

Rating: Buy  
 S&P 500: 1179

## Petro-Canada Oil Sands Producer

<i>Symbol</i>	PCZ	<i>Ebitda Next Twelve Months ending 9/30/06 (US\$m)</i>	5,400
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	23
<i>Price (US\$/sh)</i>	34.95	<i>Natural Gas and Oil Production/Ebitda (%)</i>	84
<i>Pricing Date</i>	10/27/05	<i>Adjusted Reserves/Production NTM</i>	5.7
<i>Shares (mm)</i>	525	<i>EV/Ebitda</i>	4.3
<i>Market Capitalization (US\$m)</i>	18,400	<i>PV/Ebitda</i>	5.0
<i>Debt (US\$m)</i>	5,000	<i>Undeveloped Reserves (%)</i>	23
<i>Enterprise Value (EV) (US\$m)</i>	23,400	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	38.00
<i>Present Value (PV) (US\$m)</i>	27,100	<i>Present Value Proven Reserves(US\$/boe)</i>	30.00
<i>Net Present Value (US\$/share)</i>	42	<i>Present Value Proven Reserves(US\$/mcf)</i>	5.00
<i>Debt/Present Value</i>	0.19	<i>Earnings Next Twelve Months (US\$/sh)</i>	4.75
<i>McDep Ratio - EV/PV</i>	0.86	<i>Price/Earnings Next Twelve Months</i>	7
<i>Dividend Yield (%/year)</i>	0.8	<i>Indicated Annual Dividend (US\$/sh)</i>	0.27

Note: Estimated cash flow and earnings tied to one-year futures prices for oil, natural gas and refinery crack.  
 Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

### Summary and Recommendation

Buy-recommended **Petro-Canada (PCZ)** offers 20% appreciation potential to estimated net present value of \$42 a share. Taking account of latest quarterly results, our correlation of 30 companies indicates net present value about \$8 a share lower than estimated. The correlation is a statistical check that misses the value of some future production from oil sands. The company has a 12% interest in Syncrude whose capacity is expanding to 350,000 barrels daily. PCZ has 60% of Fort Hills expected to be producing 100,000 barrels daily after 2010. Global upstream and the Canadian downstream businesses appear to be performing normally in a profitable environment.

### Cash Flow and Reserve Life Point to Present Value

McDep analysis presumes that fundamental value is measured by the projection of cash flows far into the future and discounting them to the present at a rate of return, currently 7% a year before inflation. Next Twelve Months (NTM) cash flow represents the volumes and costs that form the base for future projections. Reserve life index tells how long cash flow will last. NTM cash flow and reserve life are the two main variables in our correlation by function for about 30 companies. Net present value indicated by the current combined correlation is about \$8 a share lower than our ongoing standard estimate for the company (see table Functional Cash Flow and Present Value).

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**Petro-Canada**  
**Functional Cash Flow and Present Value**

	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
North American Natural Gas	1,245	8.2	5.0	6,200	23%
Rest of World Natural Gas	166	6.5	6.0	1,000	4%
Oil	3,155	4.7	4.6	14,400	53%
Downstream	851		6.5	5,500	20%
	5,416	5.7	5.0	27,100	100%
Debt (US\$mm)					5,000
Net Present Value (US\$mm)					22,100
Shares (mm)					525
Net Present Value (US\$/sh)					42
Over (-)/ Under (+) Correlation (US\$/sh)					(8)

**Cash Flow by Quarter Depends on Latest Results and Futures Prices**

Cash flow for the next year is projected from a base through the latest reported quarter (see table Next Twelve Months Operating and Financial Estimates). Company disclosures provide the clues for future volumes and costs as well as geographic and quality differences in price. Futures prices from the New York Mercantile Exchange determine industry benchmarks for the next year.

**Industry Conditions Support Long-Term Price Expectation**

Present value estimates that form the denominator of the McDep Ratio and change only occasionally for all companies, most recently in early August, are tied to expected constant real long-term prices. Recent futures price for oil delivered over the next six years at \$58 a barrel exceeds our long-term expectation of \$50. One-year futures for natural gas exceed our long-term expectation while six-year futures for natural gas also have appreciation potential, in our opinion.

