## Russian Natural Gas Canadian Tar Sands Offshore Drilling

By Kurt H. Wulff Springfield, Massachusetts February 15, 2006

## Summary and Recommendation

#### Buy

- Gazprom (OGZPF)
- Canadian Oil Sands Trust (COSWF)
- Devon Energy (DVN), Encore Acquisition (EAC),
   ConocoPhillips (COP)

#### Why

- Global Growth
- Commodity Price Upside 2010
  - Oil \$150 a barrel
  - Natural Gas \$30 a mmbtu

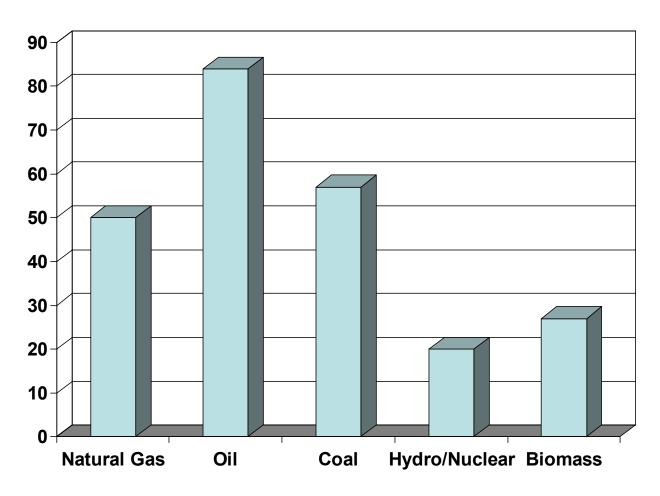
#### Global Growth

- China, India, Eastern Europe
- Race for Resources
- Environmental Quality

## World Energy Demand

## Million Barrels Equivalent Daily

Total 238

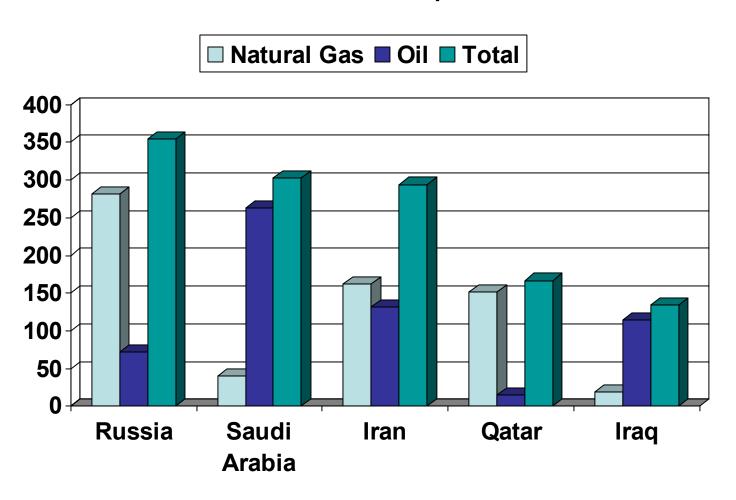


## Supply Dynamics

- Close to peak oil production
- Two-thirds of peak natural gas production
- Half world oil and gas reserves in five countries
- Russia has more natural gas than Saudi Arabia has oil

