

Northfield  
**SolarWorks**



**May 11, 2006**



Northfield



## Why should I consider investing in solar?

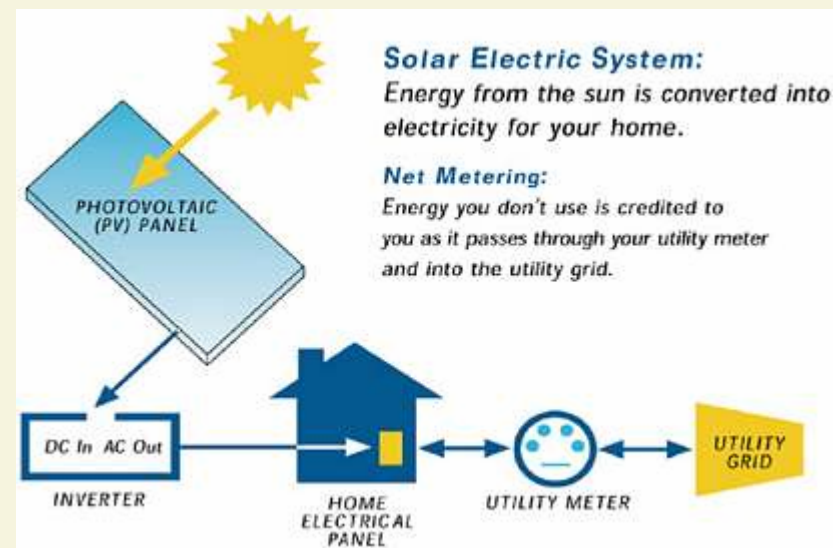
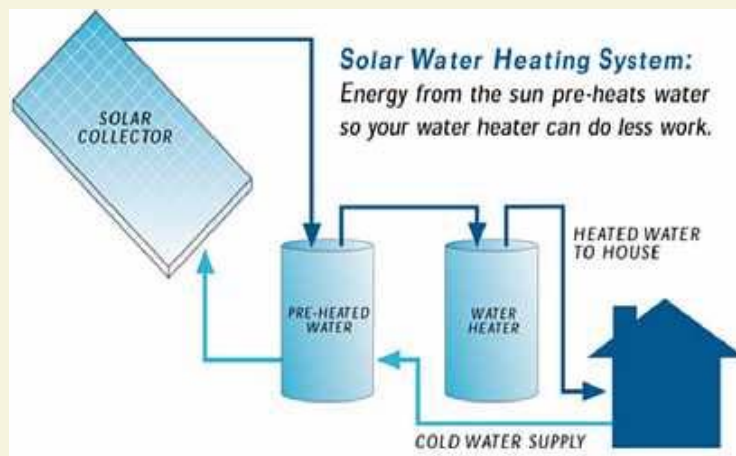
- Reduce air pollution
- Save money on gas and/or electricity bills
- Protection against future energy price increases





## What is Northfield SolarWorks?

- Initiative to spur installation of many solar water heating and solar electric (photovoltaic or PV) systems in the Northfield area





## What is Northfield SolarWorks?

- Bulk buy of solar water heating equipment in partnership with solar installer IPS Solar (<http://www.ips-solar.com/>) of Minneapolis
- Owner installations, or installations through other contractors, are also an option
- Solar electric, or photovoltaic, systems also encouraged





## Objectives:

- Facilitate installation of at least 20 solar water heater systems in the Northfield area by December 31, 2006
- Facilitate installation of as many PV systems as possible in the area during the same time period

