

# The Regional Outlook

**I**n the Midwest's search for new strategies to rejuvenate its industrial base and secure its economic future, renewable energy is a good place to start. — *Powering The Midwest*, Union of Concerned Scientists, 1993.

Every region in the country has sufficient indigenous renewable resources to supply all of its electrical needs. The Southwest, Mountain, and Gulf regions, for example, have enormous solar resources; the Northwest has hydropower and geothermal resources; the Midwest has more than enough wind energy to provide electricity for the entire nation; the Central region has large resources of wind and biomass; the Northeast could tap a combination of biomass, wind and solar; the Southeast region has vast areas of biomass; and Alaska and Hawaii could exploit their ample resources of wind, solar, hydropower, and biomass. Yet, with the exception of large hydroelectric dams, renewable energy provides very little of the nation's electricity.

Most regions of the country continue to rely on coal-fired, nuclear, or oil- or gas-fired electric generation plants to meet their needs. It would certainly not make economic sense to abandon this capacity. However, it does make sense to consider adding renewable electric generation technologies in one or more of the following circumstances:

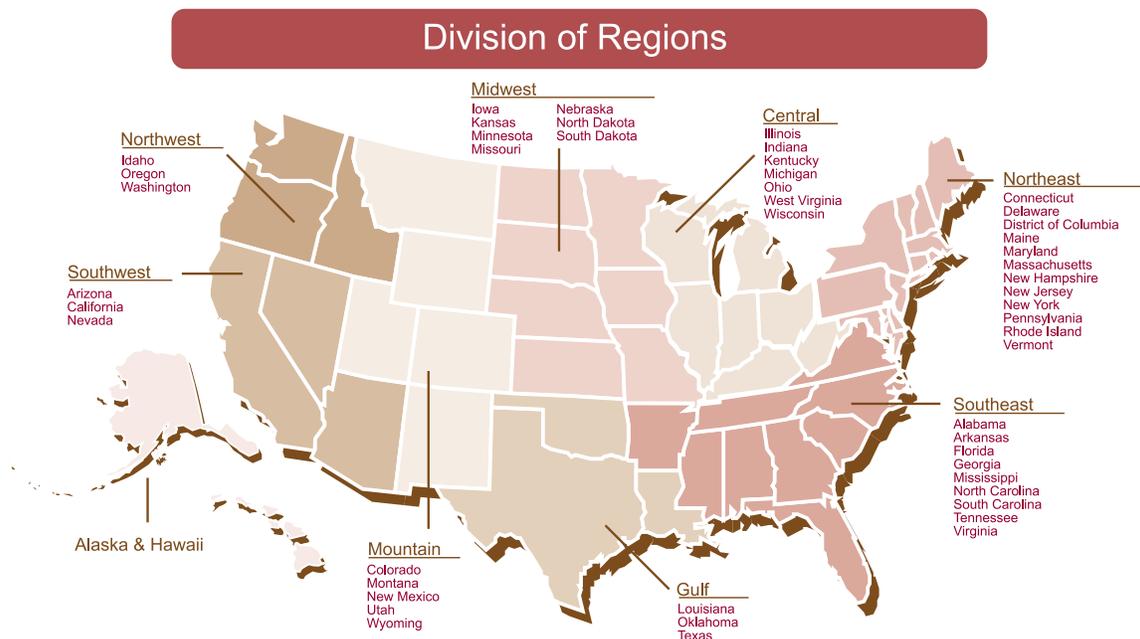
- When building new generation capacity to meet increased demand or to replace retired plants

- To reduce the environmental impacts of fossil fuel use
- To retain income for regional development
- As a hedge against fuel price fluctuations and future environmental regulations
- To satisfy customer preferences.

The reasons for turning to renewable energy vary from state to state and region to region and are as diverse as the utilities or independent producers that generate electricity.

To better understand these variations, this section presents a discussion of the current and future energy picture throughout the United States. This section divides the country into eight regions plus Alaska and Hawaii, based on similarities in geography, resources, current energy mix, and other characteristics. Each regional overview explores some of the issues that arise from the region's dependence on its current energy mix, pointing out opportunities that this mix provides for exploring renewable energy technologies.

Already, every region of the country has a success story to tell about its experience with renewable electric generation, and these stories are included.



**For the purposes of this section, the United States is divided into eight regions, plus Alaska and Hawaii. States within a region have common characteristics such as geography, resources, and energy mix.**