

Building A Biodiesel Industry

Presented by
BBI Biofuels Canada

Biodiesel...Powered by Canola

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Presentation Highlights

- Overview of BBI International
- Renewable Fuels Standard
- Potential Market Demand
- Production Projections
- Feedstock Requirements
- Economic Impact
- Summary

BBI International

- Project Development Division
 - Market Analyses
 - Feasibility Studies
 - Complete Project Development

- Conference & Event Planning Division
 - International Fuel Ethanol Workshop & Expo
 - World Biofuels Symposiums – China, Australia, India
 - National Biodiesel Conference

- Publication Division
 - *Ethanol Producer Magazine*
 - *Biodiesel Magazine*

Renewable Fuels Standard

- Federal proposal is to have an average of 5% renewable fuels in 100% of the transportation fuels by 2010
- Cannot be less than 2% by volume
- Potential to increase to 10% by 2015
- Additional incentives must be available in order to fully develop production and to help ensure plant viability

Potential Market Demand

- A 60 billion litre total diesel market including off-road vehicles, equipment and heating
- 26 billion litre transportation diesel market
- A 5% RFS creates a 1.3 billion litre biodiesel market
- Currently there is no separate requirement for biodiesel contained in the proposed RFS
- Without a separate standard for biodiesel, it would have to compete with ethanol for the 5% market share
- The Canola Growers of Canada support a separate standard for biodiesel

Production Projections

- Potentially 22 plants ranging in size from 19 mmly to 114 mmly, spread across the prairie provinces would represent 100% of Canada's biodiesel needs, or 1.3 billion litres
- More likely scenario would be 70% of market share...850-900 mmly. This could be accomplished by building 10-12 larger plants with greater economies of scale
- Another scenario would be to construct even larger plants (4-6) with even better economies of scale, this would require having to bring feedstock much longer distances
- Could be built by primary producer groups or larger companies with know-how and distribution experience. Present thinking is to lean towards primary producers
- Competitors include rendering companies, corn oil, soy oil and possibly imported palm oil...as well as biodiesel imports from the U.S. and other countries

Feedstock Requirements

- 6-year average canola production in Canada is 7.964 million tonnes
- During the same period average annual usage was 6.695 resulting in a 1.2 million tonne carry over
- It would require about 45% of the average annual production (3.3 million tonnes) of canola to produce approximately 900 ML of biodiesel or 70% of the RFS requirement
- This would create an impact on current markets, dictating that more canola would have to be raised to meet 70% of the RFS requirement, or additional feedstock sources would have to be found outside of canola

Biodiesel Means Big Business For Western Canada

Annual Projections

- \$91 million in net profit industry wide
- 27% projected return on investment
- \$24 million in net profit for Alberta alone
- Over 4 million acres of production to support 70% of Canada's biodiesel industry
- A whopping \$450 million in new business to the seed, fertilizer and chemical industries alone

Economic Impact

- Satisfying 70% of a RFS would create over \$504 million in new investment
- Nearly 200 direct jobs created
- Over 900 indirect jobs
- \$105 million in new revenue to various support industries...fabrication, electrical, plumbing, etc.
- \$20 million of new transportation revenue
- \$730 million in new agricultural revenue
- \$138 million in additional farm income

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Things You Can Count On

- A Renewable Fuels Standard is going to happen
- It is not yet clear as to the level of participation biodiesel will have, but it will have a place and the Canola Council and others are working hard to ensure it happens
- Canola will be the major feedstock for biodiesel production in Canada
- Imports of biodiesel from U.S. and likely palm oil from Asia, steady competition from rendering industry
- The world will never again rely on a single source of energy
- Renewables have garnered a prominent place in the world energy pool

Closing Thought

You are in the right place, at
the right time in history.
There has never been a
better time to build a
biodiesel industry!

Thank You!