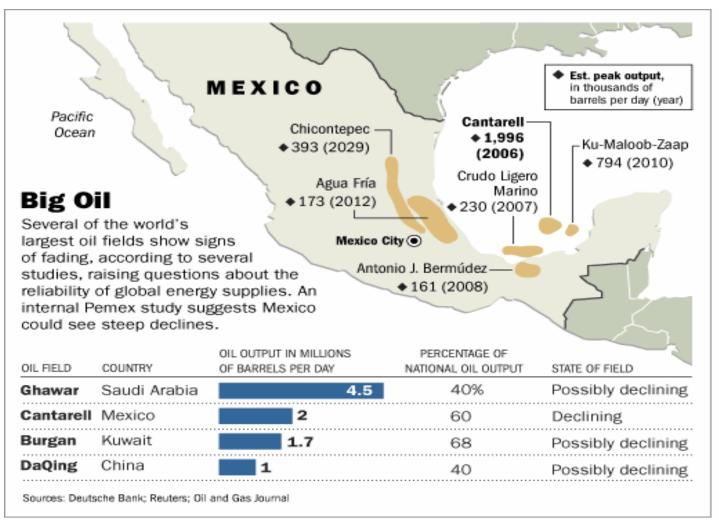
#### World Oil and Gas Reserves

#### Billion Barrels Equivalent



## Large Fields Peaked

Wall Street Journal 2/9/06



## Refining Expands Oil Supply

- Light Sweet Supply Most Valuable
- Refining Upgrades Heavy Sour
- Need Refining Capacity for Oil Sands

### LNG Expands Natural Gas Supply

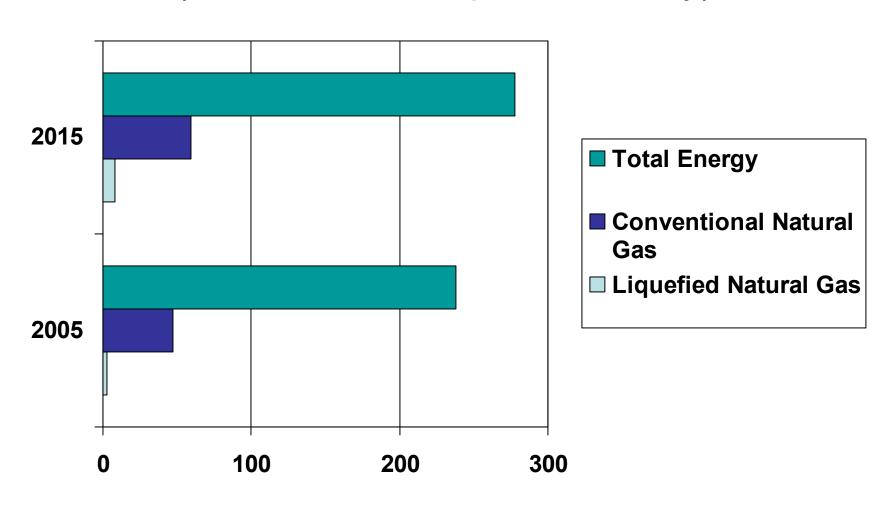
(million barrels daily)

	<u>2005</u>	-	<u>2015</u>	
Asia	1.7	65%	2.8	35%
Europe	0.7	26%	3.4	42%
U.S.	0.3	9%	1.9	23%
	2.7	100%	8.1	100%

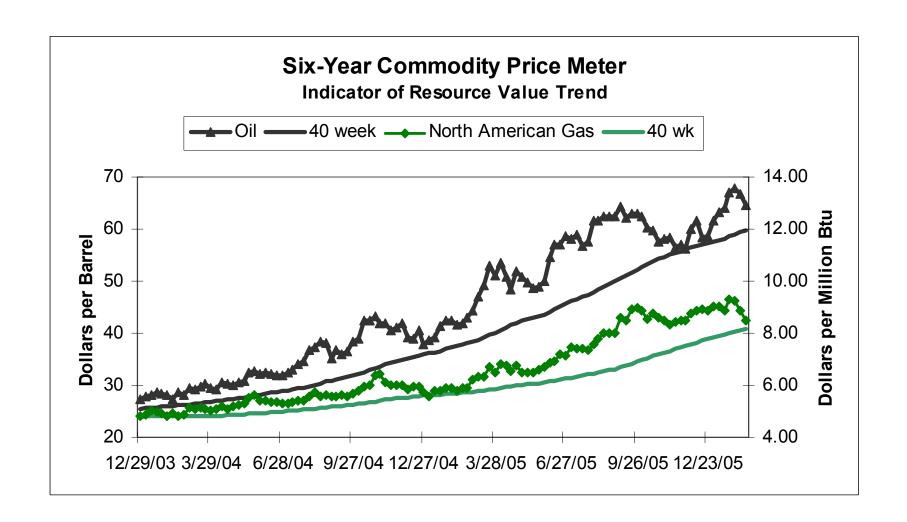
Source: International Energy Agency, Oil and Gas Journal, McDep Associates

