







Biodiesel: Powered by Canola The Westin Calgary July 17 – 18, 2006

PLUS
BIODIESEL
DIESEL

Naturally inspired

Biodiesel around the world



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#### **Presentation Structure**



Section I

Section II

Section III

Section IV

- Rabobank
- Why Biodiesel?
- Market Framework
- Looking Forward and Implications for Canada



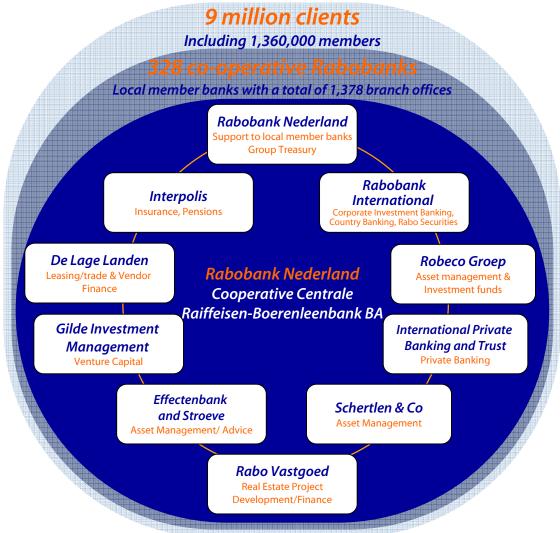


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Section I Rabobank







Food & Agribusiness Research

..with a strong balance sheet, international network and dedicated know how.....





### .. providing financial and advisory services throughout the agribusiness space















































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Section II Why biodiesel?



## Main drivers

- Environmental concerns
- Use of a renewable resource
- Petrol prices
- Interest across business segments

# The need for biofuels has today a structural nature in both supply...



- Environmental concerns
  - Kyoto protocol compliance
  - U.S. requirement for ultra lowsulfur diesel in 2006
  - Ban on MTBE use in the U.S.
- Support of local production
  - Farmers and governments in developed economies find a form for continued support
- National security
  - Lower dependence on oil originated among not so stable or predictable suppliers





- Environmental concerns
  - Consumers awareness, particularly in developed countries
- Income availability
  - Relatively more wealthier consumers willing to support its development
- Use of domestic and renewable resource
  - Consumers are favorable to the idea of using a locally produced good



Specific importance across developed economies

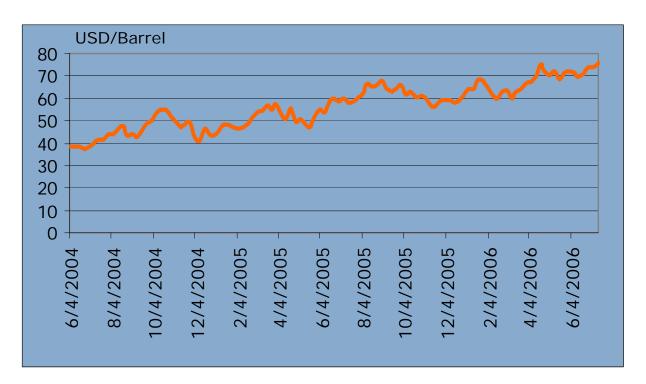


Important across both, developed & developing economies

# .. with petrol prices providing an additional support



Price evolution for mineral oil



- Increasing price trend
- Higher volatility



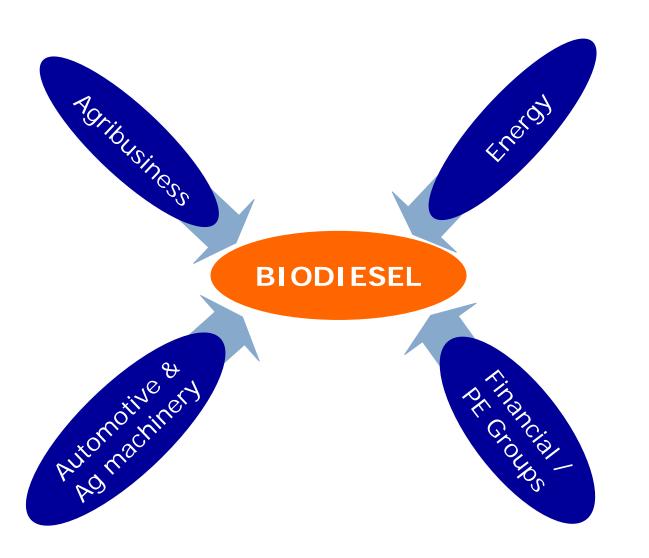
Need for alternative sources

Nymex crude for oil (Contract 1)

