

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C. Agricultural Outlook Forum U.S. Department of Agriculture Presented: February 24-25, 2011

2009 On-Farm Renewable Energy Production Survey

Joe Prusacki



2009 On-Farm Renewable Energy Production Survey

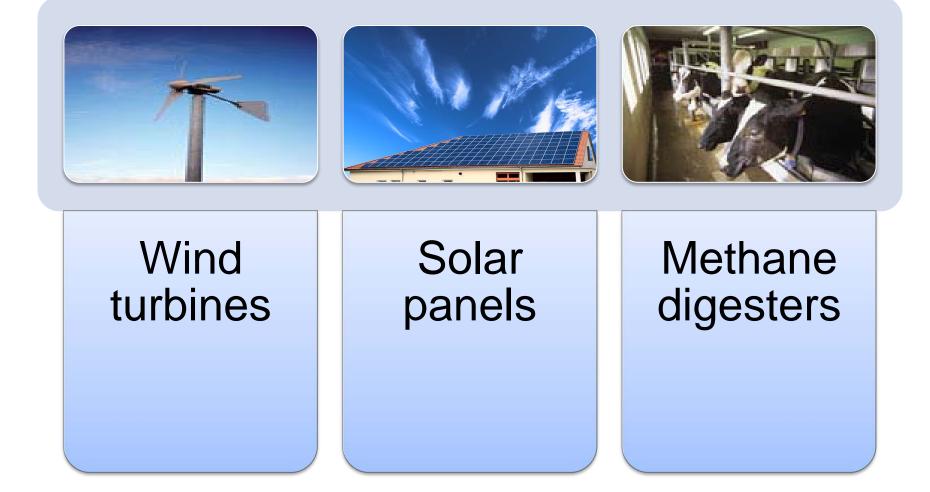
February 25, 2011



United States Department of Agriculture National Agricultural Statistics Service

Background

The first survey conducted by USDA's National Agricultural Statistics Service (NASS) to focus on the production of renewable energy on America's farms and ranches.