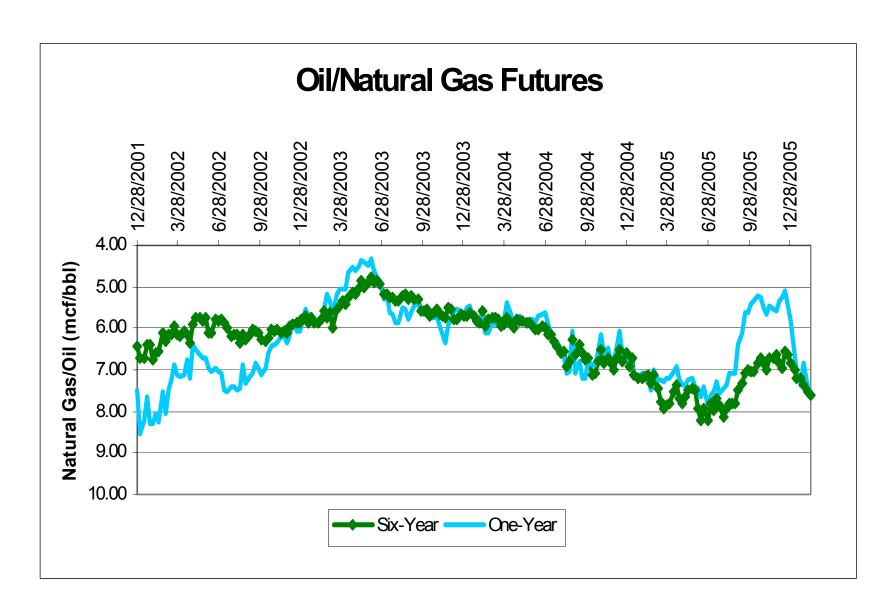
### Cleanest Fuel and Total Energy

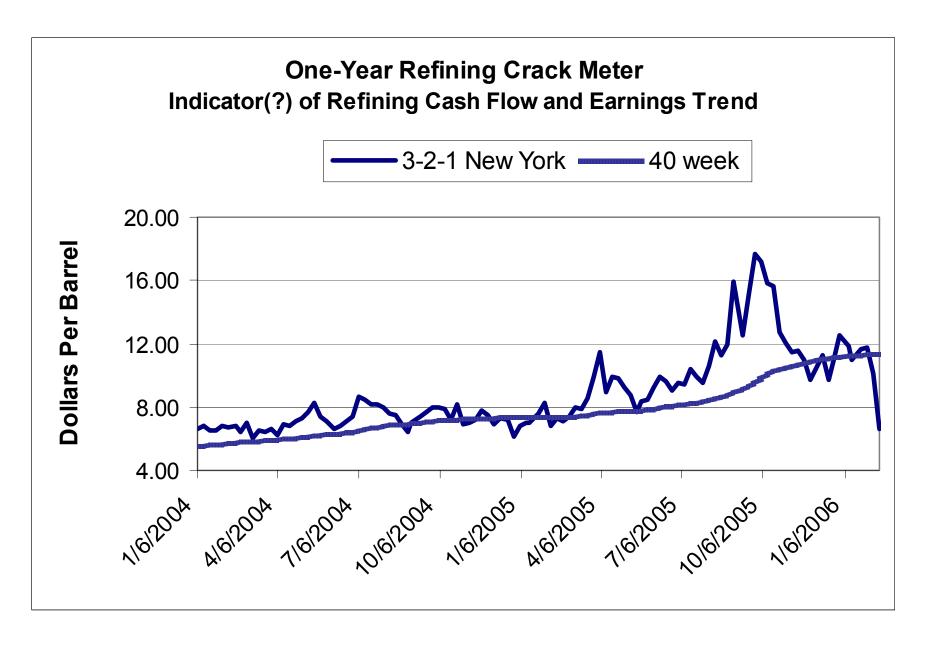
(Million Barrels Equivalent Daily)



