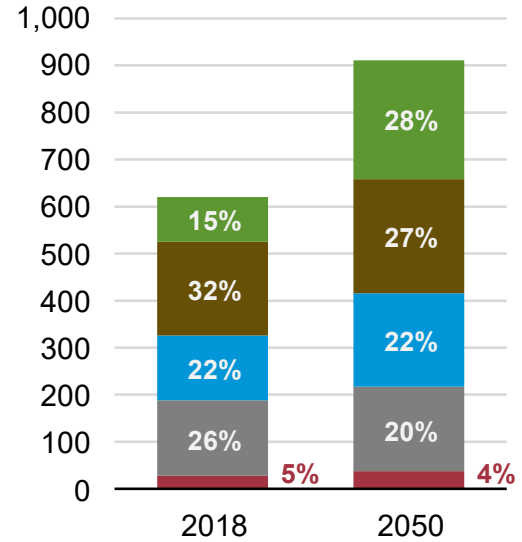


Global primary energy consumption by energy source (2010-2050)

quadrillion British thermal units



quadrillion British thermal units



Resources

- US Department of Energy: <http://energy.gov>
- National Geographic Interview: <http://voices.nationalgeographic.com/2013/10/07/the-impact-of-energy-development-on-the-environment-a-look-at-wildlife-with-dr-michael-hutchins/>
- Brain Pop: <https://www.brainpop.com/science/energy/conservingenergy/>
- The National Resources Defense Council: <https://www.nrdc.org/>
- US Energy Information Administration: <https://www.eia.gov/>