

Hon. Richard Neufeld, Minister of Energy, Mines and Petroleum Resources

June 1, 2006

BioEnergy Conference – Prince George B.C.

I am happy to be here in Prince George, and proud that the Ministry of Energy, Mines and Petroleum Resources was able to co-sponsor this second annual BioEnergy conference along with the Ministry of Environment and BC Hydro.

Premier Campbell sends his best wishes and for our international visitors, welcome to our beautiful province of British Columbia.

We are proud of our mountains and rivers and forests, and proud of the natural resources which continue to fuel our economy. In the next few minutes, I'll give you a snapshot of our successful oil and gas and mining industries, a progress report on alternative energy in the province, which includes bioenergy, and an update on the development of our new Energy Plan.

British Columbia is Canada's second largest natural gas producer, producing about 1.1 trillion cubic feet of natural gas per year. The oil and gas industry invested \$3.9 billion in 2004 and oil and gas revenues are one of the largest contributors to provincial revenues. This helps pay for health care and education in communities across the province.

We are the only jurisdiction in Canada that has more than replaced its natural gas production with new reserve additions for the past six years. We expect to continue doing this. The good news applies to mining as well. Thanks to improving markets, industry investment and forward-looking government policy, mining is experiencing a transformation in this province like no other. We have over 20 proposed mine development projects. As the Minister responsible for these resources, it makes me pretty proud to work for a government that understands the globally competitive business environment and also encourages responsible, sustainable resource development.

We all know that sometimes opportunities come from crisis, and that is certainly the case with the mountain pine beetle epidemic that is destroying B.C.'s pine forests. It has certainly resulted in an increased production of conventional forest products, but the mountain pine beetle problem has also created opportunities in non-conventional biomass uses. One category of non-conventional use for mountain pine beetle and other wood residues is energy production. This includes wood pellets, alternative fuels like ethanol, bio-oil, syngas, charcoal and hydrogen, cogeneration and electricity.

Today, we are happy to announce the fact that in collaboration with the Ministry of Forests and Range, we are developing a bioenergy strategy to promote new sources of sustainable and renewable energy in order to take advantage of the vast amounts of pine-

beetle attacked timber and other biomass resources. Developing the bioenergy strategy fits in with the Ministry of Forest and Range's Mountain Pine Beetle Action Plan goal of developing new uses for beetle wood and extending the life of beetle-attacked timber.

For us at the Ministry of Energy, Mines and Petroleum Resources, we are in the process of updating our Energy Plan and are looking at ways to advance the use of mountain pine beetle for energy production. In the future, bioenergy will help meet our electricity needs, and supplement conventional natural gas and petroleum supplies. At the same time, it will maximize job and economic opportunities and protect our health and environment.

The production of wood pellets is already a mature industry in British Columbia. The wood pellet industry produced over 500,000 tons of pellets and exported about 90 per cent of this product overseas in 2005, primarily to the European thermal power industry. This is expected to increase as a result of four forest licenses issued in 2005 in the Prince George and Quesnel areas to a company called Tall Oil Canada, formerly known as CH Anderson and Partners. They plan on building five pellet plants using mountain pine beetle timber to supply the rapidly expanding export market. And they also have an interest in prospects for producing thermal power with biomass, and possibly co-combustion with coal.

The forest industry also uses some wood waste at its facilities to self-generate electricity and heat, with the option of selling excess power into the grid. About 4000 Gigawatt hours (GWh) per year of British Columbia's total electricity generation comes from wood residue combustion. Approximately 1300 GWh of this amount is under contract with BC Hydro from five plants located across the province. One of those plants, owned by Canfor is located right here in Prince George. It produces 390 GWh of electricity with reduced greenhouse gas emissions of five to 10 per cent as a result of cogeneration. Volatile natural gas prices further encourage forestry facilities to install cogeneration technology to lower their energy costs. This is the case with a new gasification system that has come on line recently at a plywood mill near Kamloops, a city located in the southern interior of the province. Tolko Industries owns the mill which is burning green bark as fuel in a new gasifier system developed by a Vancouver-based company called Nexterra Energy Corporation. Their gasifier systems convert solid fuels into clean burning syngas that is used as a substitute for natural gas for generating heat and power. The mill estimates annual savings are \$1.5 to \$2 million depending on gas prices. And greenhouse gas emission reductions will be about 13,000 tonnes of CO₂-equivalent per year.

Another source for electricity production is garbage – although I suppose I could use the more polite term “municipal solid waste”. The Greater Vancouver Regional District has a cogeneration facility in Burnaby that converts garbage into steam during the incineration process. This site recycles 20 per cent of the region's waste into BC Clean Electricity which is sold back to BC Hydro.

The plant provides enough electricity to supply about 12,500 homes each year – with little or no impact to the environment.

We have other exciting projects happening in British Columbia when it comes to producing energy from alternative sources. Just off the coast of Victoria, on the southern tip of Vancouver Island, there is an innovative tidal demonstration project at Race Rocks Marine Park where the power of daily tides will help create electricity.

Then, there are Hydrogen Fuel Cells. The ministry has staff that work on a constant basis with industry on hydrogen and fuel cells. British Columbia is a world leader in the development of hydrogen fuel cells, and its leadership is well recognized.

The Hydrogen Highway project should be up and running by the time the 2010 Olympic and Paralympic Games start.

We also participate in a program where there are five Ford Focus fuel cell vehicles being tested in the Vancouver and Victoria areas. This is a program in cooperation with Ford Canada, the government of British Columbia and Fuel Cells Canada. The cars are powered by fuel cells developed by Vancouver-based Ballard Power Systems. Testing of the cars will continue for another four years.

As you can see, sustainability and diversity are key themes in our government, especially when it comes to producing electricity for the needs of a growing province, or developing the abundant natural resources we have in this province – hydro, oil and gas, minerals, biomass, wind, ocean and solar.

Over 90 per cent of our electricity comes from clean sources – and most of that is hydroelectric generation. We are lucky to have the third lowest electricity rates in North America and to have a remarkable resource in our hydro dams on the Peace and Columbia Rivers which give us the capacity for multi-year storage.

We are at a crossroads when it comes to looking at where we are today in energy production and where we want to be in 20 to 50 years. British Columbia has grown in population and energy consumption. We have also grown our industries and as a result we are now net importers of electricity. We have to look at how do we guarantee secure and reliable sources of electricity while keeping in mind that we want to conserve and protect what we have in terms of our quality of life and the natural environment.

The 2002 Energy Plan identified a goal to acquire 50 per cent of new electricity supply from BC Clean electricity over the next 10 years. The time has come for us to begin reviewing and updating the Energy Plan. There is a lot of work to be done. It will take all of us, private citizens, industry and all levels of government, to define our priorities and find solutions to our present and future energy needs.

We know British Columbia is resource rich, competitive and connected. Through investment opportunities and training programs, the British Columbia government has created an open-for-business climate. And I can't say this enough. We are a vast, open province that still has a lot of room to grow and diversify, waiting for pioneers like you. I

hope you enjoy your stay in our beautiful province, and I wish you much success in your future ventures. Thank you.

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