www.mcdep.com





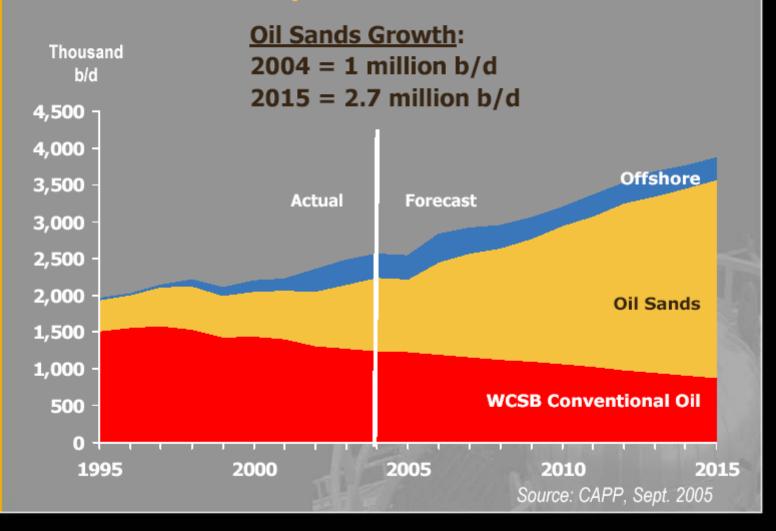


#### Canadian Tar Sands

- World Conventional Oil Reserves
  - 1.2 Trillion Barrels Recoverable
- Canadian Oil Sands
  - 175 Billion Barrels
- World Oil Production
  - 84 Million Barrels Daily
- Canadian Oil Sands Production
  - 1 mmbd Now, 2.7 mmbd 2015

