2006 Minnesota Solar Tour

October 7, 2006

21 Ziebold-Carpenter Residence

3232 Bryant Avenue South
Minneapolis, MN

Auditing our household's annual energy costs, we realized that it was evenly divided between electricity and gas. Therefore, we decided to divide the south roof's capacity into one-half electricity production and one-half heat production. The latter are closed-loop water collectors, used for hot water and air exchange in the forced air heating system. The solar heat will decrease our heating costs by one-third — mostly in the transitional seasons — but we anticipate accelerated payback because of future fuel shortages, price increases, and environmental benefits. The maximum energy conservation will occur due to improved insulation of the attic.

System Components

- 1.58 kW photovoltaic array with monocrystalline panels (note triangular shape)
- 8 solar water collectors (closed-loop)

Directions

From the Green Institute, head south on 21st Avenue and turn right (west) at Lake Street. Turn left (south) at Bryant Avenue.