



Nebraska

WOOD

ENERGY

Team

OVERVIEW

- Hotspot Assessment
- Identified Hotspot Communities
- Outreach and Education
 - Hotspot Communities
 - National Bioenergy Day

HOTSPOT ASSESSMENT

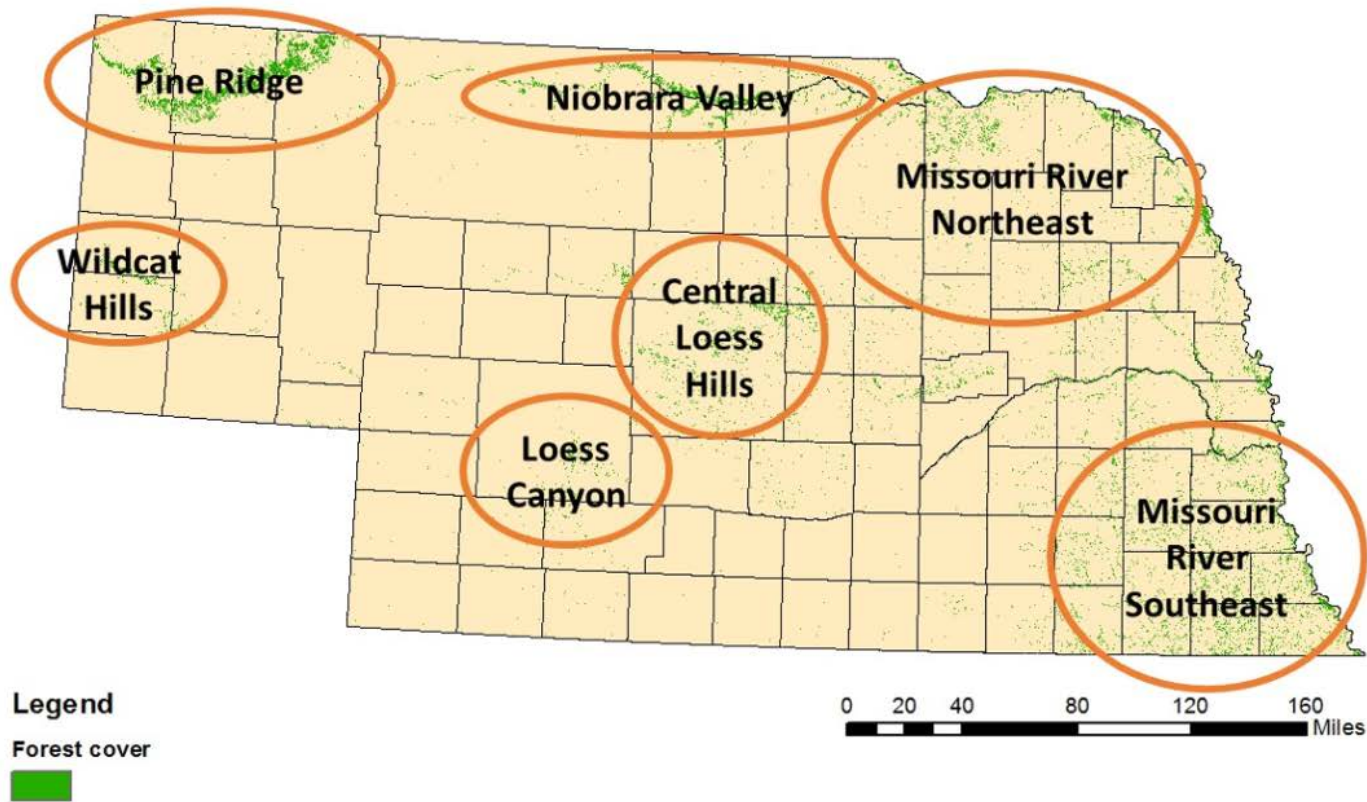
- Biomass Energy Resource Center (BERC)
- Purpose:
 - Evaluate rural Nebraska's current energy demands and potential for wood energy.
 - Identify areas with high energy demand and no natural gas access that also have access to the wood resource

WHAT MAKES A HOTSPOT?

- Fuel Supply:
 - Near forested region with active management
 - Adequate small diameter/low quality wood
 - Existing infrastructure
- Energy Demand
 - Large facilities, co-located smaller facilities
 - No access to natural gas
 - Access to incentive programs & tolerance for longer-term ROI

