Solar Energy on Farms—Activity
Estimate Photovoltaic Electricity Output (Solution)
Assume roof mount system.

Approximate dimensions of front main roof: 57’ by 12’

Approximate azimuth of front main roof: 160°

Approximate dimensions of a solar PV panel: 3’ by 5’

Estimate number of solar PV panels and maximum output at 150 watts per panel

ZIP code is 15601.

Use PVWatts Calculator to estimate annual energy output.

55’ by 12’ enables about 11 panels by 4 panels or 44 panels.

44 panels times 150 watts per panel is 6,600 watts
Estimated annual production is: 8,088 kWh.

This project supported by the Northeast Sustainable Agriculture Research and Education (SARE) program. SARE is a program of the National Institute of Food and Agriculture, U.S. Department of Agriculture. Significant efforts have been made to ensure the accuracy of the material in this report, but errors do occasionally occur, and variations in system performance are to be expected from location to location and from year to year.

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