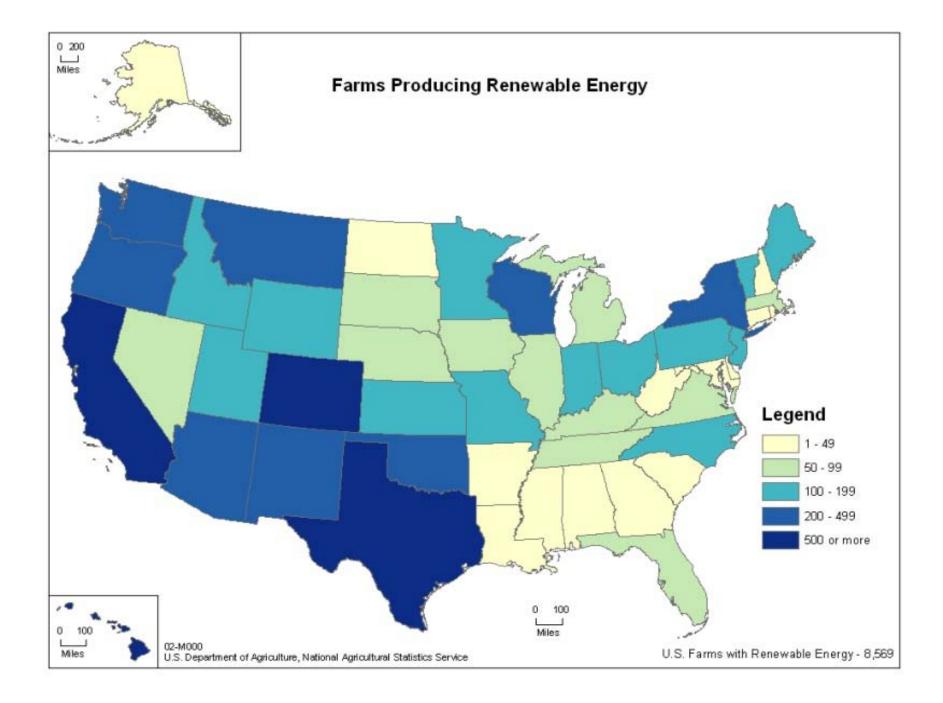




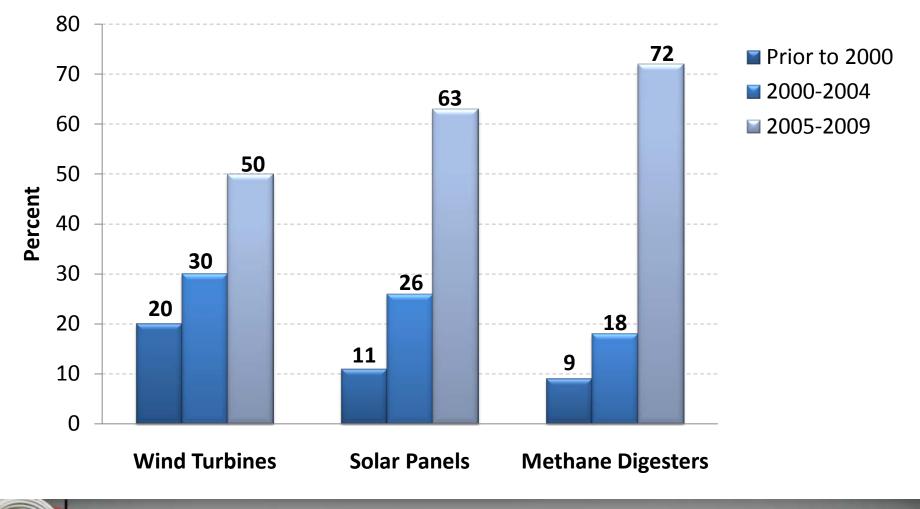
2007 Census of Agriculture

Screening Question

At any time during 2007, did this operation generate energy or electricity on the farm using wind or solar technology, methane digester etc.?



Percent of U.S. Wind Turbines, Solar Panels, and Methane Digesters by Year of Installation



Wind Turbines

- 1,420 Operations in the United States
 - 1,845 Turbines

• 1,406 Small Turbines (<100 kW)

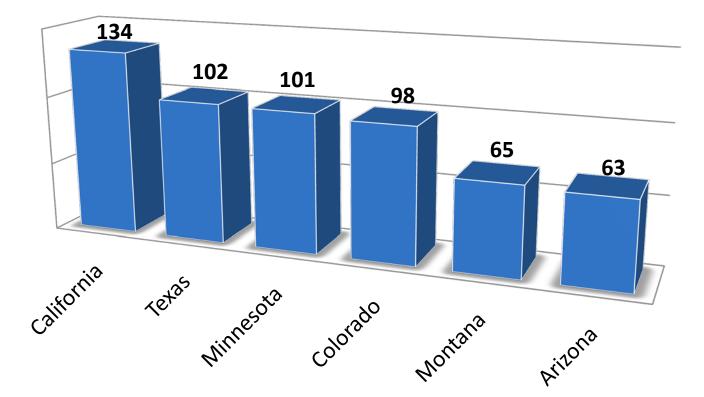
- 1831 Wind Turbines
- 6 kW Average Generating Capacity
- \$12,972 Average Installation Cost

• 14 Large Turbines (>100 kW)

- 14 Wind Turbines
- 1035 kW Average Generating Capacity
- \$1,339,143 Average Installation Cost



Wind Turbines: Number of Farms Select States (2009)

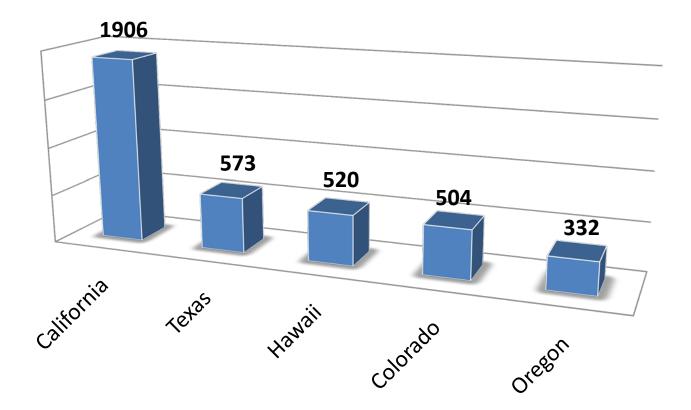




Solar Panels

- 7,968 Farms Reporting Solar Panels
- Average Generating Capacity = 4,449 W
- Average Installation Cost = \$31,947

Solar Panels: Number of Farms Top 5 States (2009)



Methane Digesters

- 121 operations in the U.S. had methane digesters
- 140 methane digesters across the nation
- Average installation cost was \$1,718,562
- Average digester produced 30.5 million cubic feet of methane



Questions

?