**Oil and Gas Commodity and Stock Price**  
**Thursday, October 27, 2005**

	<i>Units</i>	<i>Futures Price</i>	<i>McDep Ratio</i>
		<i>Six-Year</i>	<i>Denominator</i>
		<i>One-Year</i>	
<b>Crude Oil</b>	\$/barrel	58.13	50
<b>Natural Gas</b>	\$/million btu	8.65	10
<b>Oil Refining</b>	\$/barrel		10
			<i>Median</i>
	<i>Stocks</i>		<i>McDep Ratio</i>
	<b>Producer/Refiner</b>		0.80
	<b>PCZ</b>		0.86

Source: McDep Associates, Bloomberg, New York Mercantile Exchange, Yahoo and company disclosures

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**Petro-Canada**  
**Next Twelve Months Operating and Financial Estimates**  
 (Canadian Dollars)

	<i>Q4</i>	<i>Year</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Next Twelve Months</i>
	<i>12/31/04</i>	<i>2004</i>	<i>3/31/05</i>	<i>6/30/05</i>	<i>9/30/05</i>	<i>12/31/05</i>	<i>2005E</i>	<i>3/31/06</i>	<i>6/30/06</i>	<i>9/30/06</i>	<i>9/30/06</i>
<b>Volume</b>											
Natural Gas (mmcf)											
U.S. (or North America)	556	<b>529</b>	534	503	527	522	<b>521</b>	517	511	506	<b>514</b>
Overseas	119	<b>139</b>	158	114	113	112	<b>124</b>	124	123	122	<b>120</b>
Total	675	<b>669</b>	692	617	640	634	<b>645</b>	641	634	628	<b>634</b>
Oil (mbd)	227	<b>239</b>	226	220	223	221	<b>222</b>	219	228	226	<b>223</b>
Total gas & oil (mbd)	340	<b>351</b>	341	323	330	326	<b>330</b>	325	334	331	<b>329</b>
<b>Price</b>											
Natural gas (\$/mcf)											
Henry Hub (US\$/mmbtu)	7.10	<b>6.15</b>	6.27	6.76	8.56	13.83	<b>8.85</b>	13.80	10.66	10.64	<b>12.23</b>
Currency (US\$/C\$)	0.82	<b>0.77</b>	0.82	0.80	0.83	0.85	<b>0.83</b>	0.85	0.85	0.85	<b>0.85</b>
Henry Hub (C\$/mmbtu)	8.65	<b>7.98</b>	7.68	8.40	10.29	16.21	<b>10.71</b>	16.17	12.50	12.47	<b>14.34</b>
U.S. (or North America)	6.89	<b>6.72</b>	6.67	7.29	8.22	12.94	<b>8.80</b>	12.92	9.98	9.96	<b>11.46</b>
Overseas	5.83	<b>5.30</b>	6.25	6.01	6.58	6.49	<b>6.32</b>	6.53	6.55	6.54	<b>6.53</b>
Total	6.70	<b>6.43</b>	6.57	7.05	7.93	11.80	<b>8.32</b>	11.68	9.32	9.30	<b>10.53</b>
Oil (\$/bbl)											
WTI Cushing (US\$/bbl)	48.31	<b>41.44</b>	49.65	53.05	62.52	61.68	<b>56.73</b>	62.03	62.24	62.20	<b>62.03</b>
WTI Cushing (C\$/bbl)	58.91	<b>53.70</b>	60.85	65.99	75.14	72.30	<b>68.57</b>	72.71	72.95	72.91	<b>72.72</b>
Worldwide	48.41	<b>46.92</b>	52.76	59.85	69.01	66.40	<b>62.03</b>	66.77	67.00	66.96	<b>66.78</b>
Total gas & oil (\$/bbl)	43.65	<b>42.17</b>	45.37	52.14	59.82	65.60	<b>55.70</b>	65.37	61.08	61.02	<b>63.24</b>
NY Harbor 3-2-1 (\$/bbl)	5.72	<b>7.74</b>	6.17	10.59	16.70	11.73	<b>11.30</b>	12.23	13.62	12.83	<b>12.60</b>
<b>Revenue (\$mm)</b>											
Natural Gas											
U.S. (or North America)	352	<b>1,301</b>	321	334	399	621	<b>1,674</b>	600	465	464	<b>2,150</b>
Overseas	64	<b>269</b>	89	62	68	67	<b>286</b>	73	73	73	<b>286</b>
Total	416	<b>1,570</b>	409	396	467	688	<b>1,960</b>	673	538	537	<b>2,436</b>
Oil	1,011	<b>4,107</b>	1,073	1,198	1,416	1,349	<b>5,036</b>	1,313	1,392	1,393	<b>5,447</b>
Downstream	2,506	<b>9,434</b>	2,488	2,683	3,144	3,144	<b>11,459</b>	3,144	3,144	3,144	<b>12,576</b>
Other	(216)	<b>(734)</b>	(589)	(217)	(182)	(182)	<b>(1,169)</b>	(182)	(182)	(182)	<b>(727)</b>
Total	3,717	<b>14,377</b>	3,382	4,060	4,845	4,999	<b>17,286</b>	4,949	4,892	4,892	<b>19,732</b>
<b>Expense</b>											
Upstream	442	<b>1,661</b>	536	506	611	649	<b>2,302</b>	637	623	623	<b>2,531</b>
Downstream	2,294	<b>8,680</b>	2,261	2,508	2,927	2,895	<b>10,591</b>	2,895	2,895	2,895	<b>11,579</b>
Other	(216)	<b>(734)</b>	(589)	(217)	(182)	(182)	<b>(1,169)</b>	(182)	(182)	(182)	<b>(727)</b>
Total	2,520	<b>9,607</b>	2,209	2,797	3,356	3,362	<b>11,724</b>	3,350	3,336	3,336	<b>13,383</b>
<b>Ebitda (\$mm)</b>											
Upstream	985	<b>4,016</b>	946	1,088	1,272	1,388	<b>4,694</b>	1,350	1,307	1,307	<b>5,352</b>
Downstream	212	<b>754</b>	227	175	217	249	<b>868</b>	249	249	249	<b>997</b>
Total	1,197	<b>4,770</b>	1,173	1,263	1,489	1,637	<b>5,562</b>	1,599	1,556	1,556	<b>6,349</b>
Exploration	76	<b>235</b>	82	58	54	54	<b>248</b>	54	54	54	<b>216</b>
<b>Deprec., Deplet., &amp; Amort.</b>											
Upstream	280	<b>1,125</b>	295	297	309	309	<b>1,210</b>	309	309	309	<b>1,236</b>
Downstream	72	<b>277</b>	53	52	60	60	<b>225</b>	60	60	60	<b>240</b>
Other	40										
Total	392	<b>1,442</b>	348	349	369	369	<b>1,435</b>	369	369	369	<b>1,476</b>
<b>Ebit</b>	729	<b>3,093</b>	743	856	1,066	1,214	<b>3,879</b>	1,176	1,133	1,133	<b>4,657</b>
Interest	34	<b>142</b>	34	39	39	39	<b>151</b>	39	39	39	<b>156</b>
<b>Ebt</b>	695	<b>2,951</b>	709	817	1,027	1,175	<b>3,728</b>	1,137	1,094	1,094	<b>4,501</b>
Income Tax	243	<b>1,033</b>	248	286	359	411	<b>1,305</b>	398	383	383	<b>1,575</b>
<b>Net Income (\$mm)</b>											
Upstream	378		53	475	499						
Downstream	91		113	80	102						
Other	(17)		295	(24)	66						
Total	452	<b>1,918</b>	461	531	667	764	<b>2,423</b>	739	711	711	<b>2,926</b>
<b>Shares (millions)</b>	528	<b>533</b>	527	526	525	525	<b>526</b>	525	525	525	<b>525</b>
Per share (\$)	0.86	<b>3.60</b>	0.88	1.01	1.27	1.45	<b>4.61</b>	1.41	1.35	1.35	<b>5.57</b>
Ebitda Margin (E&P)	72%	<b>74%</b>	68%	71%	70%	70%	<b>70%</b>	71%	70%	70%	<b>70%</b>
Tax Rate	35%	<b>35%</b>	35%	35%	35%	35%	<b>35%</b>	35%	35%	35%	<b>35%</b>

