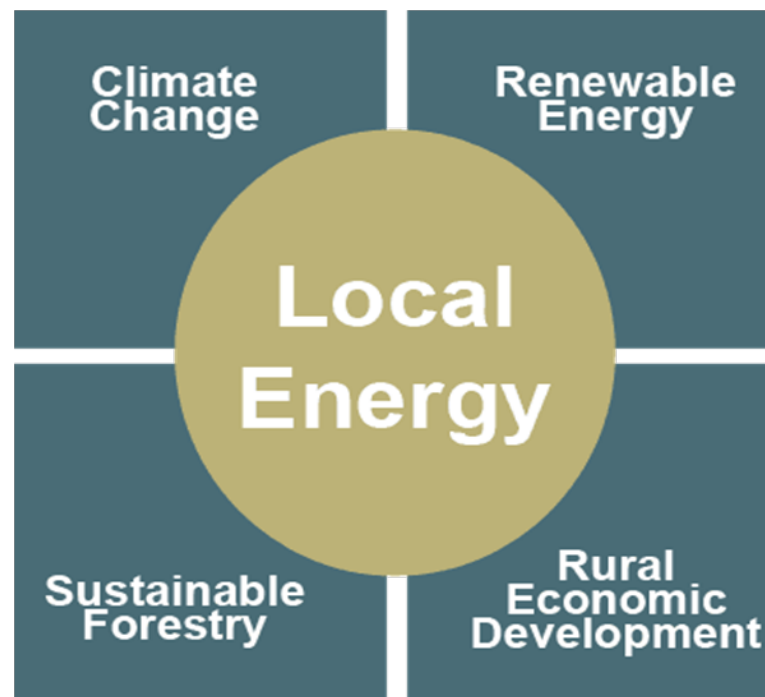


The Opportunity

Local Energy –

A new way to look at the relationship between
Communities, Forests and Agriculture.



What Are the Characteristics of Local Energy?

- Uses *community-scale* technology
- Replaces fossil fuels with *local* biomass, for heat and power and potentially fuels
- Uses *efficient, clean* technology
- Has strict requirement for *sustainable* fuels

Wood to Energy Conversion Efficiency (available technology)

