

# Lakeview Biomass Cogeneration Plant



## Project Overview

Located in southern Oregon's Lake County, Iberdrola Renewables' Lakeview Biomass Cogeneration Plant will be an innovative 26.8 MW generation facility that works sustainably with the region's forest economy to produce clean, renewable electricity. Fueled from a combination of residuals from the sawmill, forest management practices and logging, the combined heat and power – or cogeneration – facility will use latest-generation technology: a proven boiler design, a steam turbine generator, an air cooled condenser – reducing water usage by more than 80 percent, and modern emissions controls to minimize environmental impacts. During and after construction, the plant will provide a major boost to the local economy, creating long-term family-wage jobs, helping to revive the local community.

Once operating, Lakeview will produce enough power for 18,000 typical homes and steam for the Collins Fremont Sawmill.

## Project Details

**Project Capacity:** 26.8 MW gross, enough to power more than 18,000 homes. The plant will consume about 160,000 BDT/year of fuel.

**Project Location:** Lakeview in Lake County, Ore., approximately 20 miles from the Calif. border.

## Generating Electricity from Biomass at Lakeview

In general, biomass is any organic fuel not derived from fossil fuels. This includes everything from forest residuals to rice straw to chicken droppings and methane gas in landfills. For the Lakeview Biomass Cogeneration Plant, it means otherwise unusable residuals from nearby timber operations. The proposed plant will create electricity by burning low-grade wood residuals in a boiler that generates steam at 950 degrees Fahrenheit. This will turn a turbine in a generator that will produce power that will be sold to regional utilities to help meet their renewable energy goals. The term cogeneration refers to the simultaneous production of power and steam from one fuel source.

## Jobs in the Forests, Jobs in Town

The Lakeview Biomass Cogeneration Plant will create good jobs in a part of rural Oregon with an unemployment rate above the state average. The plant's construction will have a major impact on the local and regional economy, from contracting, engineering



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before thinning

after thinning

sixteen years later

and trucking firms throughout the Pacific Northwest to local restaurants and hotels that will see more business. Once operating, the plant will create more than 18 family-wage jobs on site, while related forest and land management practices will result in another 50+ jobs in the forest. Lake County is set to join communities across the country in creating clean energy jobs for the future.

### Project Developer

Iberdrola Renewables Inc., developer of the Lakeview Biomass Cogeneration Plant, is headquartered in Portland, Ore. with over 850 employees at the end of 2010. It is part of the Iberdrola global group, the world's leading provider of renewable energy, with over 12,700 MW in operation. Our corporate history is rooted in developing and operating renewable projects like the Lakeview Biomass Cogeneration Plant—under an old name, PPM Energy, we built the nearby Klamath Cogeneration Plant and continue its operation today. We have a track record of building, developing, marketing and operating power facilities, and we have spent more than \$3 billion in the last five years building energy projects across the U.S.

Learn more at [www.iberdrolarenewables.us](http://www.iberdrolarenewables.us).

“The Lakeview Biomass Cogeneration Plant is exactly the kind of collaborative and sustainable economic development that our rural communities need. The new plant will create long-term family-wage jobs for Lakeview, while generating renewable energy from unwanted wood residuals. Iberdrola Renewables' Lakeview Biomass Cogeneration Plant is a great example of how we can simultaneously improve the health of both our forests and our local economies through smart resource management.”

—Jane O'Keeffe, Chairwoman of the Board of Directors, Sustainable Northwest



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## Community Praise for Responsible Development

**The project has been praised as a model for responsible development by these elected officials, energy and community leaders:**

“This biomass project is a major milestone for the decade-long collaboration to restore the ecological health of the national forest lands near Lakeview. We look forward to working with our partners in the Lakeview Stewardship Group to use this new tool to help improve environmental conditions in the forest and provide economic benefits to the local community.” Formed in 1998 to restore the 500,000-acre Lakeview Federal Stewardship Unit, the Lakeview Stewardship Group is an award-winning collaborative effort that includes conservationists, timber workers, local government officials, and other civic leaders.

