CHIP ENERGY INC.  
Presents  
Energy of the Future  

Waste Stream Wood  
Municipal Brush  
Grass & Leaves  
Crop Residues  
Energy Crops  
Forest Slash  
Waste Stream Paper  

=  

Renewable Biomass Fuels  

WWW.CHIPENERGY.COM
The Biomass Market Drivers

- Unstable fuel prices: $40 to $140 per barrel in 2008
- Foreign oil imports: 75% comes from outside the US
- Environmental impact: rising CO2 levels
- Political gridlock: no cap and trade bill
- Inadequate landfill space: 988.6 million cu.Yd. in Illinois in 2008
- No biomass infrastructure: spotty biomass projects across the US
Chip Energy Is Responding

Renewable Portfolio Standards

www.dsireusa.org / March 2010

29 states + DC have an RPS
(6 states have goals)

Environmental Law & Policy Center, 2010
BIOPower: Situation Analysis

- Improved yields, lower production costs
- Today’s Energy Crops

Fuel Price ($/dry ton)

- Incentives Necessary
- Incentive NOT Required

Today’s biomass power plants  Cofiring  Transitional direct-fired systems  IG-gas turbines  Next generation efficiencies

Farmer’s feedstock price range to net ~ $45 / acre  Developer’s feedstock offer range to sell at ~ 5 cents / kWh

NREL Production of Electricity from Biomass
Market Driven Biomass Solution

Local Supply
Waste Stream Wood

100% Renewable
Energy Crops

Carbon Neutral
Forest Slash

Power Plant Fuel

Chip Energy

Biomass Conversion Facility

School Heat
Chip Energy Goodfield, Illinois

Project Site 395 W. Matin DR.
Module Stacks

Control Center
Casion Placement
Concrete Plan
Pre-Engineered Foundation
Concrete Plan

Número de identificación: [Number]

NOTES:
1. Minimum f=4000 PSI at 28 days for all structural concrete.
2. Structural steel: Use flange sections to A572 Grade 50 (f=50 ksi). All structural steel shall be ASTM A572 Grade 50 (f=50 ksi). All structural steel shall be fabricated and erected in accordance with the current edition of the AISC Code of Standard Practice.

Dimensions:
- North 564.1
- Top View 578.1
- 92.0
- 120.0
- 232.7
- 470.0
- 96.0

KEEP BEAMS TOP SURFACE LEVEL

Detail A

SCALE 1:50

DRAWN: [Name]
CHECKED: [Name]
APPROVED: [Name]
DATE: [Date]

EXPIRES: [Expiration Date]
Vertical Manufacturing
Processing
Local Municipalities Utilizing Technology

4387 Towns in 102 Counties in Illinois could Start Landscape Waste and Leaf Collection Recycling Programs

<table>
<thead>
<tr>
<th>Region</th>
<th># of Facilities</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>43,565</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>210,076</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>22,787</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>21,784</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>69</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>101,118</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1,728</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>401,127</td>
</tr>
</tbody>
</table>


- Recycling: 35.3%
- Composting: 1.5%
- Landfilling: 63.1%
Biomass Conversion Facility

Biomass Feedstock

Processing

Biomass Fuel
Chip Energy’s Marketing Strategy of Biomass Conversion Facilities

- Estimate 15 to 25 Sites Per State
  (based on feedstock availability within a 30 to 50 mile radius).
- Sites sized to the needs of the value-added products.
  (100 to 500 tons per day of processing capability)
- Intranet data exchange on site.
  (High Speed communication between sites creates network)
- Create Biomass Transportation Corridors
  (Truck, Barge, and Rail dispatch and volume impacts)
- Estimate 250 National Locations in 10 to 15 years
  (25,000 tons per day = $1,500,000 in revenue per day)
Erosion Control Socks

Recycling Woody Biomass

Value-Added Product
Chip Energy Biomass Furnace

1. Biomass gasification for heating the flash boiler.
2. Compatible with existing heating systems.
3. Qualifies for a $1500 gov energy tax credit.
5. Has 7 day unattended operation.
6. Has automated feeding and ash auger.
7. Has multi-fuel capabilities. (LPG or NG).
Gasification in a 20ft. Container

200,000 BTU Rated Gasifier & Flash Boiler

6 CU. YD Biomass Hopper
Chip Energy the Company

The Chip Energy Network of Biomass Conversion Facilities will market and sell several environmentally friendly value-added products. Chip Energy will be the Technology Provider thru contract services for the development and construction of the facilities network.

**Products**
- Mulch Products
- Erosion Control Products
- Floor Dry Materials
- Compost Feedstock
- Biomass Furnace
- Stove/Grill
- Processed Biomass Fuel
- Cellulosic Ethanol Feedstock

**Services**
- Grant application assistance
- Feasibility study assistance
- Project management
- Design & equipment supplier
- Turnkey construction
- Operator training
- Fuel delivery
- Market development
ILLINOIS IS SLOW TO REALIZE BIOMASS FUEL POTENTIAL

Power Generators using Woody Biomass Fuels in the United States as of 01/01/2008

Illinois will have 1 Woody Biomass Generating Plant Startup In 2011
Chip Energy Business Model

Compatible Revenue Streams

- Waste Stream Recovery Revenue
- Biomass Fuel Sales
- Biomass Conversion Facility Revenue
  - Provide Technology Development Services
- Furnace Sales
- Biomass Grill Sales
- Erosion Control Sales

Chip Energy’s Offered Strategic Values

- Biomass Feedstock → Value Added Processing → Fuel Revenues
- Utilization of Woody Biomass
- Facility Design
- Lower Construction Cost
- Rural Development
- Gasification Technology

Markets for Biomass Conversion Facilities and Energy

- Municipality
- School District
- Green House Owner
- Ethanol Plant
- Power Plant
- Home Owner
CHIP ENERGY NEEDS

- **Team Members**, To help secure grant funding for Research and Development collaboration on community development projects.

- **Company Officers**, To manage the product development, design and construction of the Biomass Conversion Facilities and products.

Thank You

- Paul W. Wever, President
- CHIP ENERGY INC.
- Phone 309-965-2005 Location: 401 W. Martin Dr. Goodfield, IL 61742

For MORE INFORMATION
WWW.CHIPENERGY.COM
WWW.PWCE.COM