



Biomass heat in Ohio

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Wood for Warmth
Renewable Heat Services

Heating the Midwest Conference and Expo

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Wood for Warmth Renewable Heat Services



Ohio Biomass Installations

- 25 district energy systems
 - biomass used in a few
- Veterans Affairs Medical Center
- Green Circle Growers (nursery)
- Distributed residential



Green Circle Growers

- Highly automated state-of-the-art facility
- 125 acres
- 600 workers
- distributes ~75 truckloads of plants per day from March through June



Green Circle Growers

- Six 800 hp low pressure, hot water Vyncke boilers





Green Circle Growers

- Replaced 1500 hp wood chip fired boiler
 - purchased several years before from a Clarksville, Tennessee sawmill and dry kiln operation



Green Circle Growers

- ~10 truckloads of chips per day
- Supplemented by dried horse manure



Residential

- Outdoor wood boilers
- Wood stoves
- “Wood for Warmth Renewable Heat Services”



Wood for Warmth

- Renewable heat services
- Local and renewable forest-sourced heat
- Modern high-efficiency technologies



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- Close coupling of local forests with end users (translate strong interest and enthusiasm for local food/farming?)
- Initial cordwood focus with pellets and larger chip-based systems later
- Learning from Europe and Northeast



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Business trajectory

- Developing partnerships
 - Local installers and service providers
 - Renewable energy companies
 - Conventional HVAC companies
 - Manufacturers
 - Suppliers
 - Supporters



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Business trajectory

- Broadening awareness of modern wood heat option
 - Differentiate
 - Local and state leaders of opinions



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Business trajectory

- Readying supply
 - Split and cured cordwood
 - Service crew
 - DIY forest owners



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Business trajectory

- **Readying supply** (and creating a sense of stable infrastructure and available quality fuel)
 - Central facility
 - Distributed staging





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Business trajectory

- Developing customer base
 - Modest targets for upcoming season
 - Focus on model projects
 - Slow growth, looking toward 2013



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Strategies

- Marketing
 - Creating a buzz about wood heat



- Utilize concern about new natural gas exploration to showcase wood option



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Strategies

- Marketing
 - Clean and organized operations



- Avoid large wood stores in visible end-use locations



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Strategies

- Marketing
 - Update marketing plan for phase 2



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Strategies

- Financing
 - Focus on low capital outlay



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Strategies

- Services
 - After-sale support packages
 - Some complementary wood at times, such as pre-season tech check
 - Pre-purchasing and leveled billing
 - Delivery frequency suited to customers



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Strategies

- Partner with developers of larger projects for supply and to advocate for biomass heat systems



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Strategies

- Learn
- Network
- Advocate



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Vision

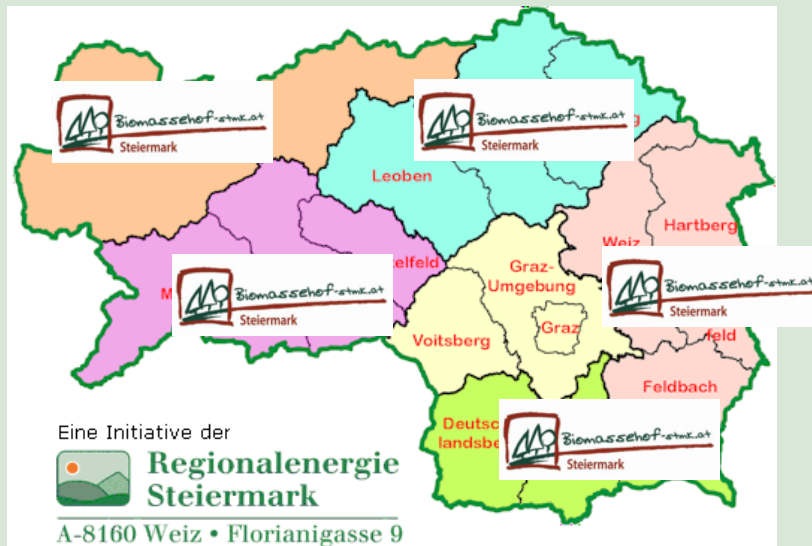
- Expand to adjacent counties, other areas of state
- Larger projects



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Vision

- Collaborative marketing





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Contact

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