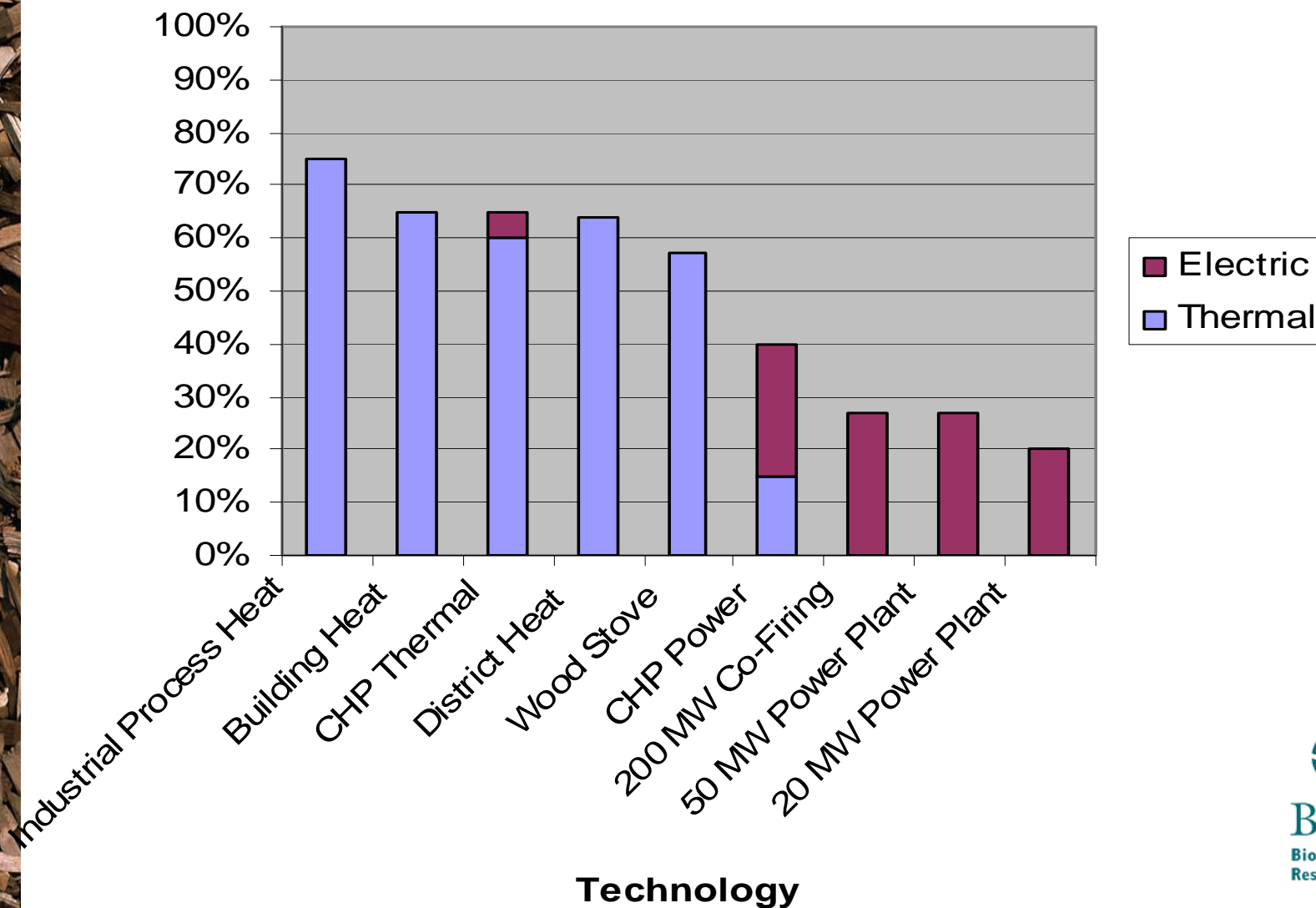