*Adapted from BERCC

HIGH POTENTIAL REGIONS



*Image generated by BERCC

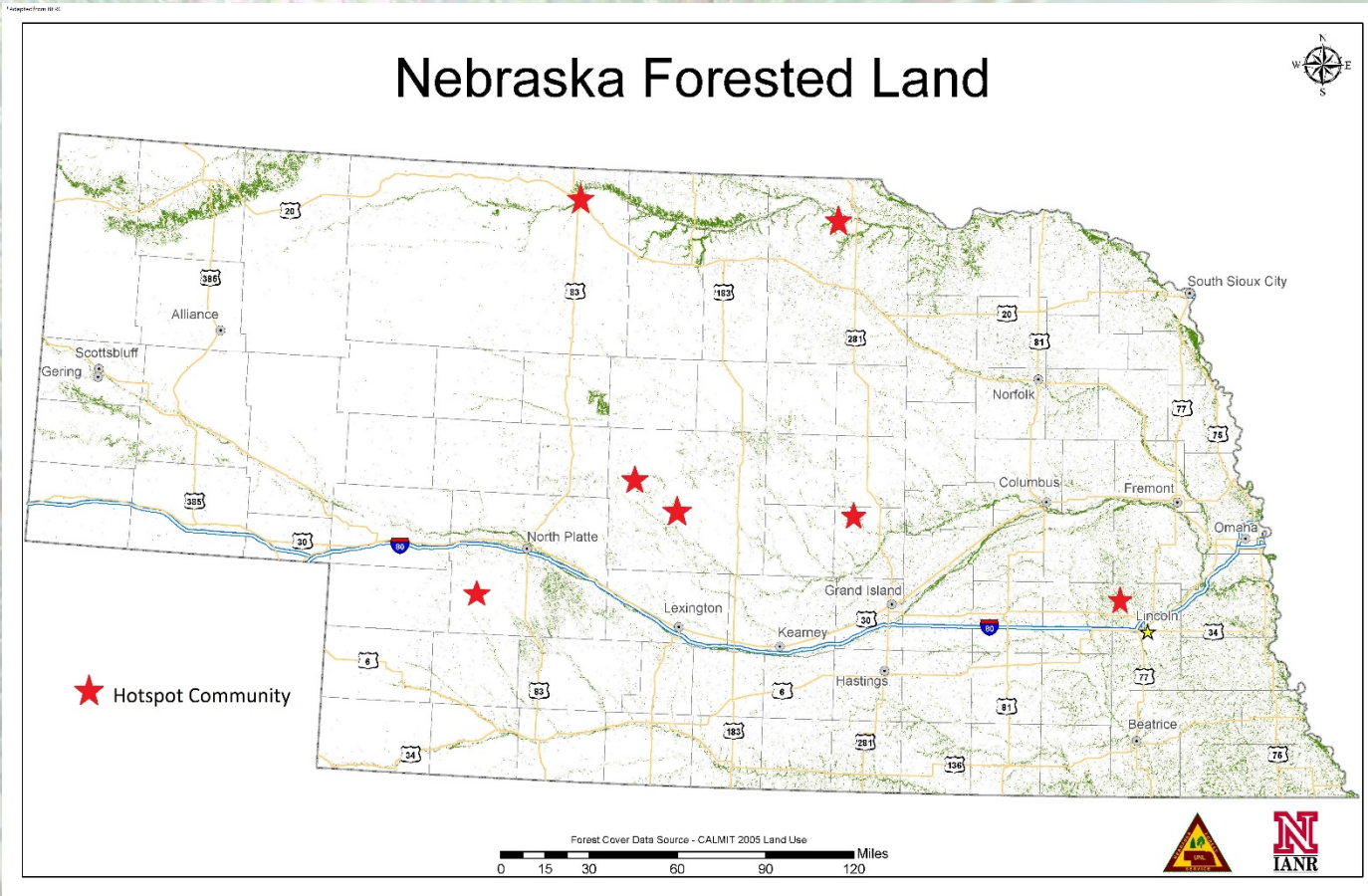
HIGH POTENTIAL REGIONS

- Number and type of forested acres
- Natural gas pipeline access
- Percentage of natural gas boilers by town
- Sawmills and wood products manufacturing facilities proximity to towns >5,000

*Adapted from BERCC

HOTSPOT FACILITIES

(WITHOUT NATURAL GAS)



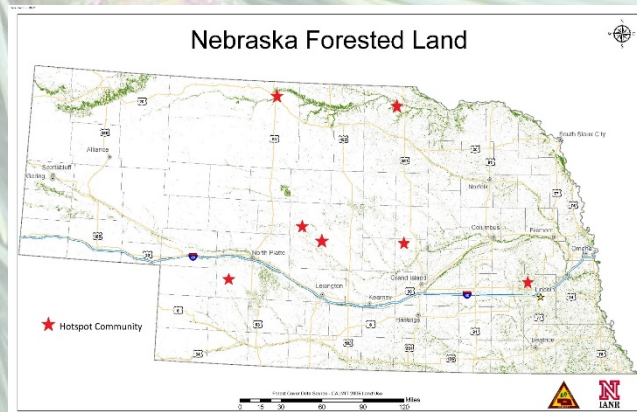
- 4 Focus Regions
- 9 Facilities
 - 2 Hospitals
 - 7 Schools
- 7 Communities

