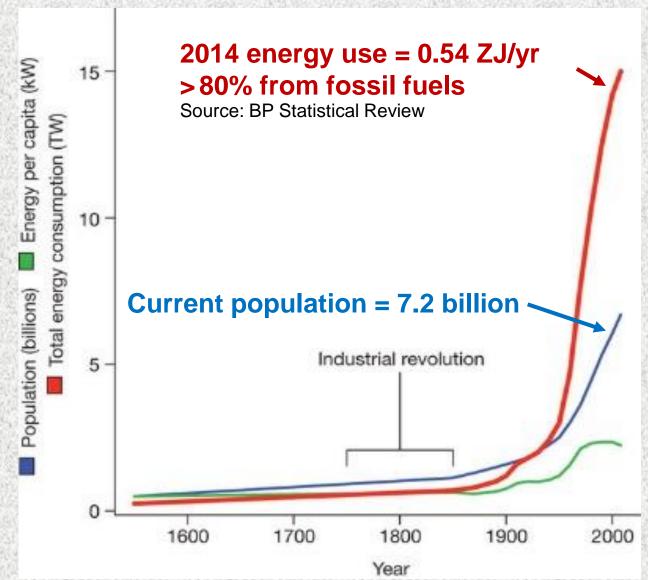
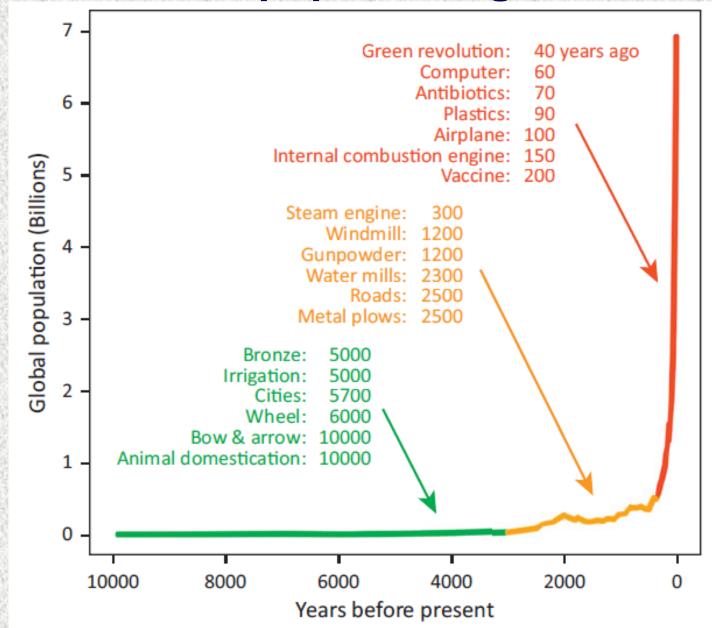
ENERGY USE HAS BEEN INCREASING MUCH FASTER THAN





Innovations have fueled population growth



AVAILABLE ENERGY SOURCES

- OIL NATURAL GAS COAL **BIOMASS NUCLEAR FISSION HYDRO** SOLAR WIND ANIMATE **GEOTHERMAL OCEAN CURRENTS** TIDES/LUNAR PULL
- **NUCLEAR FUSION**

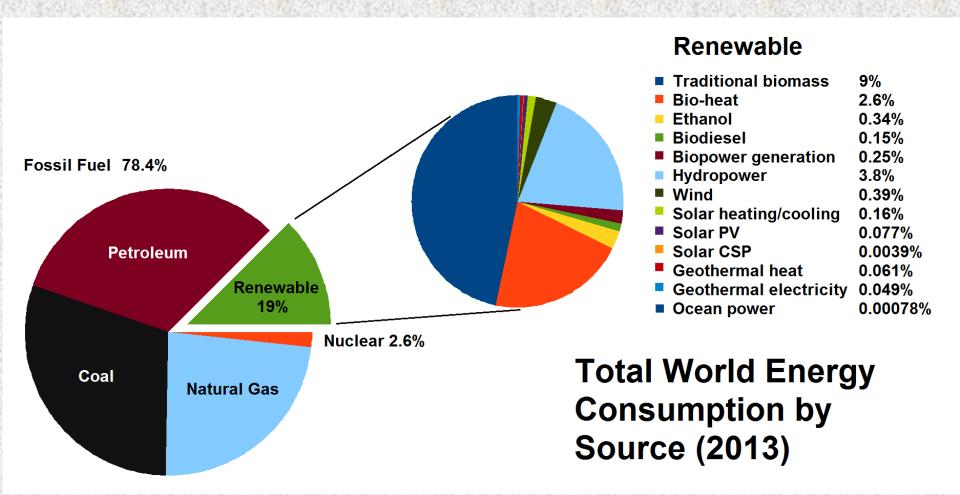
Global energy requirements for different economic scenarios

	I W	Tactor
world current	17.5	1.0
U.S. lifestyle	82.3	4.7
Chinese lifestyle	13.1	0.75
current trends to 2025*	38.5	2.2
U.S. lifestyle in 2025*	180.2	10.3
Chinese lifestyle in 2025*	28.0	1.6

^{*}Assumes 2025 world population of 8 billion (U.S. Census Bureau) and 3.8% per year increase in global GDP (World Resources Institute)

Brown et al. 2011

THE VAST MAJORITY OF ENERGY (80%) COMES FROM FOSSIL FUELS



https://commons.wikimedia.org/wiki/File:Total_World_Energy_Consumption_by_Source_2013.png