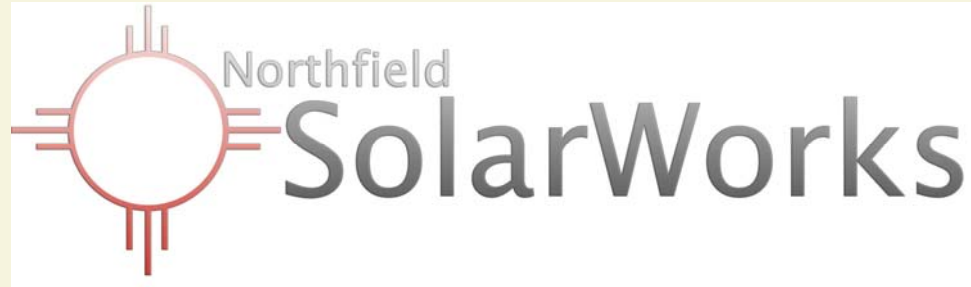




## Has this been done anywhere else?

- The SE Como neighborhood (Minneapolis) is in the midst of a similar pilot project (<http://www.secomo.org/Solarpage.htm>)
- 39 home/business owners signed up for solar site analyses
- About 20 are proceeding with solar work this summer





## How will it work?

RENew Northfield will coordinate and facilitate:

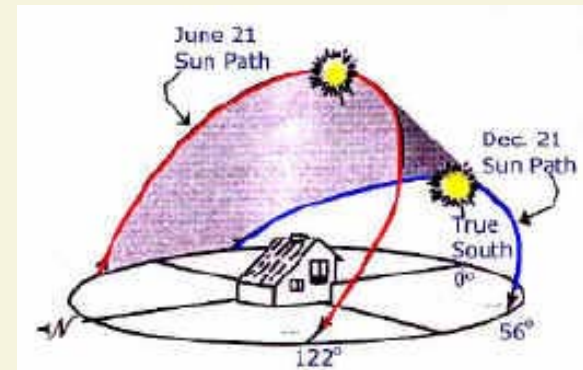
- Solar site analyses for area homeowners and business owners, and
- Below-market-cost bulk buying of solar water heating systems
- Potential for installation savings on associated solar heating and/or PV systems as well



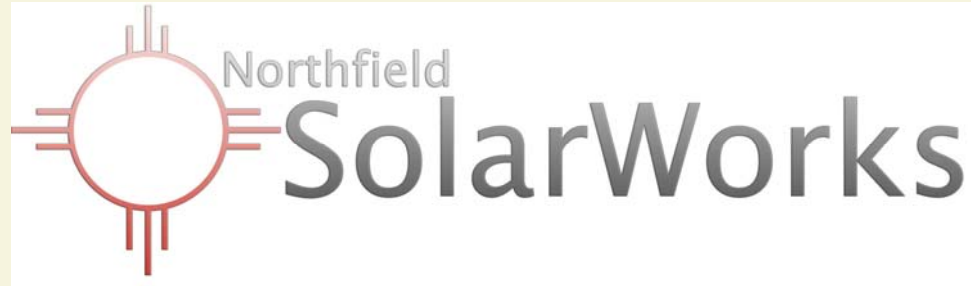


## What are the steps to take?

1. Sign up for a solar site analysis (performed by IPS Solar and/or REnew Northfield) to determine which solar option(s), if any, make sense at your site (\$95 cost)
2. Solicit bids from IPS Solar and/or other contractors
3. When target of 20 participants committing to bulk buy through IPS Solar is reached, materials order placed
4. Schedule work beginning around September 1 2006







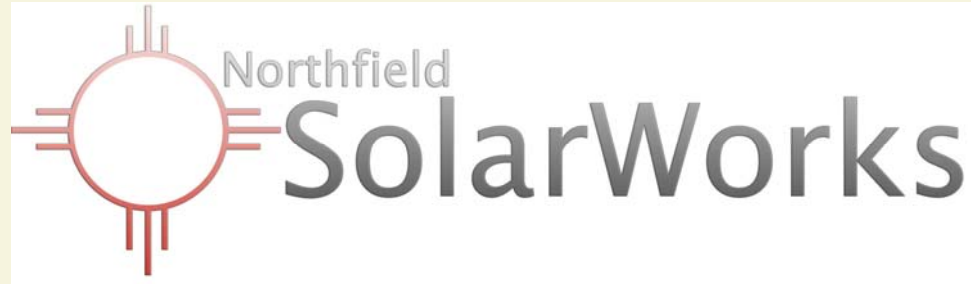
## Financial incentives

- **Federal tax credit**

([http://www.energystar.gov/index.cfm?c=products.pr\\_tax\\_credits#1](http://www.energystar.gov/index.cfm?c=products.pr_tax_credits#1)) for PV and/or water heating (available for systems installed by 12/31/07)

