<u>Meeting Individual Needs</u>



Wind Energy

U.S. federal tax credits supported the early growth of the wind energy industry. The nation's capacity to produce electricity from wind was only 10,000 kilowatt-hours (kWh) in 1981. That is about enough to provide power for two homes. Despite the 1985 expiration of these tax credits, by 1989 the capacity had increased to more than 2 billion kWh. That is enough to power the residential energy needs of a major city the size of Washington, D.C. or San Francisco.

The majority of the growth in wind energy use occurred in California. Over 14,000 privately owned and operated wind turbines are located there. These turbines are located in three mountain passes and make up about 80 percent of the world's current wind-energy capacity. Use the library, or sources such as your state's energy department, NASA, or the American Wind Energy Association to answer the following questions.



1. Where are the best places to put wind turbines to efficiently produce electricity?

- 2. What does it cost to produce electricity using wind turbines?
- 3. What are some of the advantages of using wind turbines to produce electricity?
- 4. What are some of the disadvantages of using wind turbines?

5. What applications, other than producing electricity, can wind turbines be used for?