




U.S. Silica Holdings Inc.



Hilton Garden Inn
Washington, D.C.
February 21, 2014



Business Description

Company roots are established
in 1901

In 2012, U.S. Silica goes public

In 1987, Pennsylvania Glass
Sand Corporation merged with
Ottawa Silica Company to form
the present day U.S. Silica

Company Overview

Industry &
Competitors

Financial
Analysis

Valuation

Risk Analysis

Conclusion



Business Description

- Two primary end markets
 - Oil and Gas
 - ISP Segment
- Operates nationwide
 - Large presence in the Marcellus Shale basin



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Business Description

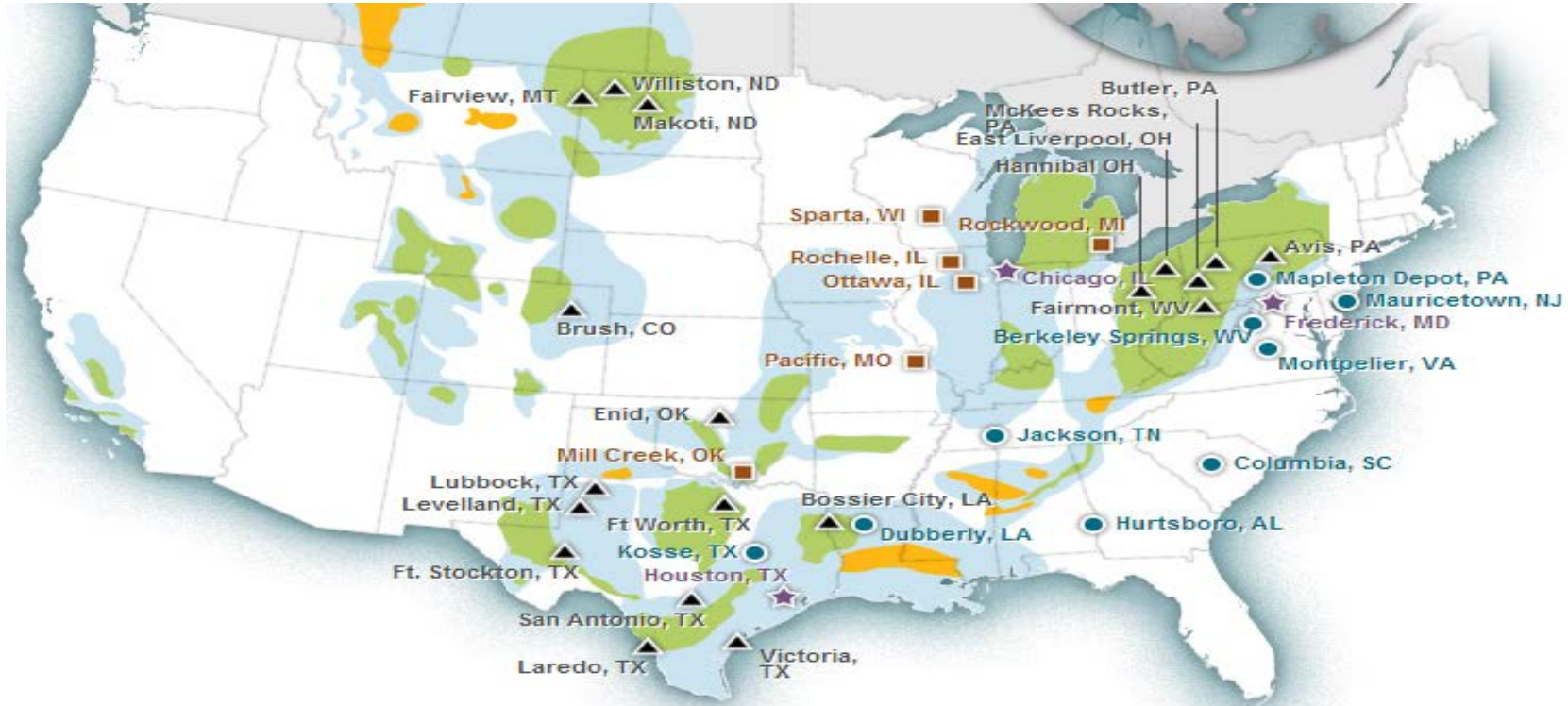
U.S. Silica Locations

- ☒ ISP Plants
- ☒ Oil & Gas
- ☒ Transloads
- ☒ Offices



Shale Deposits

- ☒ Shale Basins
- ☒ Current Shale Plays
- ☒ Prospective Shale Plays



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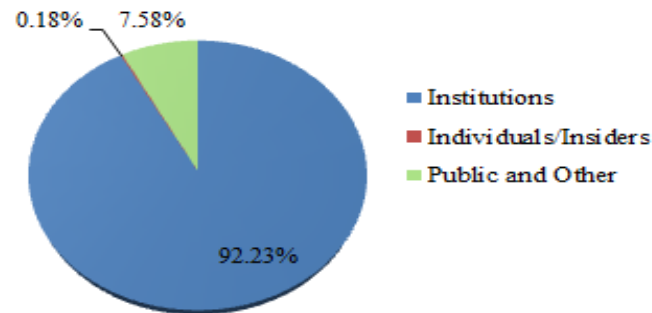
Conclusion

Firm Overview

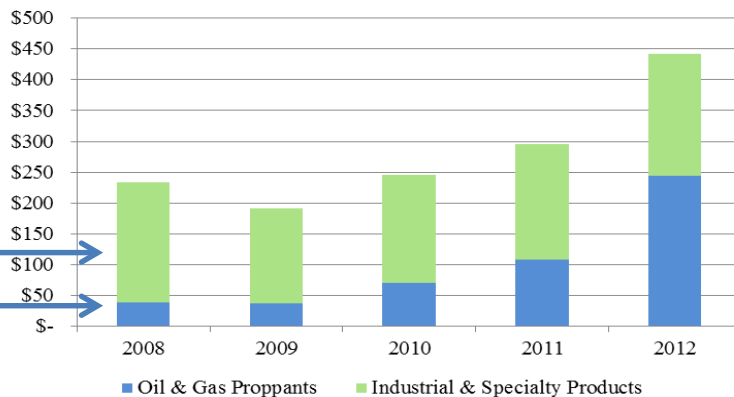
Market Profile	
52-week range	\$17.05-\$37.14