- 30% after other rebates
- \$2,000 residential limit per system (can be taken for both water heating and PV systems)
- No business limit

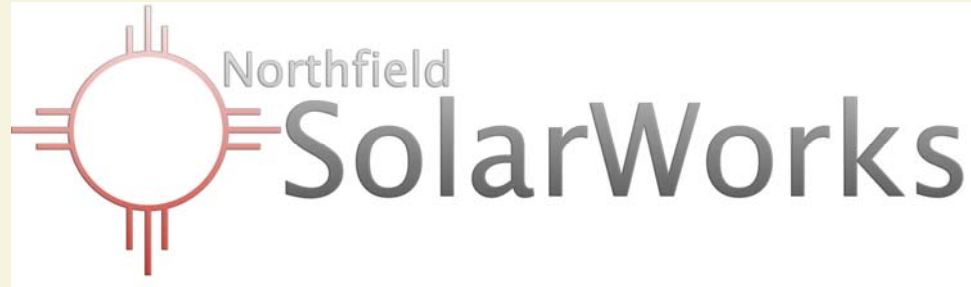




## Financial incentives

- **Minnesota Solar Electric Rebate**  
([http://www.state.mn.us/mn/externalDocs/Commerce/Solar\\_Electric\\_Rebate\\_Program\\_110802025911\\_RebateInstructions.pdf](http://www.state.mn.us/mn/externalDocs/Commerce/Solar_Electric_Rebate_Program_110802025911_RebateInstructions.pdf)) of \$2,000 per kW (PV), up to \$20,000 total
- **Great River Energy Solar Electric Rebate**  
([http://www.greatriverenergy.com/partners/images/gre\\_solar\\_fact\\_sheet.pdf](http://www.greatriverenergy.com/partners/images/gre_solar_fact_sheet.pdf)) of \$2,000 per kW, up to \$4,000 total (available for customers of Steele-Waseca, Dakota and Goodhue co-ops)





**Solar water heating example: 2-panel system (64 square feet), residential customer  
(*actual costs may vary*)**

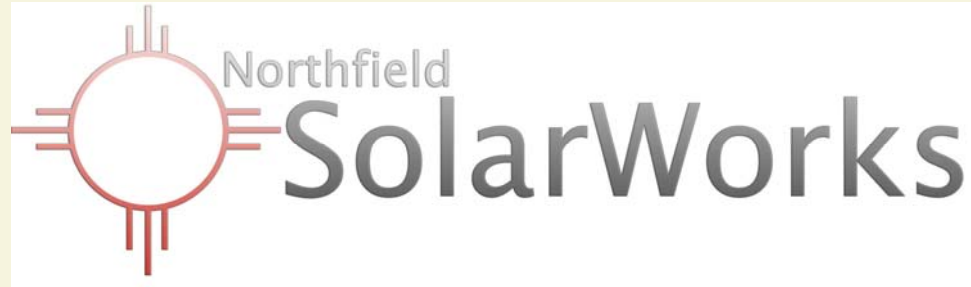
Typical system cost: \$7,500

Tax credit: \$2,000

**Net system cost: \$5,500**



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**Solar water heating example: 2-panel system (64 square feet), business customer  
(*actual costs may vary*)**

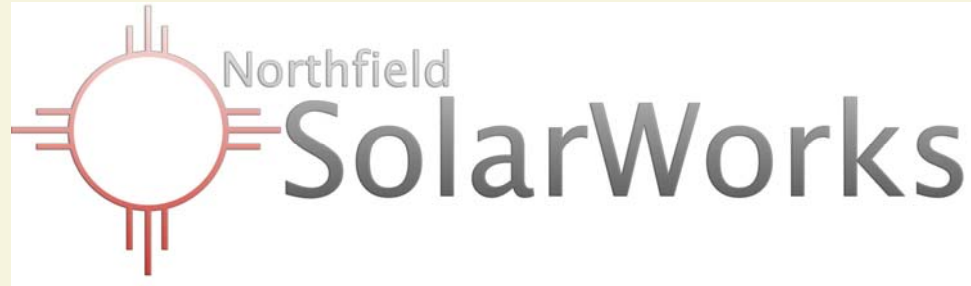
Typical system cost: \$7,500

Tax credit: \$2,250

**Net system cost: \$5,250**



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**PV example: 2 kW system, Xcel residential customer  
(*actual costs may vary*)**