*Adapted from BERCC

EDUCATION AND OUTREACH

Hotspot Community Education and Outreach

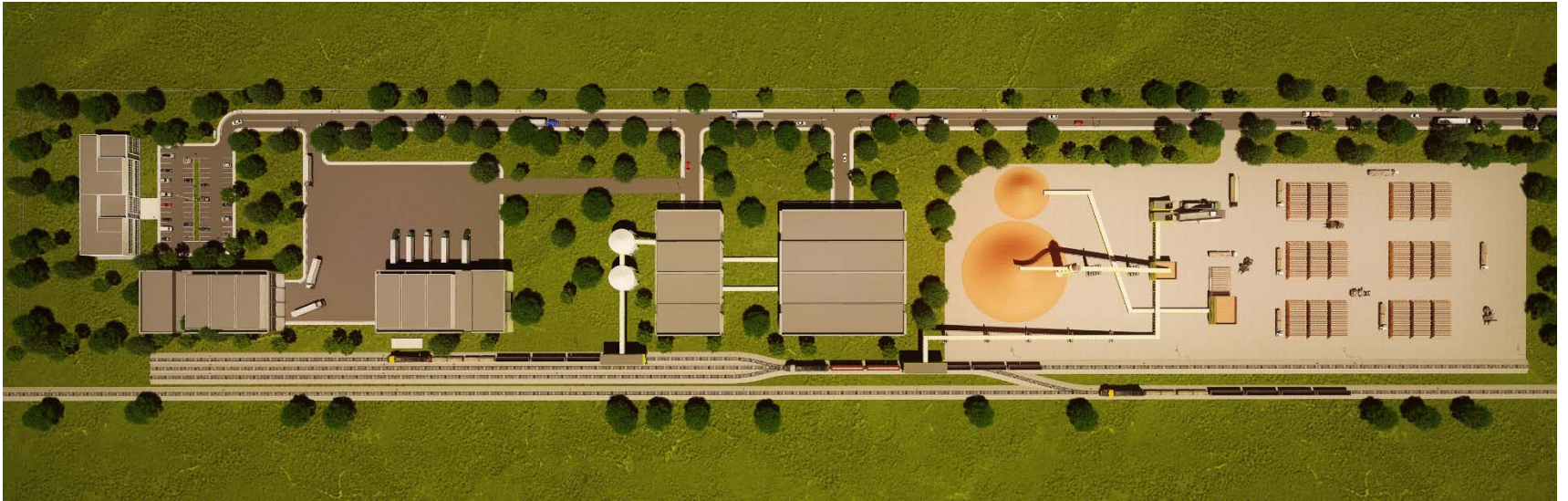
- Local workshops
 - General public buy-in
 - Decision maker education
- Bus tour for representatives and decision makers
 - USFS Region 2, Colorado Wood Energy Team
 - Increase exposure to woody biomass utilization

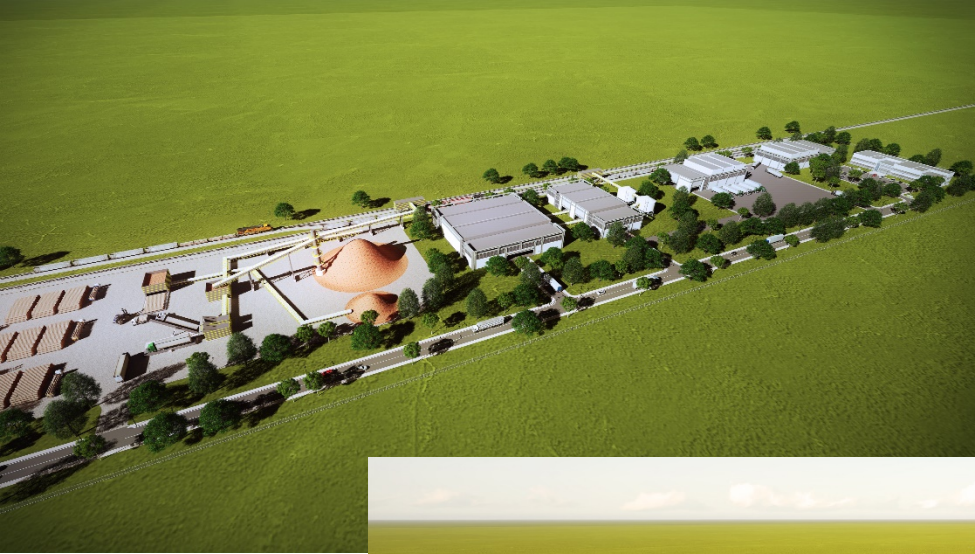


OUTREACH AND EDUCATION

National Bioenergy Day 2017

- Green Star Energy Group
- Development of a \$53 million biomass power plant
- 3 megawatts of power to be sold to the City of South Sioux, NE
 - With the addition of the biomass power facility, 57% of the city's energy is from renewable sources
- Commitment to developing small scale gasification systems for municipalities
- Fuel supply: community wood waste, eastern redcedar, forest product business residues





OUTREACH AND EDUCATION

Wood energy workshops:

- Small scale gasification demonstration
- 5 communities ID'ed by hotspot assessment



OUTREACH AND EDUCATION

National Bioenergy Day 2018

- Greenhouse CHP system
- Promote opportunities for other greenhouse nursery businesses and the tree care industry





NEBRASKA

FOREST

SERVICE

University of
Nebraska-Lincoln