



Life Beyond 60

Assistant Secretary for Nuclear Energy

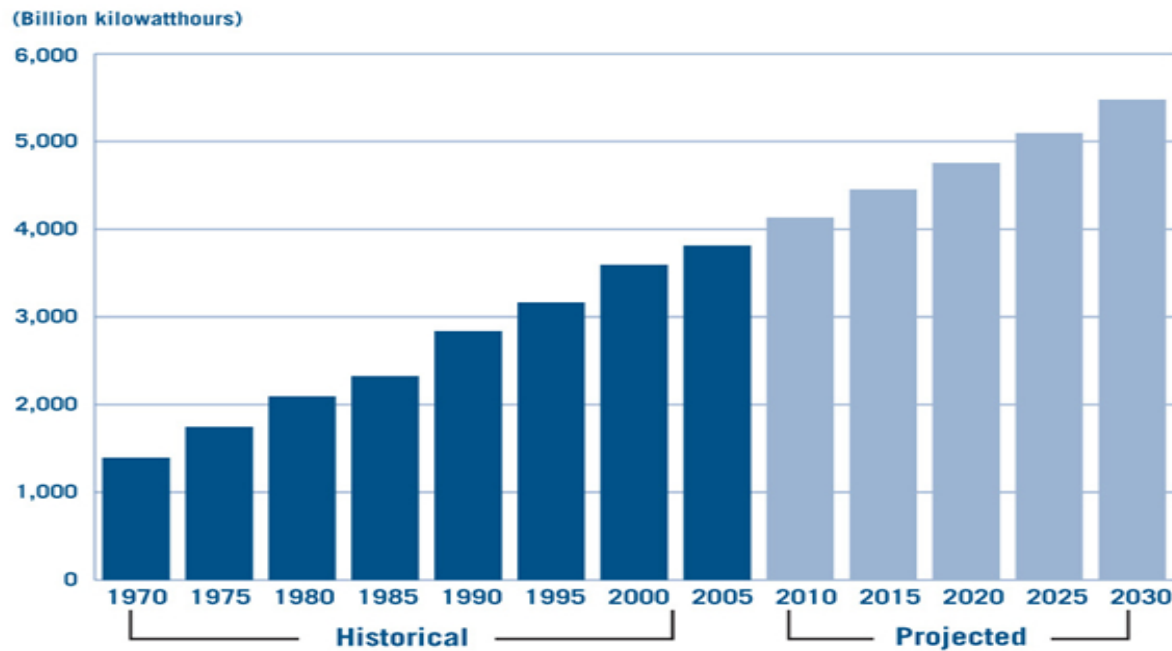
Dennis R. Spurgeon

Forecasted Energy Demand



By 2030, domestic demand for energy is projected to grow by 40 - 50 percent.

During the same time, global demand is expected to nearly double.

