

# **Biofacilities Overview**

An Interagency Effort by the Departments of Agriculture, Interior, and Energy

RETECH February 4, 2010 Faline Haven USDA Forest Service , Office of Tribal Relations

## Introduction

- The Energy Policy Act of 2005 and Executive Order 13423
- mandates all federal agencies to increase the amount of
- renewable energy used at their facilities by 2% a year for
- next 10 years.

- The DOE Federal Energy Management Program is tasked
- With assisting all federal agencies in meeting these mandates.



Reduce the amount of woody biomass residues collecting on federal properties by using these materials as feedstocks for generating heat and electricity.

Heat and electricity generated would primarily be used to meet heating and power demands at participating facilities.

### **Biofacility Site Section Criteria**

- 1. Does the site have an available biomass feedstock?
- 2. Are their multiple biomass suppliers in the area?
- 3. Is transportation infrastructure in place?
- 4. Does the site have local environmental group support?
- 5. Does the site have local community support?
- 6. Did the site participate in the CROP study?
- 7. Does the site have Line Officer support?
- 8. Will the Forest Service, Bureau of Land Management, a Tribal Nation, Department of Defense, or another federal agency also participate in a project?

## Preliminary Organization of Sites

Agency	Region	No. of biomass resources sites in Region
Forest Service	1	2
Forest Service	2	26
Forest Service	4	3
Forest Service	5	3
Forest Service	6	6
Forest Service	9	15
Bureau of Land Management	Oregon & Arizona	54
Yakama & Colville Tribes	Washington	4
Total Number of Projects	8	113

#### **Project Roadmaps**

Two Roadmaps were identified for project development.

	Roadmap 1 Projects	Roadmap 2 Projects
Description	Confined to individual federally-	Woody biomass from groups of
	owned forests. On-site and	federally-owned forests in a
	local woody biomass residues	region would be combined with
	would be used to provide heat	other local woody biomass
	or electricity to the buildings on	residues to support a larger
	the property.	biomass facility. The facility
		can be located on federal
		property but does not have to
		be. Heat and electricity
		demand for the participating
		forests would be addressed
		first with surplus electricity sold
		to other federal facilities in the
		region and the public.
Contracting vehicles	Super Energy Savings	Stewardship agreements,
	Performance Contracts	Power Purchase Agreements
Project Financing	Third party	Third party

#### **Project Development Process**

- 1. In FY10 FEMP will develop 8 Feasibility Studies on woody biomass use in generating heat and power. FEMP ARRA funds will be used. The heating and power demands and the available biomass residues of each site will be addressed in the studies.
- 2. With assistance from Forest Service, BLM, and tribe FEMP will collect site data.
- 3. The Biofacilities Planning Team (USDA, DOI, DOI) will brief region and the sites within each region on the objectives of the effort, how the data will be analyzed, and how the recommendation on whether to proceed as a Roadmap 1 or Roadmap 2 type effort will be made.

#### **Project Development Process**

- 4. The Biofacilities Planning Team will analyze the data and make preliminary recommendations for Roadmap 1 and Roadmap 2 development.
- 5. The Planning Team will present their recommendations to each region and site for discussion and consensus.
- 6. FEMP will provide training to FS, DOI, and the tribal office on use of Super Energy Savings Performance Contracts and Power Purchase Agreements.
- 7. FEMP will complete each Feasibility Study will revisions as needed/recommended by field staff.

## Each Feasibility Study will

- Provide each region with sufficient information to make an informed decision regarding whether to proceed
- Address the heating and power needs of each site and how those needs could be addressed through the development of a
- biomass plant
- Address woody biomass residue minimization through conversion to feedstocks for each site within a region
- Recommend which sites should proceed as Roadmap 1 type efforts and which should Roadmap 2
- Recommend preliminary biomass plant sitings
- Include preliminary cost/benefit analyses
- Include preliminary Greenhouse Gas benefits analyses
- Include preliminary job creation benefits

#### **Project Schedule**

November 9, 2009

November 24, 2009

December 18, 2009

December , 2009 January 30, 2010 February 2010

March – April 2010 February – May 2010 Biomass surveys sent to all F.S. and **BIM** sites Briefing to Woody Biomass Steering Committee Biomass surveys due from F. S., BLM & Tribal sites Data analysis begins Data analysis completed Regional Office visits/briefings at 6 Forest Service Regional Offices, BLM Oregon Office, and Yakama & Colville Tribal Offices. Regional and site officers to attend. Site visits/briefings Preliminary Task Order lists developed for each project; preliminary biomass plant site selections

#### **Project Schedule**

#### June 2010

July – August 2010 August 30, 2010

September 30, 2010

Visits to all Forest Service Regional Offices, BLM Oregon Office, Yakama Tribal Office to present, discuss, review, and adjust as necessary Task Order Lists. Feasibility Studies finalized Feasibility Studies submitted for review to offices Finalized Feasibility Studies submitted