

SJR 385

Promoting hybrid and fuel efficient vehicles

December 13, 2007

BLUE RIDGE CLEAN FUELS

CHAD FRECKMANN

DIRECTOR



Blue Ridge Clean Fuels

Major areas of work

1. Biodiesel implementation consultant to fleets: (UVA, City of Charlottesville, Albemarle Co.)
2. Marine Education Consultant to the National Biodiesel Board: promoting biodiesel use on the Chesapeake Bay
3. Sales consulting to commercial biodiesel plants in VA.
4. Fuel distribution consulting
5. Contracted by State Division of Energy to Coordinate Quarterly Statewide Bio-fuels forums.
6. Coordination of programs with Virginia Clean Cities and JMU Alternative Fuels Program



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Promote hybrid and fuel efficient vehicles

- State Agencies lead the way-EO 48 of 2007 and EO 89 of 2005
 - Long term fuel savings calculated into cost of ownership
 - Support for VA produced alternative fuels
- DMV provide fuel efficiency reminders with all communications
- VA Dept. of Education adopt Drivers Education Curriculum that incorporates alternative transportation technologies:
 - driving for fuel efficiency
 - use of alternative fuels.
 - use of alternative technologies
- State provides incentives to 302 Virginia High Schools to purchase fuel efficient, hybrid and alternative fuel vehicles for behind the wheel programs.



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“Use and Development of Alternative Energy and Fuel Sources are important for the Commonwealth’s economic development and environment”

Biofuels can provide some substitution for petroleum fuels

- VA consumption of on-road diesel 1 Billion gallons (DoE 2005)
 - Use Biodiesel in public transportation to mitigate emissions and promote cleaner air.
 - Support research into new oil seed crops and uses for crush bi-product
- VA gasoline consumption is 3.8 billion gallons (DoE 2006)
 - Support research at state universities into new Ethanol technologies and non-food crop production for fuel feedstock.



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Impact of current economic model (what \$1 pays for)