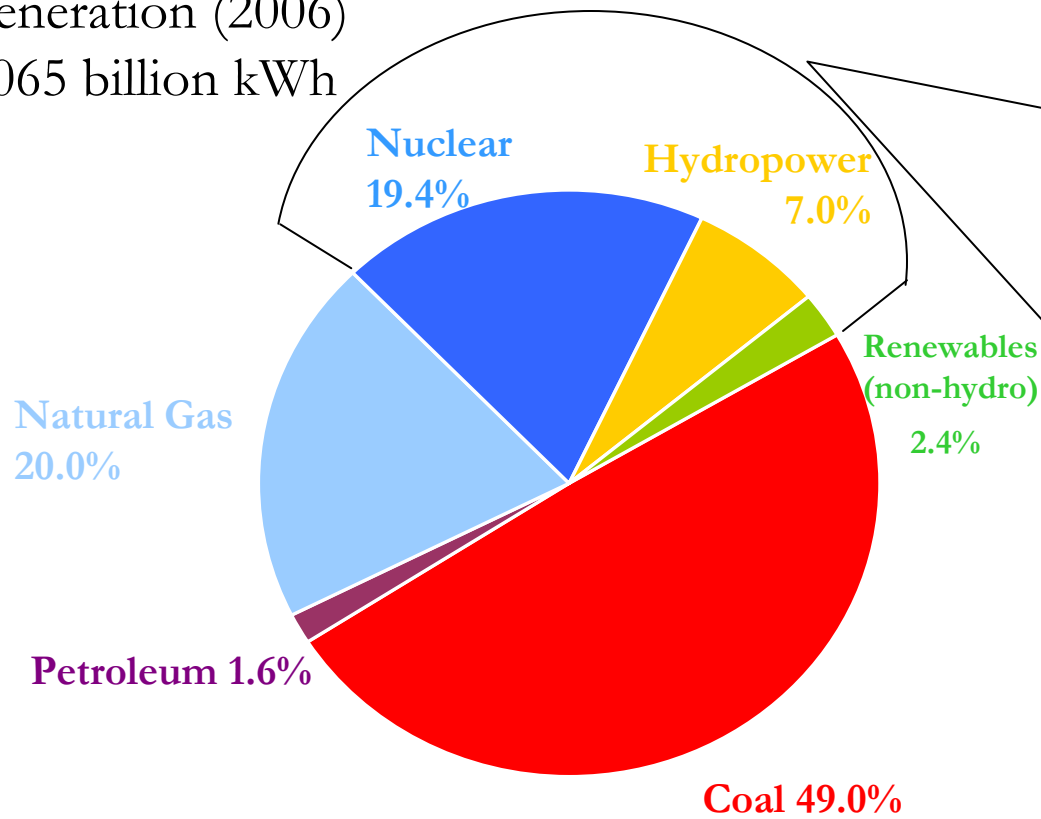


Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2005* and *Annual Energy Outlook 2007 Early Release*

