

Programmatic Investment Summary

PROJECT NAME			
Developing a Business Case for Sustainable Biomass Generation <i>ESC 2009-003</i>			
ALIGNMENT WITH THEORY OF CHANGE			
Forest Retention	Value Streams		Community Capacity
X			X
TYPE OF PROJECT			
Knowledge	Pilot/Demonstration	Operational	Policy
X			
PROJECT OVERVIEW AND OUTCOMES			
<p>The “<i>Developing a Business Case for Sustainable Biomass Generation: A Regional Model for Western Montana</i>” report explores the feasibility of developing sustainable, woody biomass-fueled Combined Heat and Power (CHP) plants at sawmills in western Montana to supply a portion of NorthWestern Energy’s (NWE) required renewable energy portfolio. (View Full Report) The major items addressed in the feasibility study include identifying the:</p> <ul style="list-style-type: none"> • Supply and cost of biomass fuel • Appropriate size and technology for western Montana sawmill CHP plants. • Economics of CHP plants at western Montana sawmills • Possible obstacles to sawmill CHP plants (e.g. environmental permitting, water use, interconnection and transmission, and ash disposal). • Available renewable power incentive programs • The potential markets for renewable power • Economic and environmental benefits of sawmill CHP plants. 			
PROJECT HIGHLIGHTS			
<p>The resulting consolidated statewide business plan allows all parties to finalize investment plans and construct plants, creates much-needed jobs in both energy and timber manufacturing, and increase Montana's renewable power while providing an economic use for excess wood from forest treatments that reduce wildfire risk and improve forest health.</p> <p>The advantage of siting CHP plants at sawmills rather than developing large, stand alone biomass power facilities is that sawmills offer: an existing industrial site, air and water permits, and interconnection to the power grid; an industrial process heat demand; experience procuring and moving biomass; experienced boiler operators; and substantial volumes of on-site fuel. Also, sawmill CHP plants can increase the long-term viability of Montana’s sawmills by stabilizing the value of mill residues and providing mill owners with predictable income form the sale of renewable power.</p> <p>Participants in the study include NorthWestern Energy; seven Montana sawmills who provided detailed information on their mill’s manufacturing and forestry operations; and Montana’s major forest landowners, both public and private, who submitted data on the supply of woody biomass available to CHP’s from Montana forests.</p>			
FUNDS COMMITTED			
Endowment Commitment	Leverage via Endowment	Endowment Spending to Date	Leverage Outside Endowment
\$50,000	-	\$50,000	\$125,000
CONSULTANTS/GRANTEES			
Montana Community Development Corporation			
CHRONOLOGY			
Date Approved By Board	Date Agreement Signed or Launched	Project/Initiative Life	Status
May 2009	9-1-2009	12-31-2010 Closed 4 th Quarter	Complete