Source: Energy Information Administration

## ...while it is sustained today by the involvement of investors across sectors ...







- Increasing attention
- Improved economics
- Higher capitalization

#### ..and geographies



Biodiesel investment announcements. Selected players and regions, 2006

New Holland Daimler Chrysler Volkswagen Rheinische Bioester Bunge Bioverda SARIA Bio-Industries West Coast Biodiesel Ltd Sofiproteol **ADM** CHS Golden Hope Repsol **AGP** Western Iowa Energy Axiom Fuels Bunge Big's Daddy Biodiesel Cargill L. Dreyfus Peter Cremer 4DM - Wilmar Hldgs Petrobras AGD Fox Oil - Neckermann Vicentin Repsol

Source: Rabobank analysis based on publicly available data

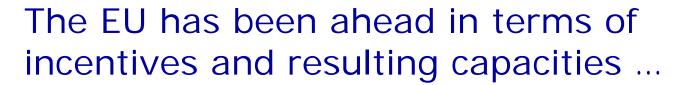
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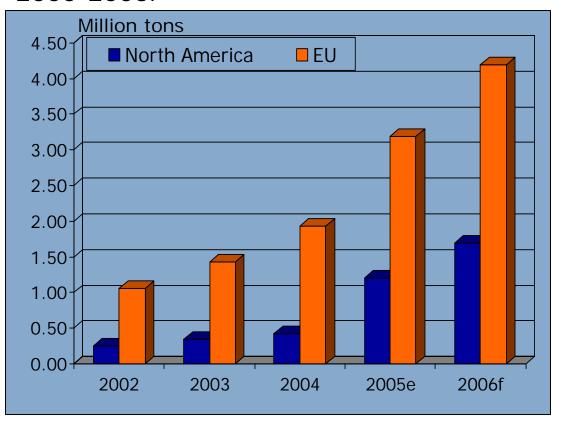
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Section III
Overall Market Conditions





Biodiesel production. Selected regions 2000-2006f



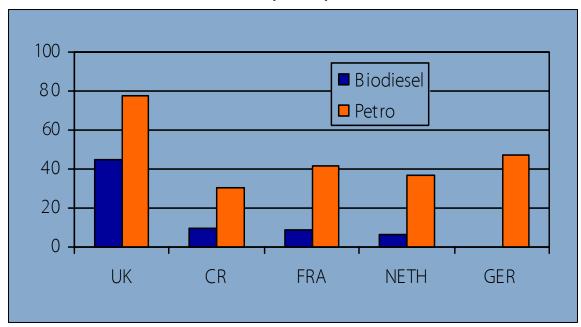
- Earlier implementation of incentives
- Higher relative use of diesel
- But capacity in U.S. and Canada currently growing at higher pace
  - Larger scale(6:1 ratio)

Source: NBB, EBB and market data, 2006

## ..but even within its boundaries, supply and demand conditions vary..



Excise duty for diesel fuels across selected EU countries, 2004 (€/hl)



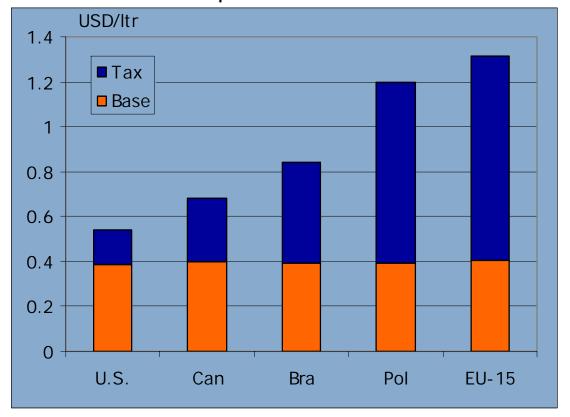
Source: Rabobank analysis.

