

Linden Hills Power and Light

Steve Palm
Chairman

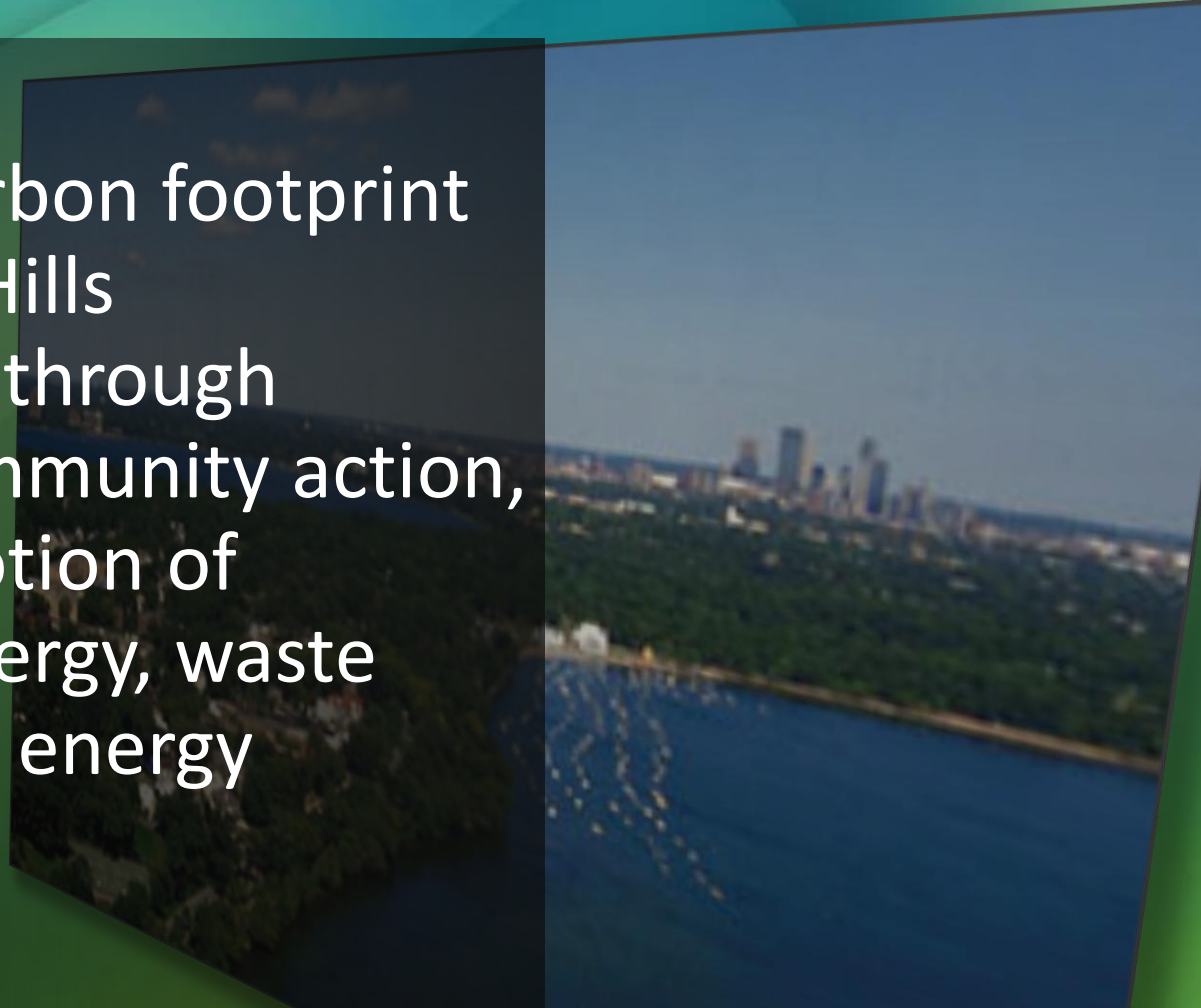


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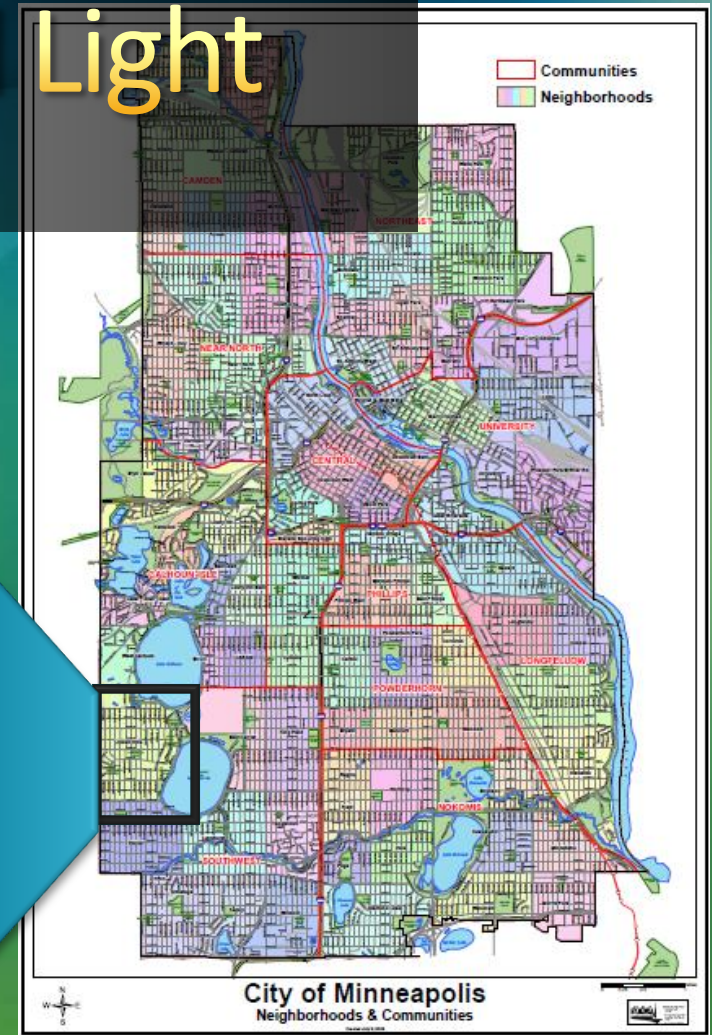
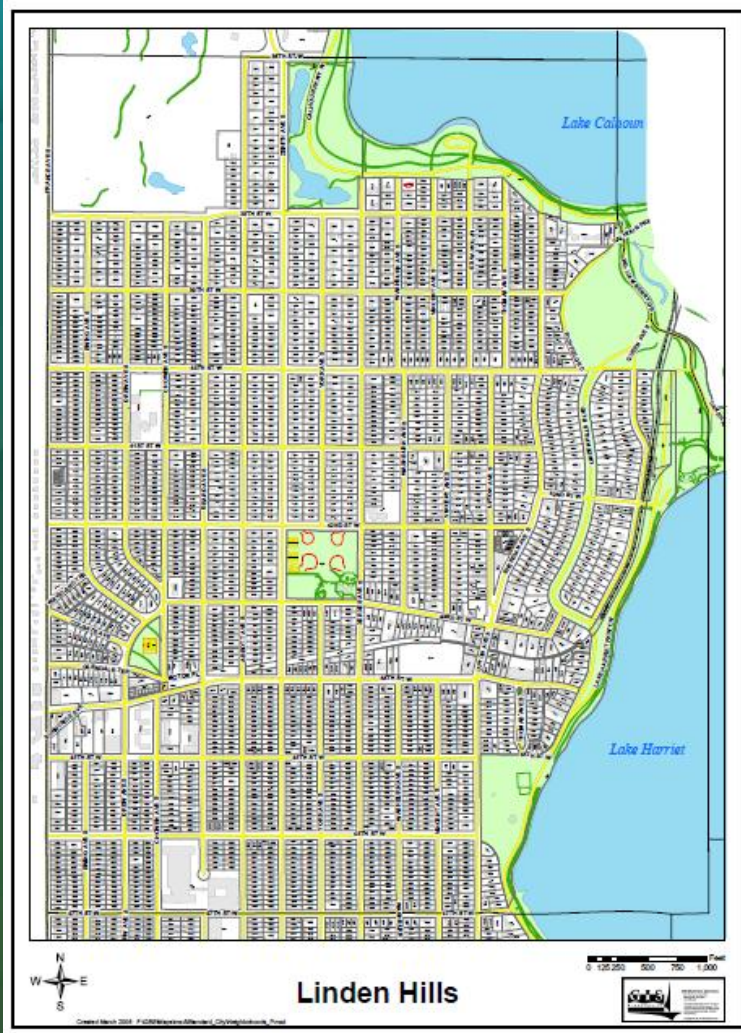
Mission

To reduce the carbon footprint of the Linden Hills neighborhood through education, community action, and the promotion of sustainable energy, waste reduction, and energy conservation.



