

- Single-pass
- Collect with corn
- Need attachment to
- combine
- Not available to public



- Multi-pass
- Collect after harvest
- Requires bailing to gather
- and store

Harvest

-30%

Can decompose over time

Field

1832.6 tons 2.76e10 btu

• 2.7 x 10^8 bushels of stover available in Illinois





- Kernel Competes for land and resources
- Corn for food not for fuel!
- Square Bales



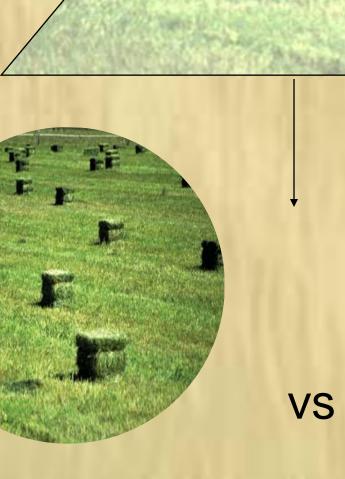
On Field

Storage

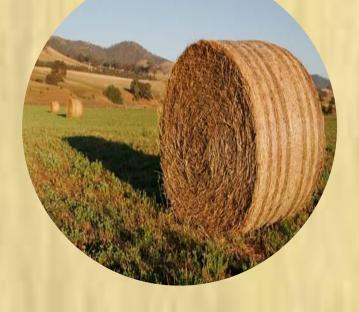
-0%

Bunch

-3.22e5 btu/ton



 Requires multiple people Easier to move via truck Better stacking efficiency
Inefficient stacking for long-term storage



- Round Bales
- Done by one person
- Harder to move



In a Facility

IPRO 349

Process Flowchart

Washe Heat Doller

Cogen

-40%

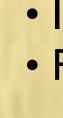
Aa Fan Economizer





 CF Nielsen **BP6000** Briquetter 55kW power consumed • Automatic operation

VS





Large scale

Transport

-1.01e5 btu/ton

• Truck • Easiest loading/unloading Can reach almost all destinations

• Water Cheapest cost • Limit to waterways



Railroad

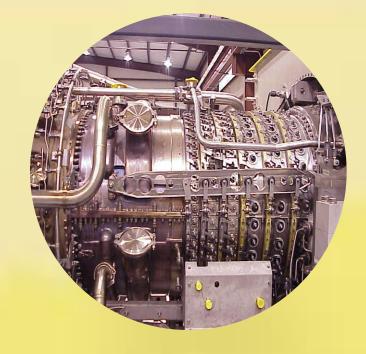
VS



- Steam turbine
- Capacity in MW: 0.5 5 Capacity in
- 10%
- Cheaper



 KDS Micronex Dryer/Grinder ~150kW power consumed Automatic operation Input 1-4 tons/hr • For wood, straw etc



 Gas turbine • Electrical efficiency 6– MW: 1 – 15 Electrical efficiency 22– 32% More costly



 Cheaper than truck • Limit to rail destinations Loading/unloading issues with square bales