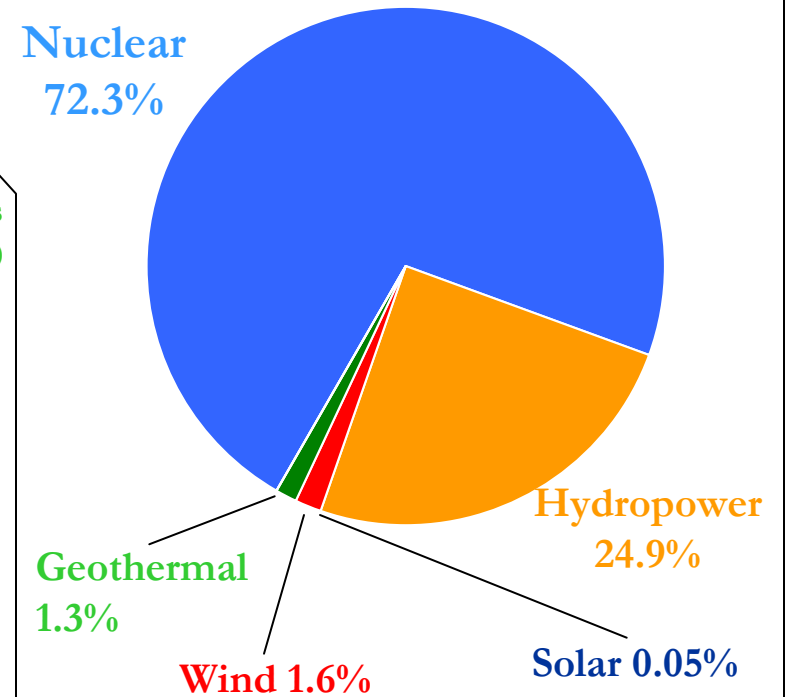
Current Electricity Generation



Net U.S. Electric
Generation (2006)
4,065 billion kWh

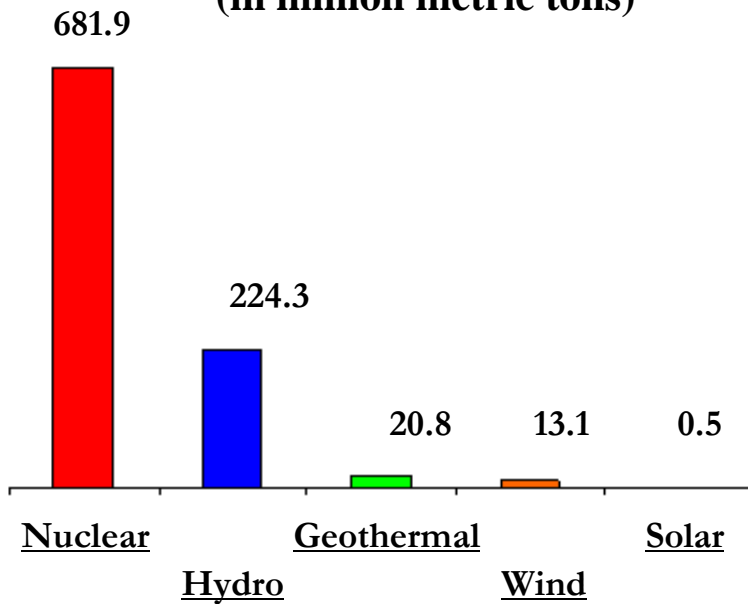


Net Non-emitting Sources of Electricity



Carbon Dioxide Prevented by U.S. Electric Power Industry

(in million metric tons)



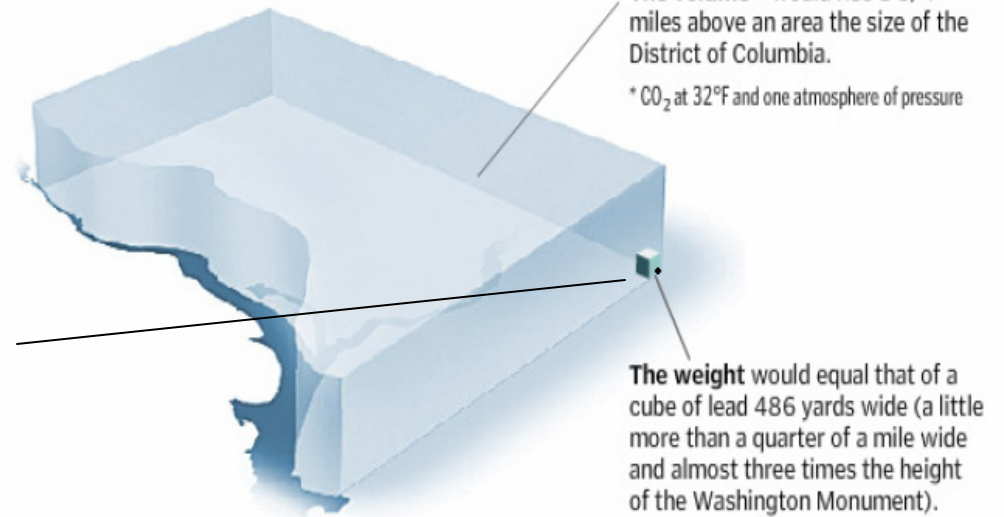
The volume of nuclear waste generated by producing the same amount of electricity from nuclear plants that would otherwise result in a gigaton of CO₂ emissions from coal plants would fit into 8 semi-trailers.