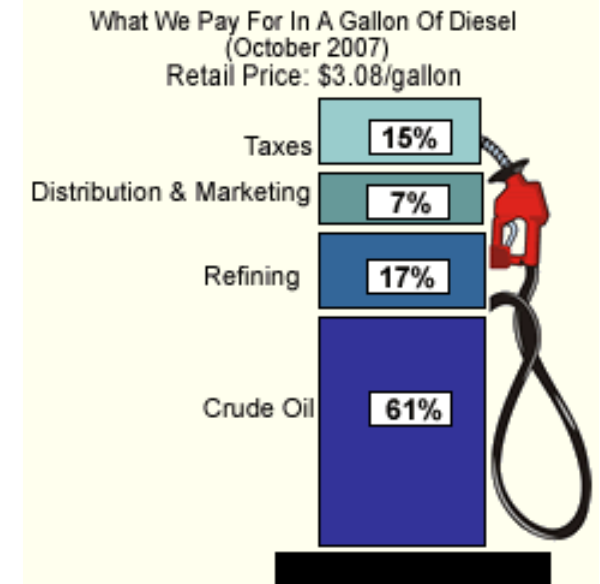


Virginia State tax = \$0.064
Virginia Petroleum Marketers= \$0.065

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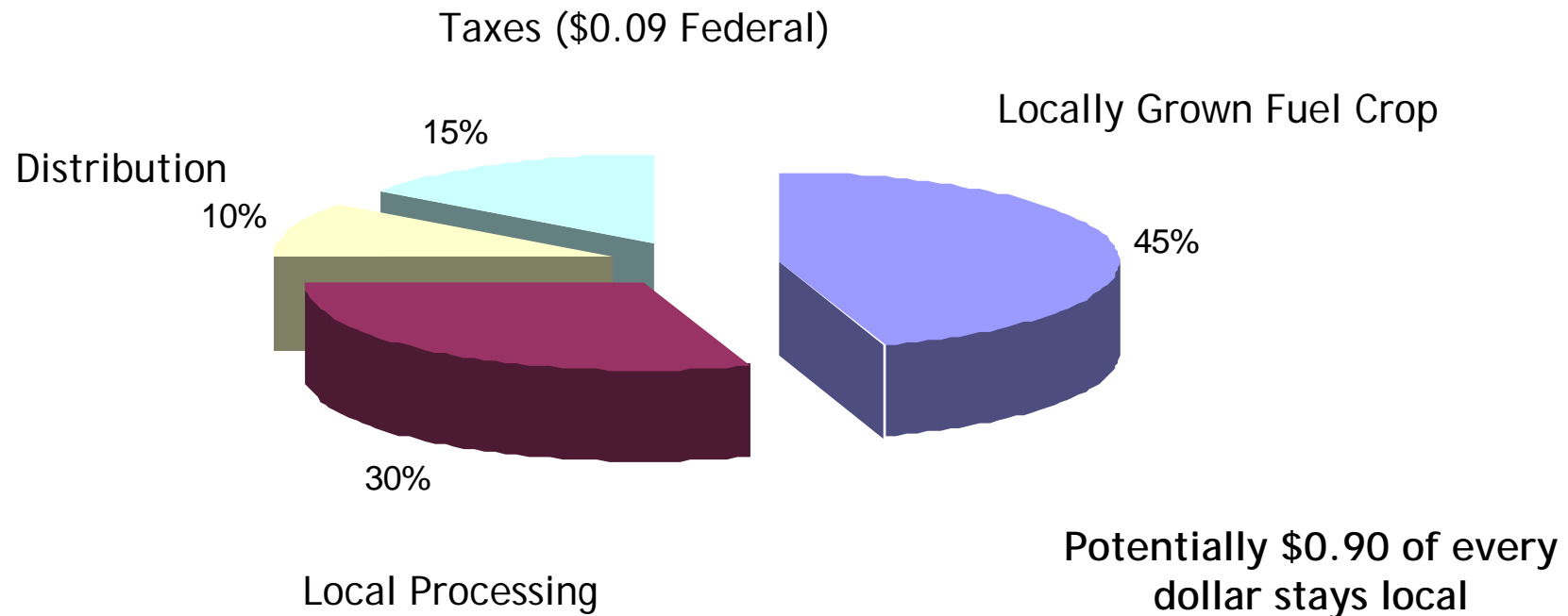
Only \$0.13 of every
\$1 spent stays local



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Biodiesel's local economic impact

For Every \$1 Spent on Biodiesel



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Transportation Funding

- Relying on Motor Fuels Tax is problematic



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Current Liquid Transportation Fuels Picture

- **Peak oil** is the point or timeframe at which the maximum global petroleum production rate is reached, after which the rate of production enters its terminal decline.
- Peak oil is maximum production, not complete depletion and is a liquid fuels problem.

•Forecast

December 2005
2006-2007
2007-2009
After 2007
2010
Before 2010
After 2010
2012
2016
After 2020
2030 or later

•Source

Deffeyes (U.S.)
Bakhtari (Iran)
Simmons (U.S.)
Skrebowski (U.K.)
Campbell (Ireland)
Goodstein (U.S.)
World Energy Council
Weng (China)
Doug-Westwood (U.K.)
CERA (U.S.)
EIA (U.S.) / Exxon Mobil

- Hirsch Report to DoE 2005
- US Army Corps of Engineers 2005



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Other factors to take into consideration

- WSJ November 19, 2007 **“Oil Officials See Limit Looming on Production”**
- NYT December 9, 2007 **“Oil-Rich Nations Use More Energy, Cutting Exports”**
- WSJ December 12, 2007 **“Saudi Industrial Drive Strains Oil-Export Role”**



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U.S. Transportation - 2003

	Autos	Light Trucks	Heavy Trucks	Airplanes
Share of transport fuel consumption	39%	28%	24%	9%
Fleet size - Millions	130	80	7	0.0085
New - Millions/Year	8.5	8.5	0.5	Small
Median life - Years	17	16	28	22

Gasoline

Robert L. Hirsch
Senior Energy Program Advisor, SAIC
Clean Cities Congress & Expo
May 7-10, 2006



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BLUE RIDGE CLEAN FUELS

- tel: +1 434 336-4388
- brcfi@earthlink.net



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