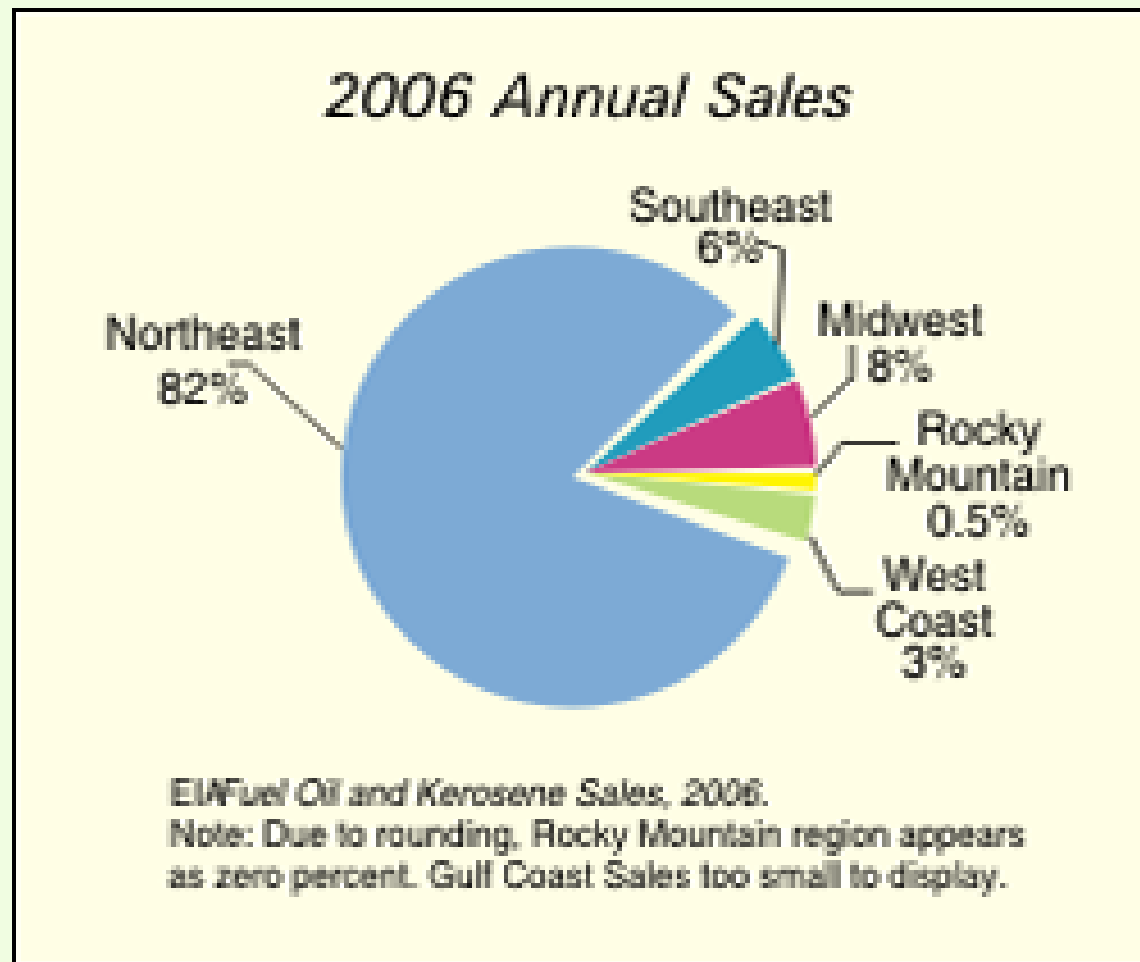