Carbon Abatement

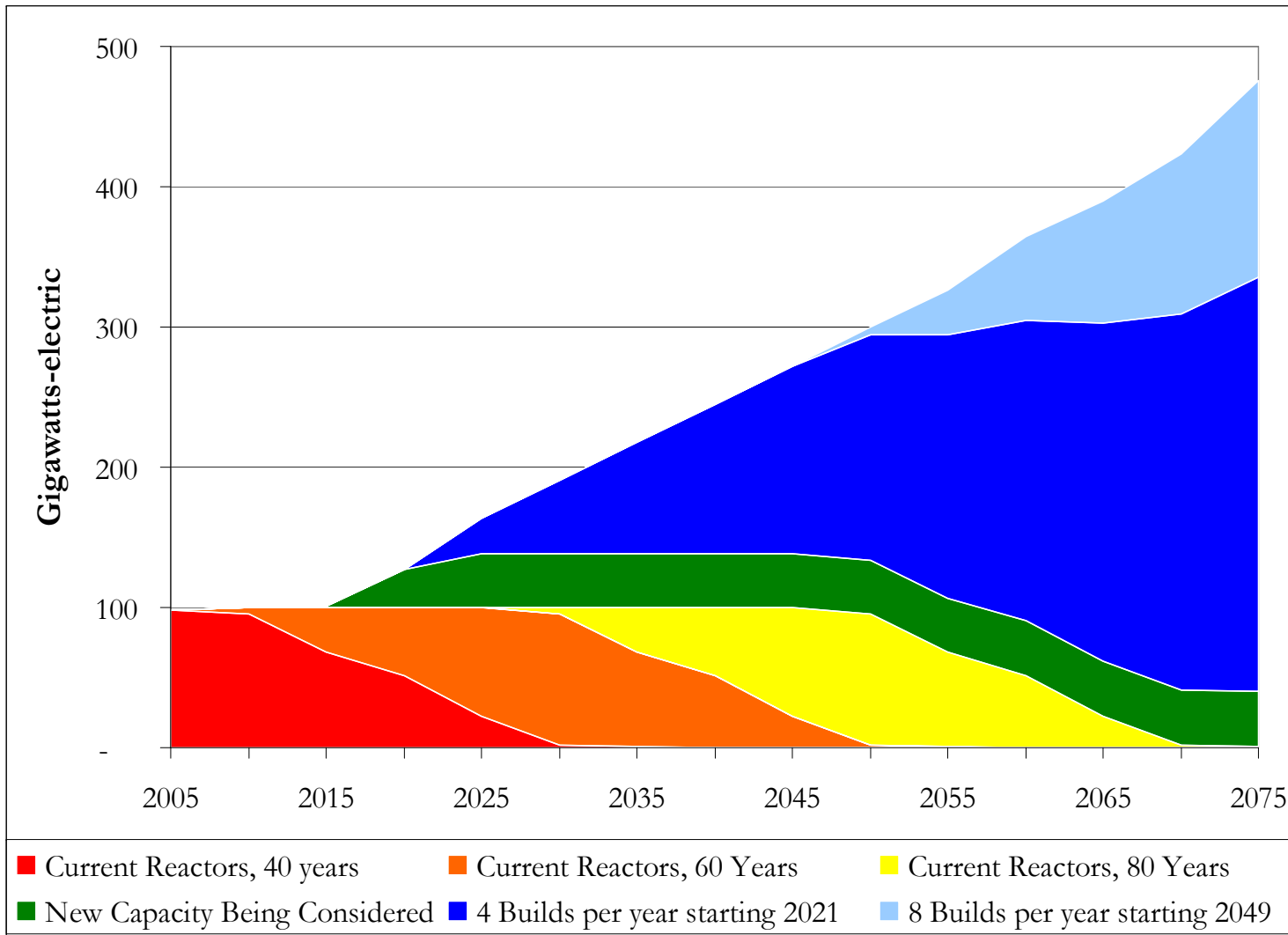


How much is a gigaton of greenhouse gas?

One billion metric tons, or 2.2 trillion pounds.