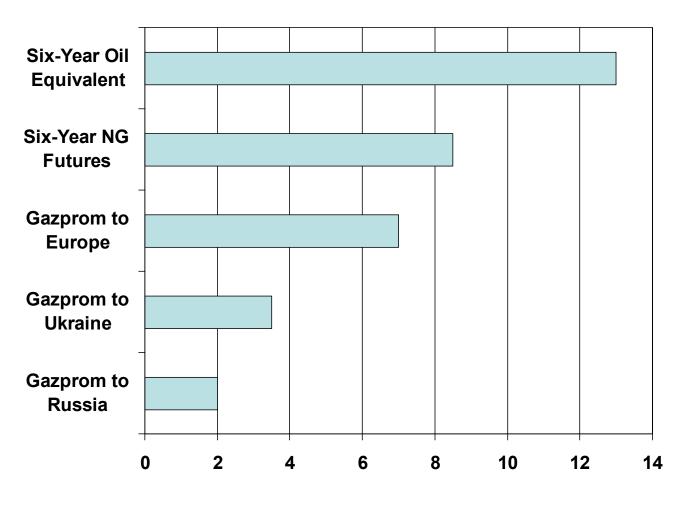


#### Canadian oil production



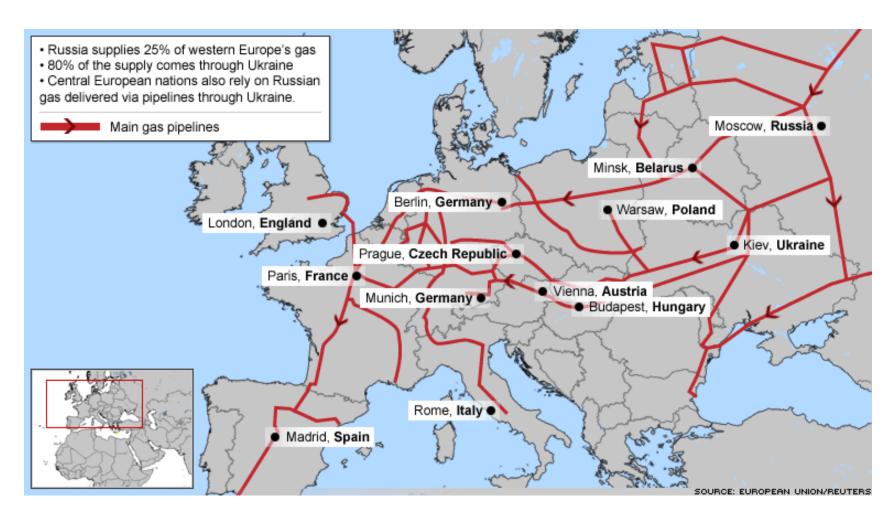
### Russian Natural Gas Underpriced

(Dollars a mmbtu)



www.mcdep.com

## Ukraine Siphons Russian Gas



## Oil Spill Ignited Environmentalism

 "I am amazed at the publicity for the loss of a few birds." Fred L. Hartley, Santa Barbara, California, 1969

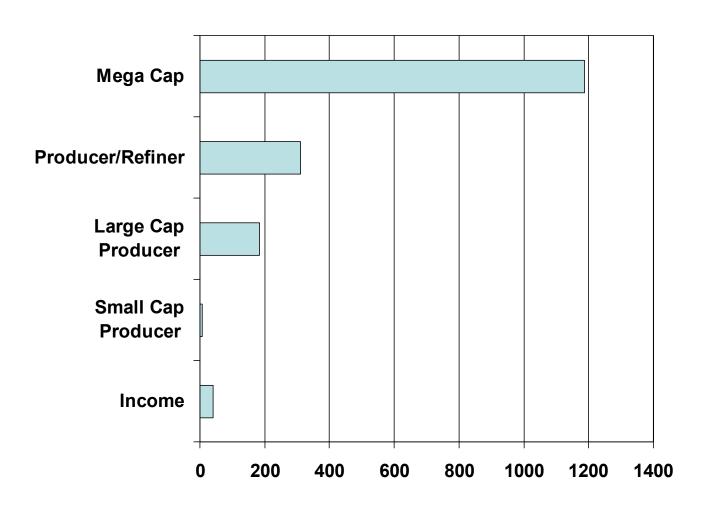
- Focus Today on Coal
  - Global Warming
  - Mercury
  - Untold Carcinogens

## Coal: Environmental Target

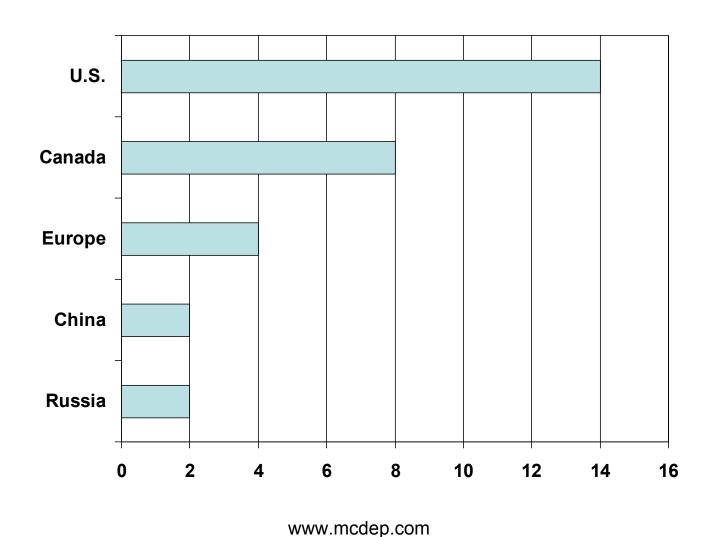
- We burn too much coal
- The dirty fuel is 24% of primary energy
- Coal should be gasified, not burned
- Displacing coal a high value use of oil and natural gas