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Linden Hills Power and Light Location



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2008 Accomplishments

- 1) Organics (Compost) Collections Pilot
- 2) Anaerobic Digester Feasibility Study
- 3) Green Film Festival



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Linden Hills Power and Light Organics Collection Pilot

- 1) Partners:
 - a) City of Minneapolis
 - b) Hennepin County
- 2) Began in August 2008
- 3) Minneapolis provides trucks and crew to collect the organics.
- 4) Current participation is close to 50% of 2500 eligible households.
- 5) Collecting on average 4 tons / week.
- 6) Organics are trucked to exurb compost facilities.
- 7) Currently implementing a project to increase participation above 70%.
- 8) Minneapolis is currently investigating expansion to additional neighborhoods.

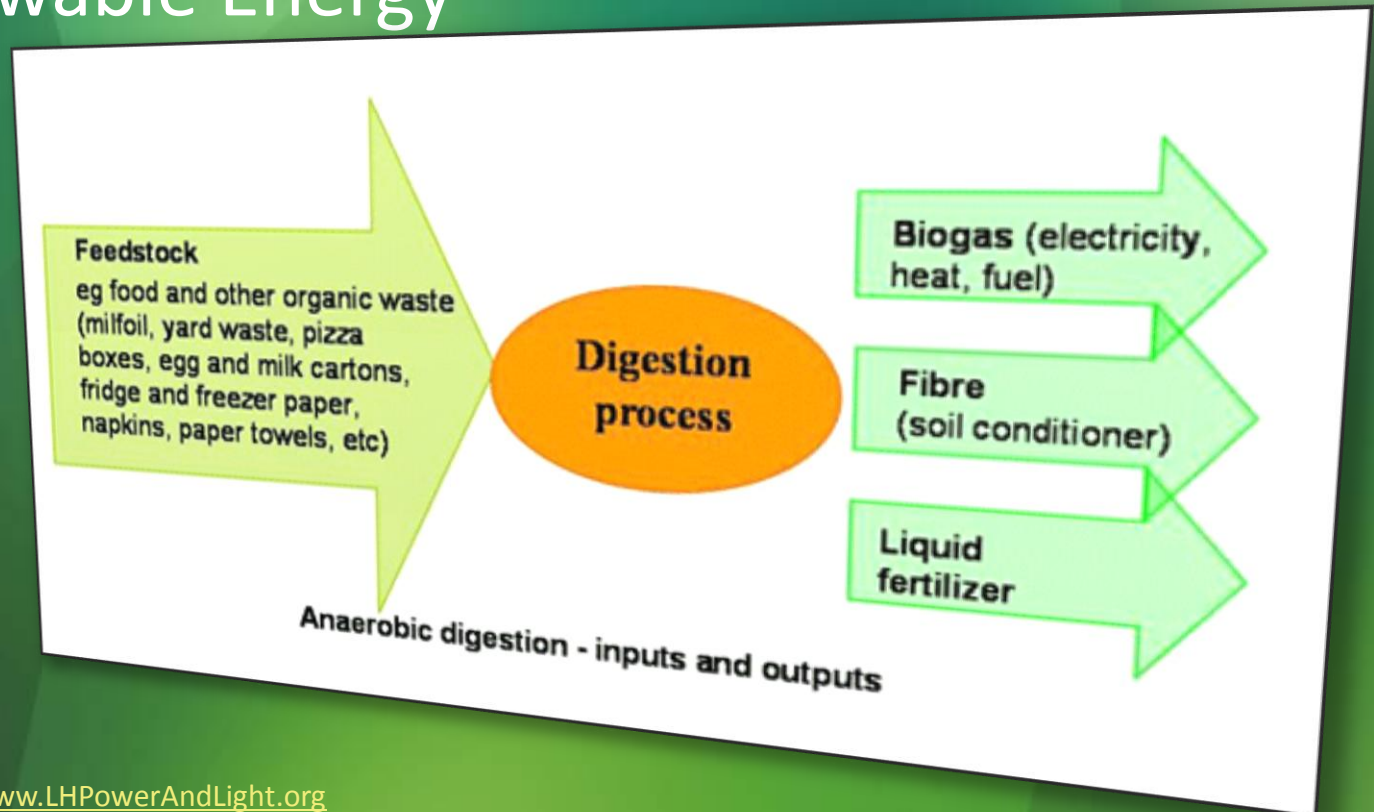


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Why Anaerobic Digestion?