**—Mike Anderson, Senior Resource Analyst for The Wilderness Society**

“We’re very pleased with Iberdrola Renewables’ selection of Lake County for their Lakeview biomass cogeneration plant. The Iberdrola Renewables folks have been tremendous to work with, very professional and courteous individuals. The facility will have only beneficial spin-offs for the county. Staffing of the facility will integrate new families into the community and hopefully new kids for our schools. Partnering with The Collins Companies to provide bio-fuel and receive steam heat in return furthers the stability of our local Fremont Sawmill and jobs there. Additional 50 new jobs to harvest and transport excess woody material from the forest will be a major plus for Lake County’s economy. And, removal of excessive woody materials only contributes to our forest’s ecological health and lessens the potential for catastrophic forest fires.”

**—Ken Kestner, Lake County Commissioner**



“Although my 12 years working with the Lakeview Stewardship Group have focused on how ecological restoration of area forest lands can benefit wildlife and watersheds, I’ve learned it’s also essential to consider social and economic needs. Utilization of forest biomass isn’t appropriate everywhere, but for the dry forests on the Lakeview Stewardship Unit, Iberdrola Renewables’ biomass plant will fill in the final piece of the puzzle to help restoration projects proceed in ways that are ecologically, economically and socially sound.”

**—Rick Brown, who has recently retired after 10 years with Defenders of Wildlife as a Senior Resource Specialist**

“The announcement that Iberdrola Renewables is starting construction on a new biomass energy plant in Lakeview is not only great news for Lake County, it is great news for the timber industry in Oregon. It demonstrates the potential for new opportunities in our forests, and a way to make the forest health projects we need to get done in the woods more economically viable. It also reflects the hard work that this community has done to create new jobs and get back on its feet.”

**—Sen. Ron Wyden**



## LAKEVIEW Biomass Cogeneration Plant

“Iberdrola Renewables, the local community and Collins never lost sight of the vision, and they strongly persevered through numerous setbacks and delays. Now, their faith and effort will pay off in jobs, efficiency, and better health of our forests in the area. As a renewable resource, biomass is a proven technology and will be an important part of Oregon’s economic future.”

—Congressman Greg Walden

“For several years the Fremont-Winema National Forest has anticipated the construction of a biomass power plant in Lakeview. Beyond the obvious positive effects that this project brings to the Town of Lakeview and Lake County economy, Lakeview Biomass represents an important, and to this point missing, tool for public and private forest land managers. Having a local outlet for logging slash and other small diameter, low value biomass will assist our managers in their efforts to plan and execute needed forest restoration projects. The resulting forests will be healthier and less prone to loss from fires or insect attack. Iberdrola Renewables’ Lakeview Biomass will also provide forest land managers new options to reduce the amount of fuels that would traditionally be dealt with by prescribed burning, contributing to improved air quality. As the Fremont-Winema National Forest, Forest Supervisor I want to personally, and on behalf of our workforce, express support for the Iberdrola Renewables Lakeview Biomass power plant.”

—Fred Way, Fremont-Winema National Forest, Forest Supervisor

“The Town of Lakeview has been working with others locally for several years to secure the biomass power plant in the Lakeview area. The impacts appear to be all positive. The 70 or so permanent, family-wage jobs between the plant and the fuel supply operations are critically important to the local economy. Also the positive impact of between 150 and 200 construction workers over the next 18 months will support our local

economy as we recover from the recession. Additionally, we see great opportunity to improve forest health on both public and private lands and a new tool to use to help manage the air quality in the Lakeview area.”

—Ray Simms, Town Manager, Town of Lakeview

“We are pleased to see construction start on this new facility which will help achieve needed restoration of our forests, reduce the threat of uncharacteristic wildfire and also provide economic benefits to the Lakeview community. We greatly appreciate the efforts of the community and its many partners to make this project a reality.”

—Russell Hoeflich, Oregon Director for The Nature Conservancy

“The Lakeview Cogeneration Plant rounds out the tools to efficiently and effectively improve the forest health in our surrounding forests. It started with the challenges of forest restoration. Fire and disease have long inhibited the ability to sustain our forests. To economically take on the forest restoration, markets are critical for small logs and biomass. In 2007, Collins invested in a small log processing side to our existing mill envisioning a cogeneration plant to holistically treat stands to improve forest health, increase growth on existing timber stocks and reduce the chance of catastrophic fires. The Forest Service helped deliver more certainty with 10-year Stewardship Contracts. Iberdrola Renewables completes the solution with this announcement. The community will add jobs, the forests will heal, and our sawmill employees have a future! A great day!”

—Eric Schooler, President & CEO, The Collins Companies



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