

TABLE 6.1 (continued)

Alternative Fuels	
<i>Methanol from Biomass</i>	Replace all existing gasoline vehicles with those that use methanol produced from biomass.
<i>Hydrogen from Nonfossil Fuels</i>	Replace gasoline with hydrogen created from electricity generated from nonfossil fuel sources.
<i>Electricity from Nonfossil Fuels</i>	Use electricity from nonfossil fuel sources such as nuclear and solar energy directly in transportation vehicles.
Transportation Demand Management	Reduce solo commuting by eliminating 25 per cent of the employer-provided parking spaces and placing a tax on the remaining spaces to reduce solo commuting by an additional 15 percent.

ELECTRICITY AND FUEL SUPPLY

Heat Rate Improvements	Improve heat rates (efficiency) of existing plants by up to 4% through improved plant operation and maintenance.
Advanced Coal	Improve overall thermal efficiency of coal plants by 10% through use of integrated gasification combined cycle, pressurized fluidized-bed, and advanced pulverized coal combustion systems.
Natural Gas	Replace all existing fossil-fuel-fired plants with gas turbine combined cycle systems to both improve thermal efficiency of current natural gas combustion systems and replace fossil fuels such as coal and oil that generate more CO ₂ than natural gas.
Nuclear	Replace all existing fossil-fuel-fired plants with nuclear power plants such as advanced light-water reactors.
Hydroelectric	Replace fossil-fuel-fired plants with remaining hydroelectric generation capability of 2 quads.
Geothermal	Replace fossil-fuel-fired plants with remaining geothermal generation potential of 3.5 quads.
Biomass	Replace fossil-fuel-fired plants with biomass generation potential of 2.4 quads.
Solar Photovoltaics	Replace fossil-fuel-fired plants with solar photovoltaics generation potential of 2.5 quads.
Solar Thermal	Replace fossil-fuel-fired plants with solar thermal generation potential of 2.6 quads.

(Table 6.1 continues)