Nuclear's potential expansion



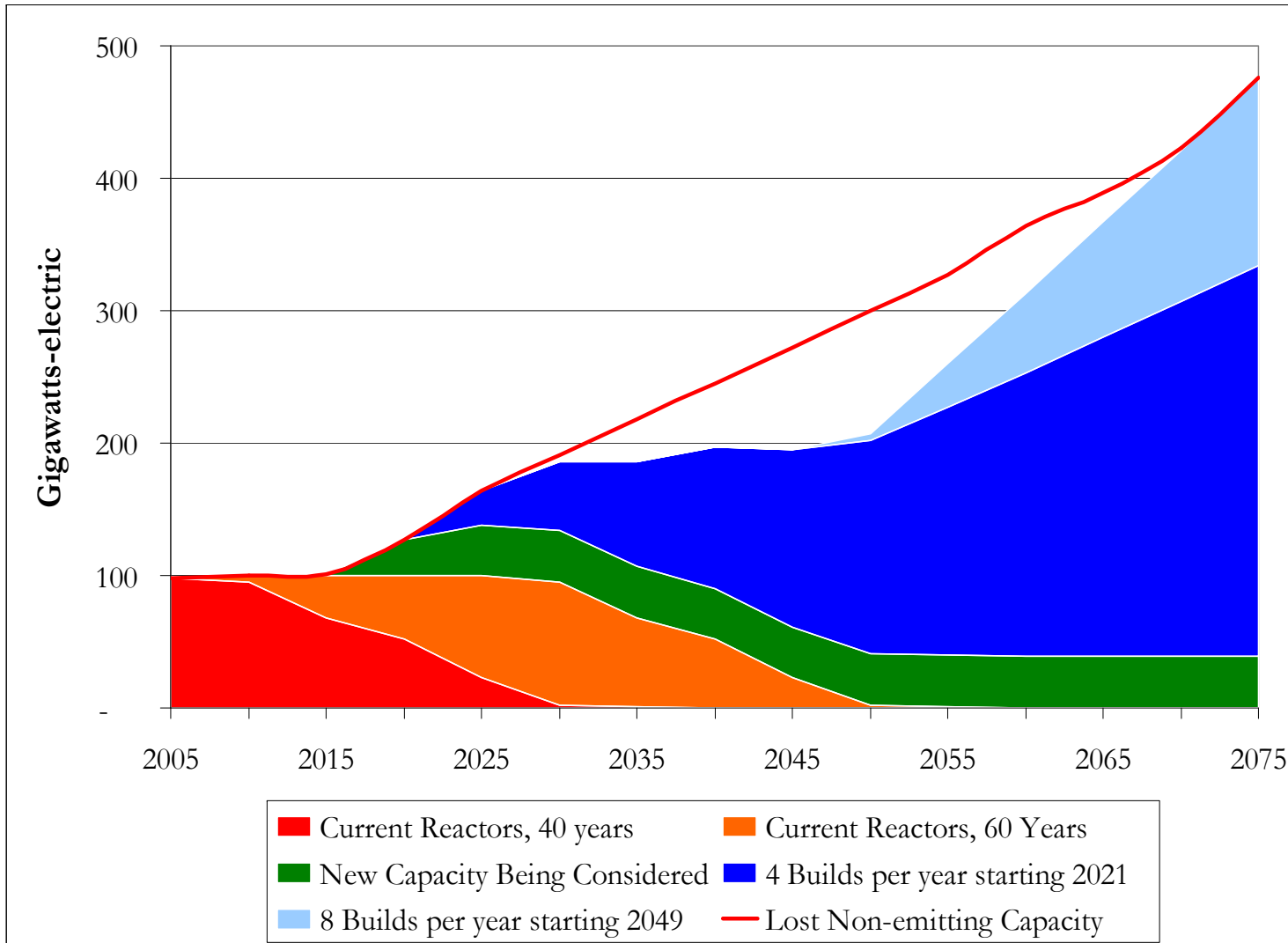
To significantly reduce carbon emissions, the United States will need 300 Gigawatts of nuclear power by 2050.

Nuclear without 80 year extensions



In total, 15 Trillion Kilowatt Hours and 12 Billion Metric tons of avoided CO2 emissions would be lost without license extensions.

That total electricity output could provide power to over 70 million households for 20 years





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