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PROJECT**

working for strong local economies,  
vibrant communities, and a healthy environment

# On Farm Digesters in the Midwest

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# The Minnesota Project is.....

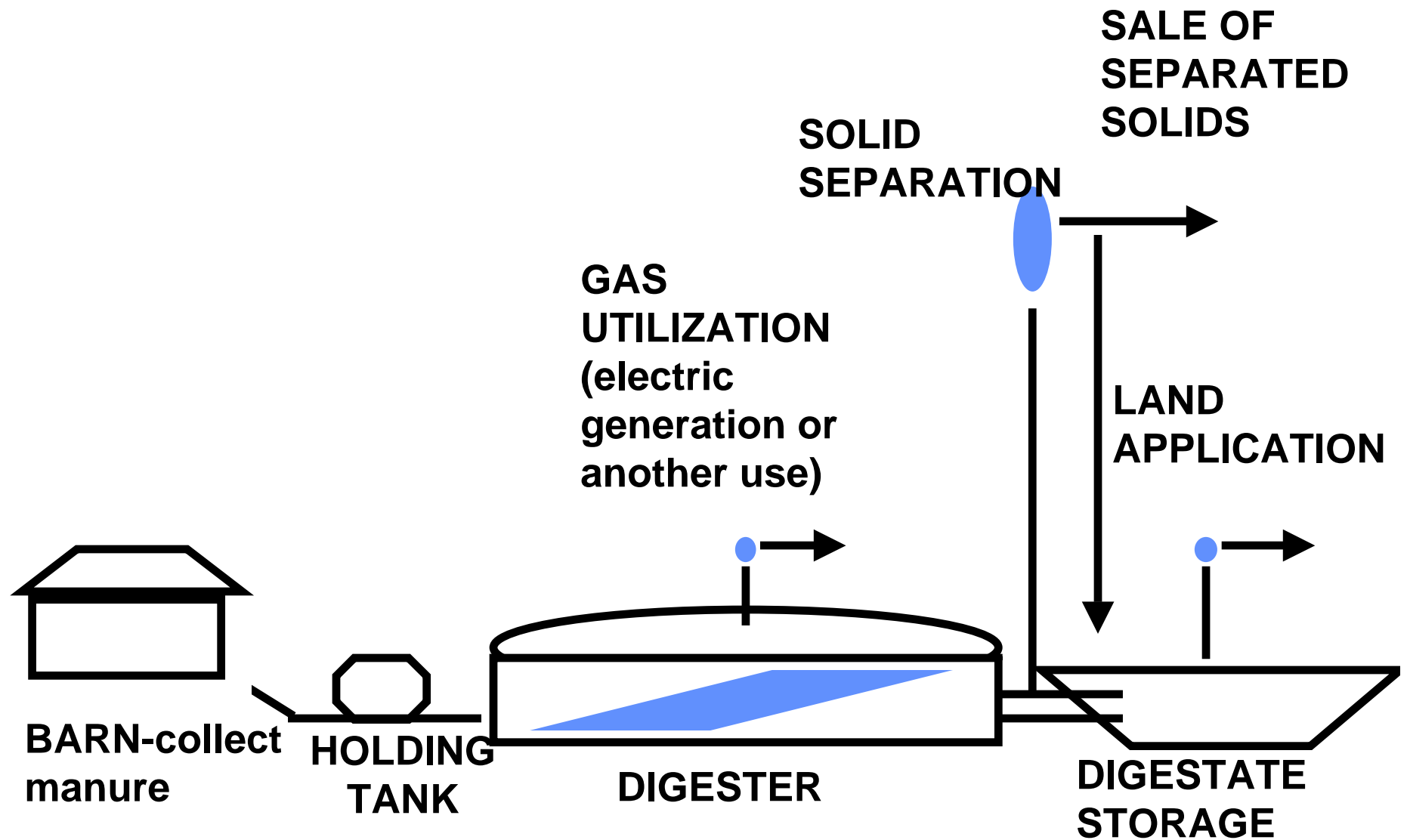
- Non Profit
- Formed in 1979
- Mission: Connecting people with policy to build strong local economies, vibrant communities and a healthy environment
- Areas of focus:  
Renewable Energy/Agriculture & Water/ Local Food
- [www.mnproject.org](http://www.mnproject.org)

# How does a digester work?

- Manure is collected, put in covered tank
- Bacteria break down manure
  - Heated digesters are more efficient
- Biogas is produced and captured
  - 60% methane, 40% CO<sub>2</sub>, other trace gases
- Biogas is routed to be burned for electricity production or another use
- Digestate is produced
  - Volume is slightly reduced (3-7%)
  - Nutrient levels remain the same during before and after digestion

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# Glance at Midwest On Farm Digester Projects

## Minnesota

Haubenschild Dairy, Princeton (1999)