### McDep Energy Stock Groups

#### Million Dollars Market Cap



## McDep Energy Stocks Domicile



#### **Business Concentration**

(Percent)

	Natural Gas	Oil	Downstream
ConocoPhillips	30	43	28
Gazprom	100	*	*
Devon Energy	64	36	
Encore Acquisition	25	75	
Canadian Oil Sands Trust	*	100	*

## McDep Ratio

## Market Cap and Debt Present Value

- Mc Market Cap
- De Debt
- 'p Present Value of Natural Gas, Oil and Downstream
- Buy Low, Sell High

## Producer/Refiner Rank by McDep Ratio

			Price	Net		
			(\$/sh)	Present	Debt/	
	Symbol	/	14 <b>-</b> Feb	Value	Present	McDep
		Rating	2006	(\$/sh)	Value	Ratio
Kinder Morgan, Inc.	KMI	S2	90.30	33.00	0.74	1.45
Imperial Oil Limited (30%)	IMO	В	96.89	90.00	0.09	1.07
Petro-Canada	PCZ	В	45.31	42.00	0.19	1.06
Suncor Energy	SU	В	71.24	75.00	0.10	0.95
Marathon Oil Corporation	MRO	В	66.16	75.00	0.25	0.91
Norsk Hydro ASA	NHY	В	111.05	130.00	0.15	0.88
PetroChina Company Ltd (1	PTR	В	96.96	120.00	0.01	0.81
Lukoil Oil Company	LUKOY	И В	77.10	100.00	0.01	0.77
Gazprom (50%)	OGZPF	В	84.30	140.00	0.02	0.61
Total or Median					0.10	0.91

www.mcdep.com

## Gazprom (OGZPF)

- Produces 90% of Russian Natural Gas
- Price Controls Fading Away
- Multi-Fold Gain Characteristics
  - Enterprise Value Now \$200 billion
    - Next Twelve Months Cash Flow \$32 billion
    - Unlevered Multiple 6.2 times
  - Natural Gas Price, Cash Flow, Could be 3-4x
  - Long Life Could Double Multiple

## Gazprom (OGZPF), cont'd

- Ownership Aligned
  - Government 51%
  - A Million Russian Stockholders
  - World's Largest Energy Stock Potentially
    - Up to 35% to trade as American Depositary Receipts
    - Ten-fold index weighting increase ahead
- Mr. Putin Chairman 2009?

## Large Cap Independent Producer Rank by McDep Ratio

			Price	Net		
			(\$/sh)	Present	Debt/	
	Symbo	l/	14-Feb	Value	Present	McDep
		Rating	2006	(\$/sh)	Value	Ratio
CNOOC Limited (29%)	CEO	В	83.35	84.00	0.00	0.99
XTO Energy Inc.	XTO	В	40.40	48.00	0.17	0.87
Encana Corporation	ECA	В	40.50	51.00	0.20	0.83
Burlington Resources	BR	В	87.07	115.00	-	0.76
Occidental Petroleum Corp.	OXY	В	87.53	120.00	0.12	0.76
<b>Devon Energy Corporation</b>	DVN	В	57.60	94.00	0.12	0.66
Anadarko Petroleum Corp.	APC	В	96.40	160.00	0.10	0.64
Total or Median					0.12	0.76

## Devon Energy (DVN)

- Burlington Resources Peer
- Managed by Founder (1973)
- Net Present Value Presumes
  - \$50 Oil
  - \$10 Natural Gas
- Adjusted Reserve Life 8.6 Years
- Unlevered Cash Flow Multiple 3.9 times
- 64% Natural Gas, 36% Oil