- Production quotas
  - -France, Italy
- Minimum blends
  - Poland, Germany,Austria, U.K, France
- Excise duty exemptions or reductions
- · Mandatory blending
  - Austria
  - Discussed elsewhere
- Product specification
  - Some allow PPO or B100 while others only blends

## ..while the tax structure on (petro) diesel differs across markets



Tax incidence on petrodiesel, 2004



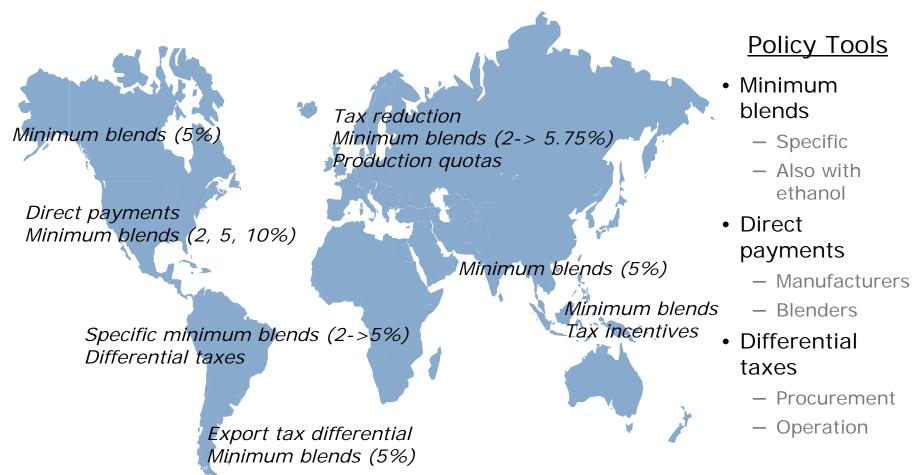
- Up to 70% of retail price in EU
- Higher leverage in EU countries for intervention through differential tax regimes

Source: OECD

# Worldwide, current conditions entail a myriad of government measures..



Policy tools supporting biodiesel production or use across regions



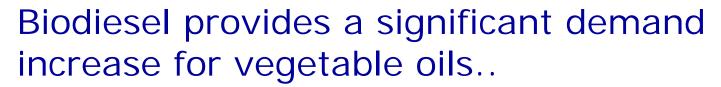
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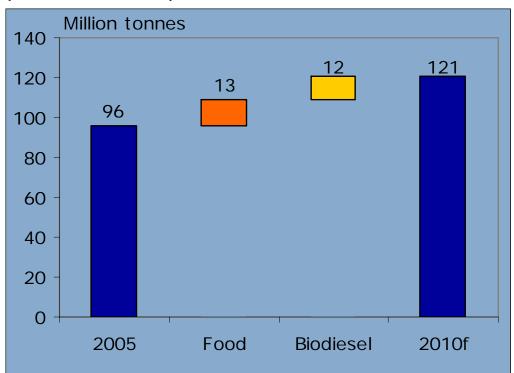
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Section IV Looking Forward





World use of selected oils (2005 & 2010)



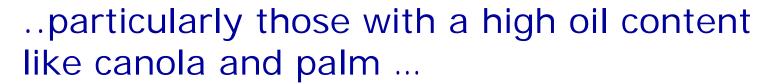
Includes, coconut, cotton, olive, palm, peanut, rapeseed, soybean and sunflower.

Source: Rabobank analysis based on FAPRI, 2006

<u>Period</u>	CAGR	
1990/95	4.16%	
1995/00	5.15%	
2000/05	3.99%	
2005/10	5.50%	

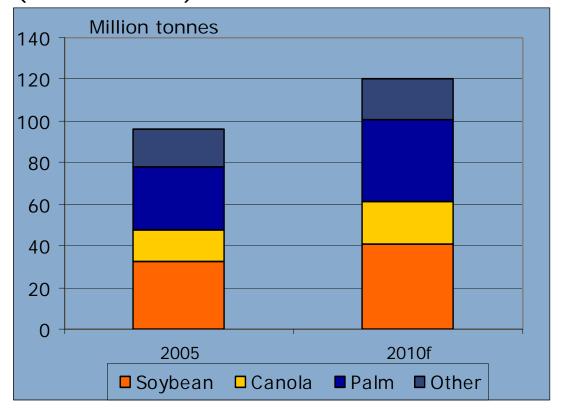


Significant departure from historical rates, reflecting the existence of a new application