Figure 3. Residential Heating Oil Sales By Region





Scale - About how much wood might the potential uses consume?

Industrial Uses:

- Bio-oil 50,000-100,000 tons/plant?
- Cellulosic ethanol (at scale) 300,000-1,500,000 tons/plant
- Power plants 200,000-600,000 tons/ plant

Community Uses:

- One school 200-1,000 tons
- 30 Schools 15,000 tons
- All schools in Maine 250,000 tons
- College 30,000 tons
- VT State office complex 5,000 tons
- Crotched Mountain Rehab Ctr. (NH Hospital) 3,000 tons
- Public housing (50 units) 450 tons

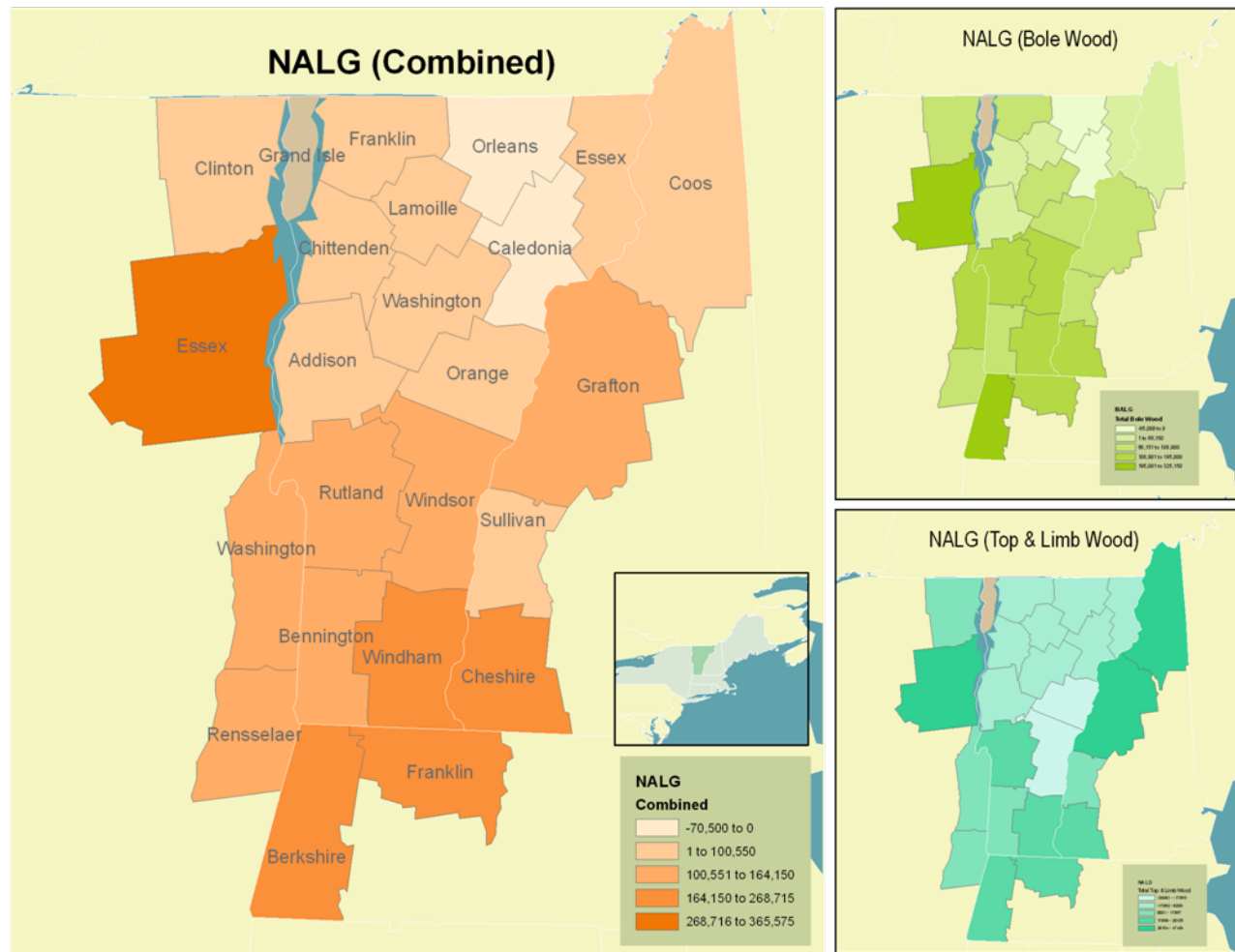
All in green tons

Sustainable Fuel Supply

Statewide Wood Fuel Supply Studies

Vermont -

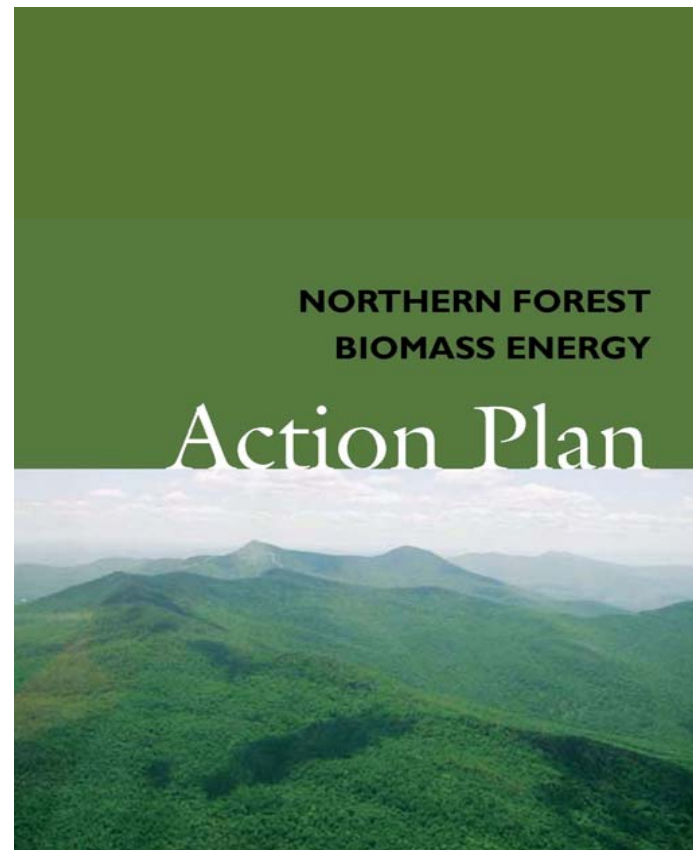
An Examination of the Availability and Reliability of Wood Fuel for Biomass Energy in Vermont



Regional Opportunities

The Northern Forest Biomass Energy Initiative

- Action Plan Completed in 2007
- Endorsed by over 40 Organizations and Institutions
- Now in Implementation



A vertical strip of wood chips or mulch runs down the left side of the slide.

Challenges

- Continued Improvement in Emissions
- Maintaining Forestry Infrastructure
- Sustainable Fuel Supply
- Maintaining Local Benefit