## Small Cap Independent Producer Rank by McDep Ratio

			Price	Net		
			(\$/sh)	Present	Debt/	
	Symbo	ol/	14-Feb	Value	Present	McDep
		Rating	2006	(\$/sh)	Value	Ratio
Berry Petroleum Company	BRY	В	67.64	65.00	0.11	1.03
Encore Acquisition Compan	EAC	В	31.31	50.00	0.21	0.70
Energy Partners Ltd.	EPL	В	23.70	38.00	0.19	0.70
Cimarex Energy Company	XEC	В	40.46	64.00	0.10	0.67
Total or Median					0.15	0.70

# Encore Acquisition Company (EAC)

- Tertiary Recovery May Double Reserves
- Chairman Founder Past Success with
   Southland Royalty, San Juan Basin Royalty Trust, Permian Basin Royalty Trust, Cross Timbers Oil Company (now XTO Energy) and Cross Timbers Royalty Trust
- Enterprise Value \$2.2 billion
  - Adjusted Reserve Life 14.3 Years
  - Unlevered Cash Flow Multiple 5.1 times

## Mega Cap Rank by McDep Ratio

			Price	Net		
			(\$/sh)	Present	Debt/	
	Symbol	//	14 <b>-</b> Feb	Value	Present	McDep
		Rating	2006	(\$/sh)	Value	Ratio
Mega Cap						
BP plc	BP	В	66.95	77.00	0.15	0.89
Total S.A.	TOT	В	128.13	160.00	0.12	0.82
<b>Exxon Mobil Corporation</b>	XOM	В	59.51	74.00	0.04	0.81
Royal Dutch Shell plc	RDS-A	В	62.23	80.00	0.11	0.80
ConocoPhillips	COP	В	58.48	95.00	0.22	0.70
Chevron Corporation	CVX	В	55.86	85.00	0.11	0.70
Total or Median					0.12	0.81

## ConocoPhillips (COP)

- Natural Gas, Oil, Downstream 30,43,28
- Includes Burlington Resources
- Low McDep Ratio 0.70
- Long Life: Adjusted R/P 10.9 years
- Low Unlevered Cash Flow Multiple 4.1
- Breakthrough CEO
- Largest San Juan Natural Gas Producer

## Energy Income Stocks Rank by McDep Ratio

			Price	Net		
			(\$/sh)	Present	Debt/	
	Symbol/	/	14-Feb	Value	Present	McDep
		Rating	2006	(\$/sh)	Value	Ratio
Kinder Morgan Energy Parti	KMP	S3	47.09	15.00	0.55	1.97
Kinder Morgan Managemen	KMR	S3	42.85	15.00	0.55	1.84
Enerplus Resources Fund	ERF		46.95	42.00	0.14	1.10
Pengrowth Energy Trust	PGH		21.84	20.00	0.16	1.08
Penn West Energy Trust	<b>PWTFF</b>	В	34.16	33.00	0.13	1.03
San Juan Basin Royalty Trus	SJT		38.19	40.00	-	0.95
Canadian Oil Sands Trust (U	COSWI	F B	121.45	136.00	0.12	0.91
Total or Median					0.14	1.08

# Canadian Oil Sands Trust (COSWF)

- 35.5% Syncrude, Largest Oil Sands Plant
- Volume Expanding Now
  - -2005 214, 2006 274, 2007 350 mbd
- Net Present Value Sensitive to Oil Price
  - \$50 oil, \$136 NPV, \$60 oil, \$177 NPV
- Distribution C\$12/unit 2007, 8+% yield
- Ultimate Volume 500 mbd for Thirty Years

## Intellectual Challenges

- Politics
- Economics
- Engineering
- Science
- Geography
- Sociology
- Art
- Finance

### Second in a Lifetime Opportunity

- Engineer with Chevron in San Francisco
- Studied UK Market for North Sea Natural Gas
- Wall Street 1971
- San Juan Basin Natural Gas Producers
- Marathon, Cities Service, Getty, Gulf Takeovers
- Hugoton Natural Gas Producers
- déjà vu San Juan, Canada, China, Russia