"A state that imports most of its fossil fuel can receive a substantial employment and earnings benefit from developing indigenous renewable resources."

— ***Powering the Midwest: Renewable Electricity for the Economy and the Environment*, a 1993 report by the Union of Concerned Scientists**

plants. Through the multiplier effect (see sidebar, left), the wages and salaries earned by industry employees generate additional income and jobs in the local economy.

The taxes paid by renewable energy companies also strengthen the area's economic base, ultimately reducing the burden on individual taxpayers in the community; in fact, generating power from renewable resources contributes more tax revenue than generating the same amount of power from conventional energy sources. As an example, the California Energy Commission has found that solar thermal power plants yield twice as much tax revenue as conventional, gas-fired plants.

In some cases, renewable energy investments can enable individuals, companies, or communities to reduce their utility bills. For example, schools can cut costs by using wind power (see page 10), and electric cooperatives can provide cheaper electricity to members with photovoltaics (see page 15).

Although the local economic benefits associated with renewable energy investments are evident, it is also important to note that, in the short term, increased reliance on in-state energy resources could reduce the income of energy-exporting states. In the long term, however, the advantages of developing renewable energy technologies go far beyond the local economy — they benefit the country as a whole. The United States leads the world in manufacturing renewable energy power systems, most of which are exported to industrializing nations. The lack of adequate fossil-fuel reserves in many of these countries, combined with their lack of extensive electricity grids, makes renewable energy technologies an increasingly popular choice for power generation. The growing demand for electricity in developing nations can continue to create jobs for U.S. workers — as long as the United States maintains a competitive position in foreign markets by continuing to invest in renewable energy technologies at home.

The Lost Potential of Energy Dollars

Several states have made efforts to quantify their electricity and total energy expenditures — a difficult task. Here are some examples of states that import energy.

- Massachusetts imports 97% of the energy it uses. In energy dollars this translated to $11 billion in 1992. The state imports 15% of the electricity it consumes.
- In 1990, Iowa imported nearly 97% of its energy at a cost of about $5 billion.
- Wisconsin imports 94% of its energy. In 1992, more than $6 billion of Wisconsin's $8.1 billion total energy bill left the state — approximately $1200 per resident. In its 1994 study, *The Economic Impacts of Renewable Energy Use in Wisconsin*, the Wisconsin Energy Bureau reported that "The energy dollar drain from the state due to fossil fuel imports has hindered additional economic growth and job development."
- New York depends on out-of-state sources for nearly 92% of its energy requirements. Each New Yorker sends an average of $1000 each year out of state to purchase energy.
- Rhode Island imports more than 90% of its electricity from other states.
- In 1990, Missouri spent $9.7 billion on energy, 70% of which left the state to pay for the energy. This equates to $6.8 billion, or more than $1300 for each Missouri resident.
- In 1992, Maine residents and businesses spent approximately $2.8 billion on energy, $2200 for every person in the state. Maine imports about 25% of its electricity.
- Hawaii: 85% of the state's electricity is generated from imported fuel oil, compared with only 3% for the United States as a whole.
- In 1990, the 100,000 residents of the U.S. Virgin Islands spent about $40 million on electricity, 65% of which left the Virgin Islands economy. More than $26 million drained out of the territory's economic bucket that year for energy purchases, equivalent to about $260 per resident.
- Minnesota imports 15% of the electricity it consumes.
- Oregon imports 11% of its electricity from other states.
- Despite extensive oil reserves, even Texas is now a net energy importer.

"Every year, people, companies and governments in the [Midwest] region spend over $100 billion on energy in all its forms — electricity, fuel oil, gasoline, coal and others. This amounts to about $1900 for every adult and child, or roughly 10% of average personal income."

— ***Powering the Midwest: Renewable Electricity for the Economy and the Environment*, Union of Concerned Scientists, 1993**