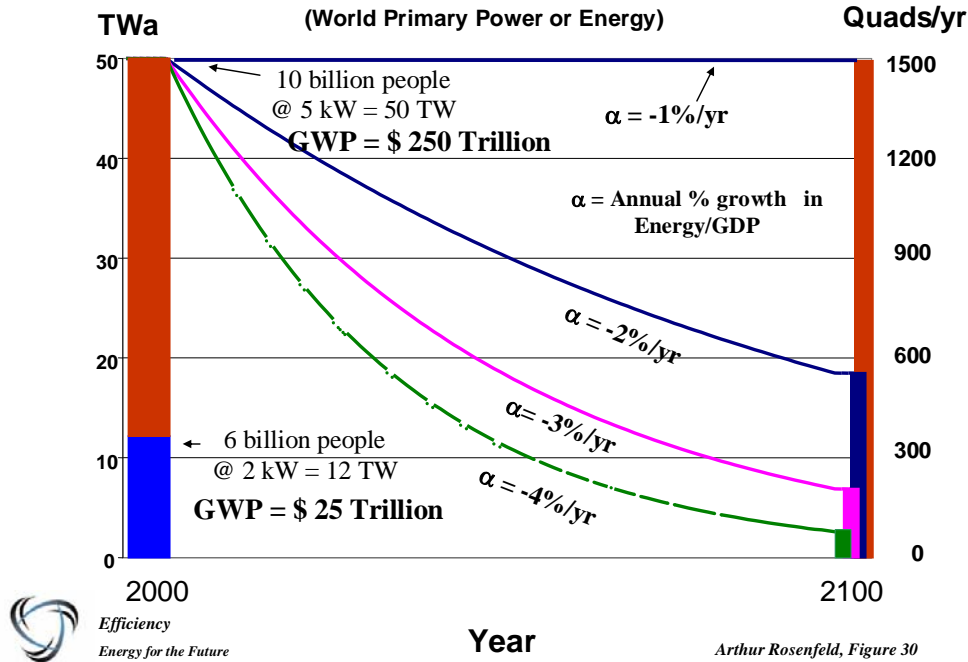




Growing Energy Demands

The demand for Global World Primary Power (GWP) will grow from \$25 Trillion to \$250 Trillion in this century¹.

The “Conservation Bomb”

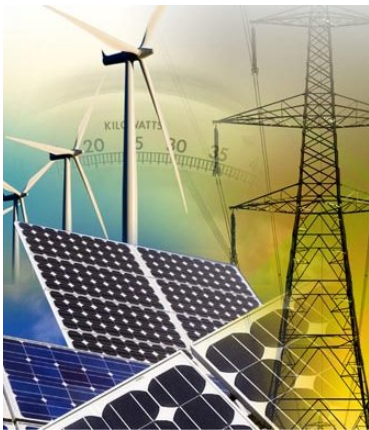


Maturity of Renewable Energy Technologies

World Energy demands will grow 71% from 2006 until 2030 according to the International Energy Outlook 2006, with renewable energy taking an increasing portion of that market.

Conceptually, there are three generations of renewables technologies, reaching back more than 100 years. First-generation technologies emerged from the industrial revolution at the end of the 19th century and include hydropower, biomass combustion, and geothermal power and heat – some of which are still in widespread use.

Second-generation technologies include solar heating and cooling, wind power, modern forms of bioenergy, and solar photovoltaics. These are now entering markets as a result of RD&D investments by IEA member countries since the 1980s. The initial investment was prompted by energy security concerns linked to the oil price crises of that period but the enduring appeal of renewables is due, at least in part, to environmental benefits. Many of the technologies reflect revolutionary advancements in materials.



¹ Arthur H. Rosenfeld, Commissioner, California Energy Commission, 2006.