Solution For Two Problems

- 1) Waste Management
- 2) Renewable Energy



Linden Hills Power and Light Anaerobic Digester Feasibility Study

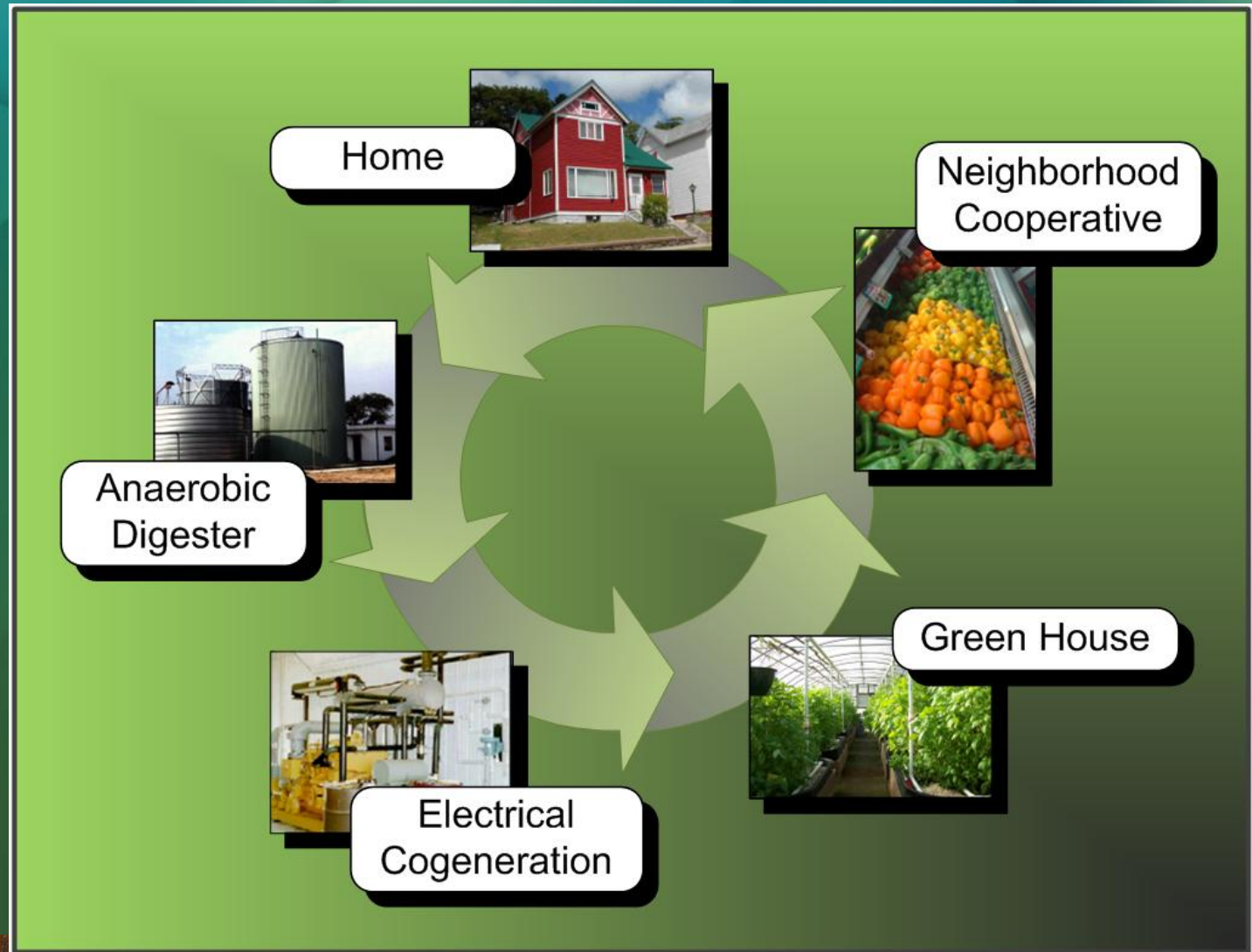
1) Studied 4 Scenarios and 3 Capacities

- Generate Electricity
- Co-generate Electricity and capture Heat
- Produce pipeline quality natural gas.
- Produce CNG for transportation applications.
- 5, 50, and 500 tons/day feedstock.

2) Conclusions

- LHPL learned a bunch about anaerobic digestion.
- Must be larger to be economically sustainable.
- A Green House is the ideal consumer of all the products: gas, liquid, and solids.

Linden Hills Power and Light Neighborhood Anaerobic Digester Cycle



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2009 Activities

1) Organics Collection

- Increase participation above 70%

2) Neighborhood Anaerobic Digester

- Site Location
- Find Partners: Technical, Financial, Political
- Funding

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Thank You

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