Typical system cost: \$17,000

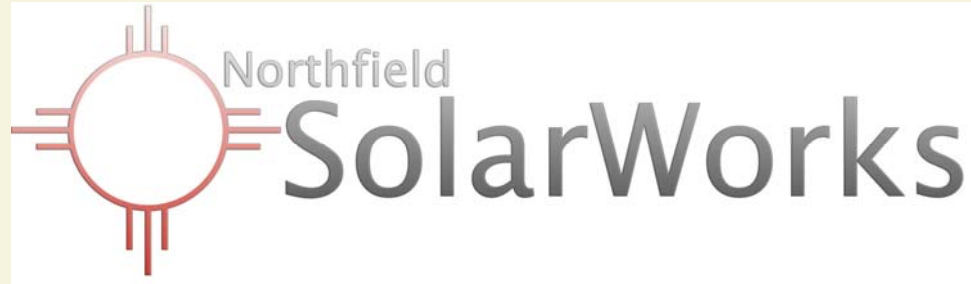
Minnesota PV rebate: \$4,000

Tax credit: \$2,000

**Net system cost: \$11,000**



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**PV example: 2 kW system, Xcel business customer  
(*actual costs may vary*)**

Typical system cost: \$17,000

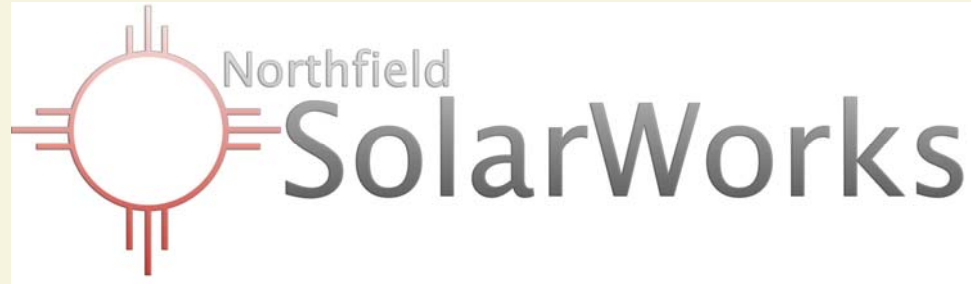
Minnesota PV rebate: \$4,000

Tax credit: \$3,900

**Net system cost: \$9,100**



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**PV example: 2 kW system, GRE residential customer  
(*actual costs may vary*)**

Typical system cost: \$17,000

GRE PV rebate: \$4,000

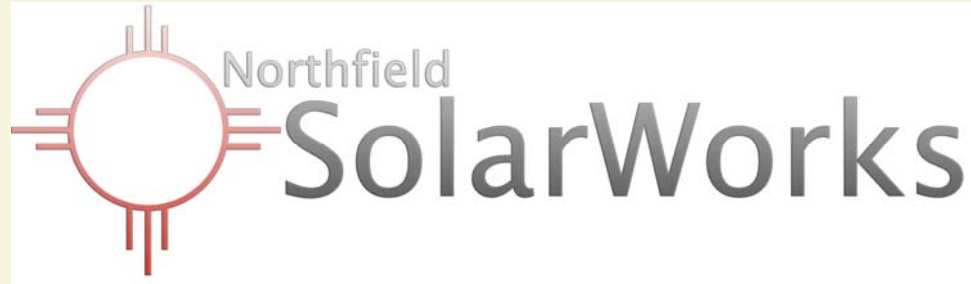
Minnesota PV rebate: \$4,000

Tax credit: \$2,000

**Net system cost: \$7,000**



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**PV example: 2 kW system, GRE business customer**  
***(actual costs may vary)***