**Buy Producer/Refiners**

Energy is necessary for world economic growth and clean energy provides a better quality of life. Producer/refiners are among the leading global suppliers of clean energy. Headquartered in

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Norway, Russia, China, Canada and the U.S., buy recommendations also offer political diversification. McDep Ratios that compare Enterprise Value with Present Value of energy and other businesses imply that the stock market undervalues the fundamental prospects. Stocks are ranked in descending order of McDep Ratio connoting “buy low, sell high” (see table Rank by McDep Ratio).

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**Rank by McDep Ratio: Market Cap and Debt to Present Value**

	<i>Symbol/ Rating</i>		<i>Price (\$/sh) 27-Oct 2005</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
<b>Producer/Refiners - Large Cap and Mid Cap</b>								
Kinder Morgan, Inc.	KMI	S2	87.78	123	10,800	20.00	0.76	1.82
Imperial Oil Limited (30%)	IMO	B	87.92	102	8,980	84.00	0.10	1.04
Marathon Oil Corporation	MRO	B	57.28	368	21,090	65.00	0.27	0.91
Petro-Canada	PCZ	B	34.95	525	18,360	42.00	0.19	0.86
Lukoil Oil Company	LUKOY	B	52.00	830	43,000	65.00	0.03	0.81
Suncor Energy	SU	B	52.05	461	24,000	68.00	0.11	0.79
Norsk Hydro ASA	NHY	B	97.21	251	24,390	130.00	0.12	0.78
ConocoPhillips	COP	B	60.90	1,418	86,400	100.00	0.15	0.67
Gazprom (50%)	OGZPF	B	57.40	1,022	58,600	90.00	0.03	0.65
PetroChina Company Ltd (10%)	PTR	B	74.58	176	13,110	120.00	0.01	0.63
<i>Total or Median</i>					<i>309,000</i>		<i>0.11</i>	<i>0.80</i>

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