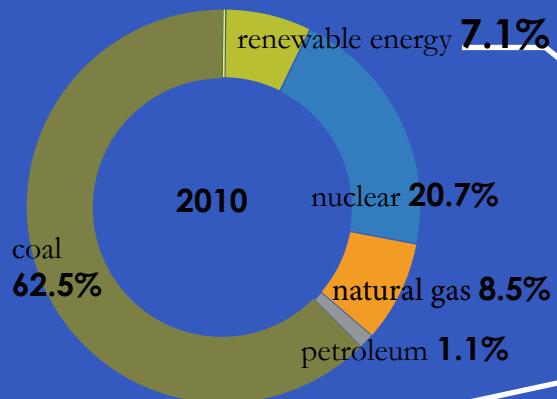


# a renewable concept

## Electric Power Generation by Source



### What is biogas?

Biogas is a mixture of methane and carbon dioxide that can be burned to generate heat and electricity. Biogas is produced when bacteria break down waste in the absence of oxygen. This process is called anaerobic digestion. To make biogas, anaerobic digesters can process waste on farms, such as manure, or at food processing facilities, like wastewater from cheese factories.

### Wisconsin Dairy Farms

1-49 cow farms	5,836
50-199 cow farms	7,252
200-499 cow farms	798
500-999 cow farms	194
1,000-2,499 cow farms	71
2,500+ cow farms	7

Most farms in Wisconsin are smaller, with only about 50-199 cows. However, most biogas production occurs on dairy farms with more than 800 cows because a certain amount of waste is needed to make the equipment cost-effective.



In 2011, Wisconsin's net electricity generation from renewable energy sources increased to **8.4%**. Renewable energy sources include hydroelectric power, biomass and wind. But there is an untapped resource in renewable energy in Wisconsin: **biogas**.

### Number of On-Farm Anaerobic Digesters

U.S.	151
Germany	3,000
U.S. potential	8,000

Wisconsin has more anaerobic digesters than any other state in the U.S., with **22** on-farm and **31** total. But, the state also has **1,000** food processing facilities and over **14,000** dairy farms that could potentially produce biogas through anaerobic digestion.

For biogas to take off in Wisconsin, small scale anaerobic digesters must become more affordable, or farmers and business owners must work together and build community digesters.