Production scenarios for selected vegetable oils (2005 & 2010)



Source: Rabobank analysis based on FAPRI, 2006

- Canada to capture most of canola's additional production and crushing
- SE Asia for palm

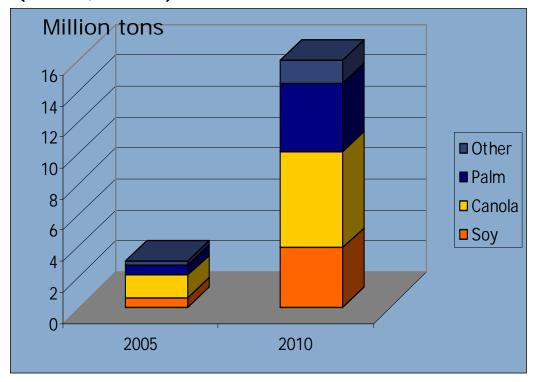


- >300% expansion for canola. 50% from Canada
- >500% expansion for palm





Feedstock used in biodiesel production (2005, 2010)



Source: Rabobank analysis based on FAPRI, 2006 and own estimates

- Development of other (geographic) markets
- Technology

   (additives) to
   favor soy and
   palm as well





#### Implicit expansion by type and region

	Туре	Region	Millon tonnes per year
Crushing	Canola	EU	3.0
	Canola	N. America	1.0
	Soybean	Americas	2.5
	Palm	SE Asia	8.2
	Palm	Row	1.4
Manufacturing	Biodiesel	EU	5-10
	Biodiesel	Americas	3.0
	Biodiesel	SE Asia	1.8

Source: Rabobank analysis

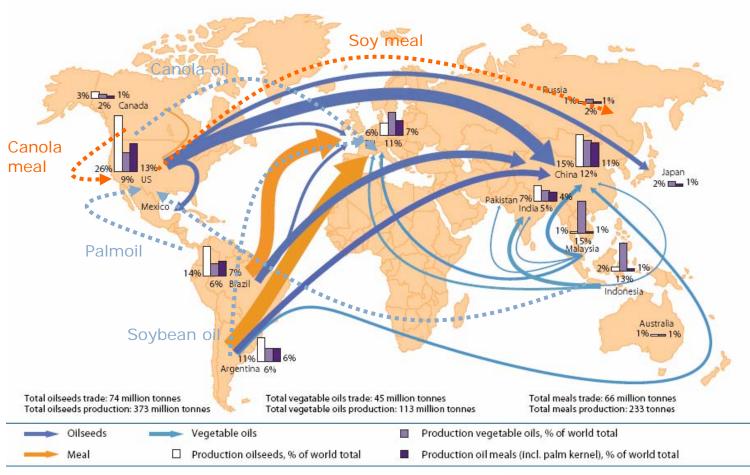
#### Key Success Factors



- Logistics optimization
  - Procurement
  - Distribution
- Dealing with by products
  - Glycerin
- Scale
- Off take contracts

### .. giving room for the development of new trade flows, particularly for oils..





Source: Rabobank analysis based on Oil World and FAPRI, 2006

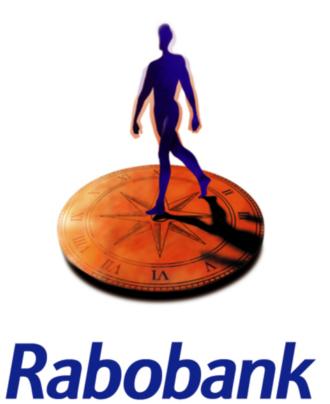


### ..in summary

- Biofuels in general and biodiesel in particular are demand shifters
- Aggregate demand increase for vegetable oils highest in recent history
  - Need for additional crushing capacity
- Agribusiness becomes attractive to existing and new players
- Existing gap between energy and agribusiness markets to get narrowed down

- Income gains globally expected to remain strong
  - Vegetable oil food consumption to mitigate any eventual non food use decline
- Higher relative prices for oils
  - Production of oilseeds and processing expansion
- Increasing competition from DDGS for vegetable meals
  - Lower relative prices for vegetable meals
  - Redefinition of business model for certain oilseeds





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