Typical system cost: \$17,000

GRE PV rebate: \$4,000

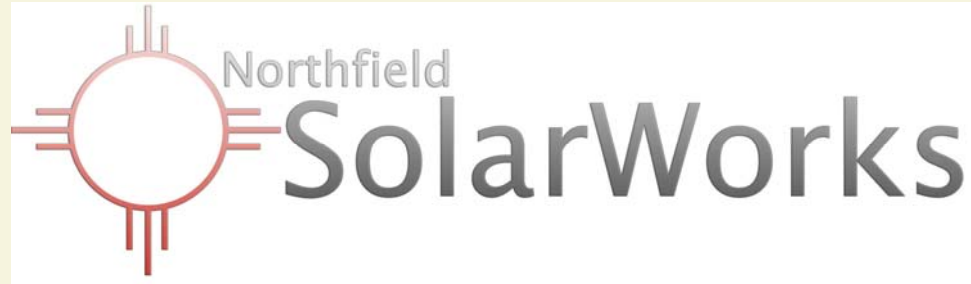
Minnesota PV rebate: \$4,000

Tax credit: \$2,700

**Net system cost: \$6,300**

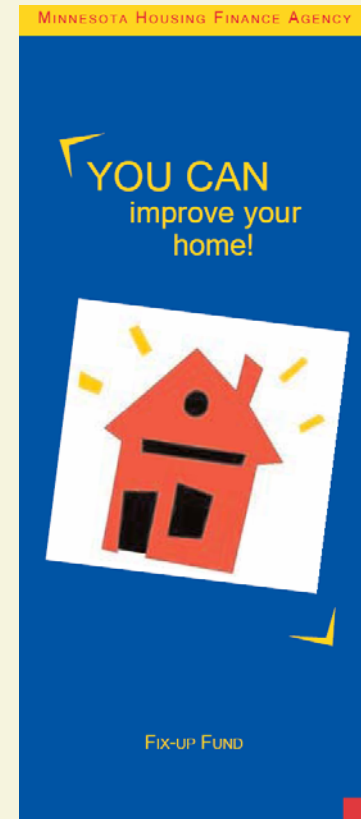


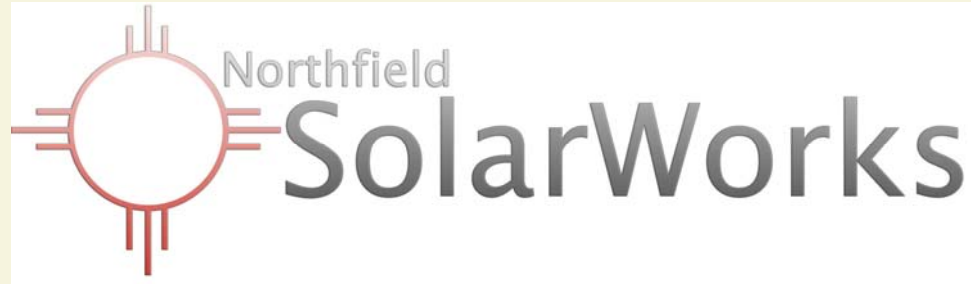




## Financing options

- **Fix-Up Fund loan** (Minnesota Housing Finance Agency; Premier Bank Minnesota)
  - \$35,000 maximum loan amount
  - 7.25%
  - \$90,000 gross household income limit
  - Contact Kathy Aanerud ([kathy.aanerud@state.mn.us](mailto:kathy.aanerud@state.mn.us); 651.296.8215) for more information
  - Local participating lender: Premier Bank Minnesota (507.645.4418)





## Financing options

- **Home Energy Loan** (Center for Energy and the Environment;  
<http://www.mncee.org/> )
- \$10,000 maximum
- 5-year term
- 7.25%
- Contact Kristin DeGrande  
([kdegrande@mncee.org](mailto:kdegrande@mncee.org) ;  
612.335.5881) for more information.





Questions?

Bruce Anderson

507.645.7133

[brucea@renewnorthfield.org](mailto:brucea@renewnorthfield.org)

<http://renewnorthfield.org>



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