- 850 head dairy farm
- Plug-flow digester
- Fuel cell that runs off cleaned biogas
- Sell carbon credits to the Chicago Climate Exchange



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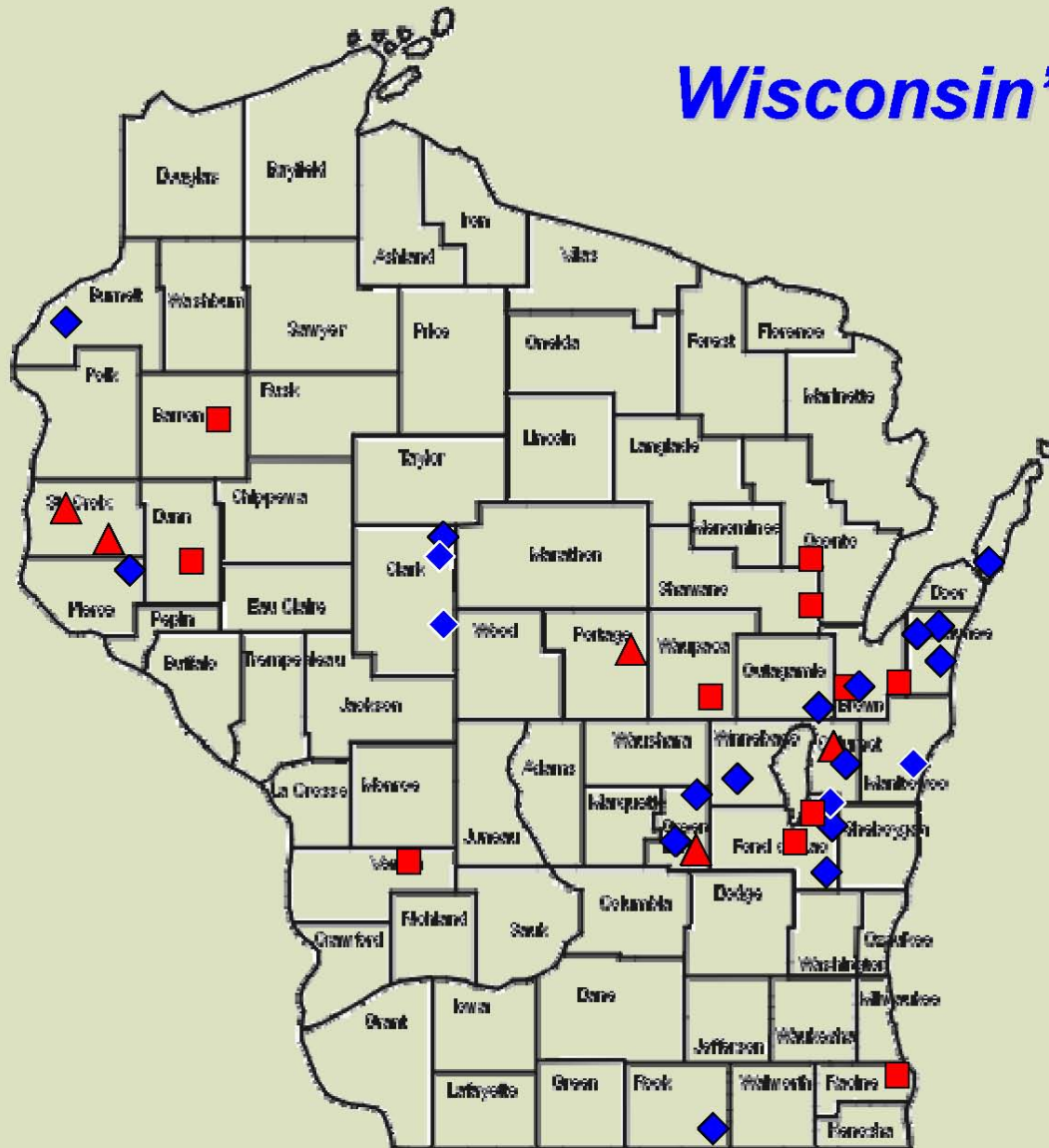
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## Northern Plains Dairy, St. Peter (2003)

- 3000 head dairy farm
- Plug-flow digester
- Electrical production
- Separated solids for bedding



# Wisconsin's Farm Digester Projects



- 11 - Existing Digesters
- ▲ 5 - Existing Digesters, capacity upgrades
- ◆ 20 - New Digesters, in construction or planned

*Photo courtesy of Wisconsin Focus on Energy*

*...the power is within you.*

# Community Digesters

## Tillamook Bay, Oregon

- 4,000 cow digester, collecting manure from several dairy farms



# Community Financing

## Dairyland Power Cooperative

- Partner with Microgy and Wisconsin farmers



Five Star Dairy, Elk Mound, Wisconsin

# *Thank You*

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