Average daily volume	1.375 mm
As a % of sales outstanding	2.57%
Shares outstanding	53.5 mm
Market Capitalization	1,583.3 mm
Institutional Ownership	95.67%
ROE	30.70%
ROA	10.40%
ROC	15.70%
P/E	19.0
Beta	1.66

- 2ND largest domestic producer of silica sand
- SLCA is made up of two segments:
 - Oil & Gas Proppants
 - Industrial & Specialty Products (ISP)

Ownership Breakdown



Revenue by Segment (mm)



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Recommendation



Key drivers

- Near capacity operations of the Sparta facility
- Finished construction of the LaSalle facility
- Aggressive logistical expansion
- More optimistic macroeconomic outlook
- Roll-out of new Industrial & Specialty Products

12 Month Price Target	Current Price (1/31/14)	Upside Potential
\$39.70	\$29.62	34%
Recommendation: BUY		

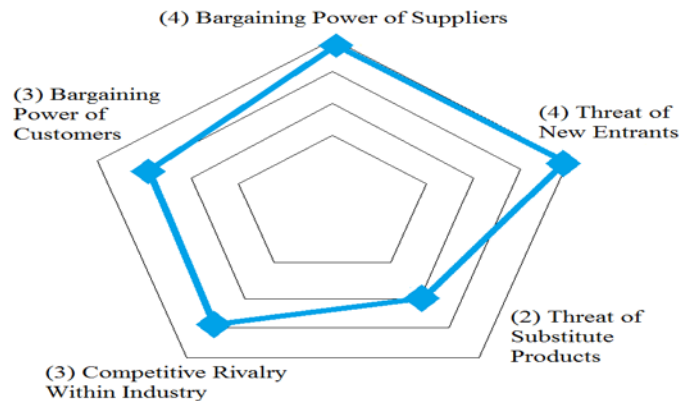




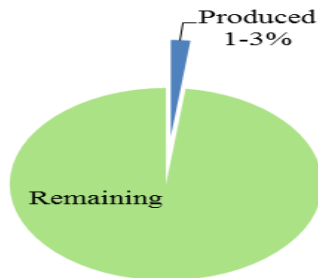
Industry Overview & Competitive Positioning



Industry Overview



U.S. Shale Gas Still Recoverable



Key characteristics of the frac sand market:

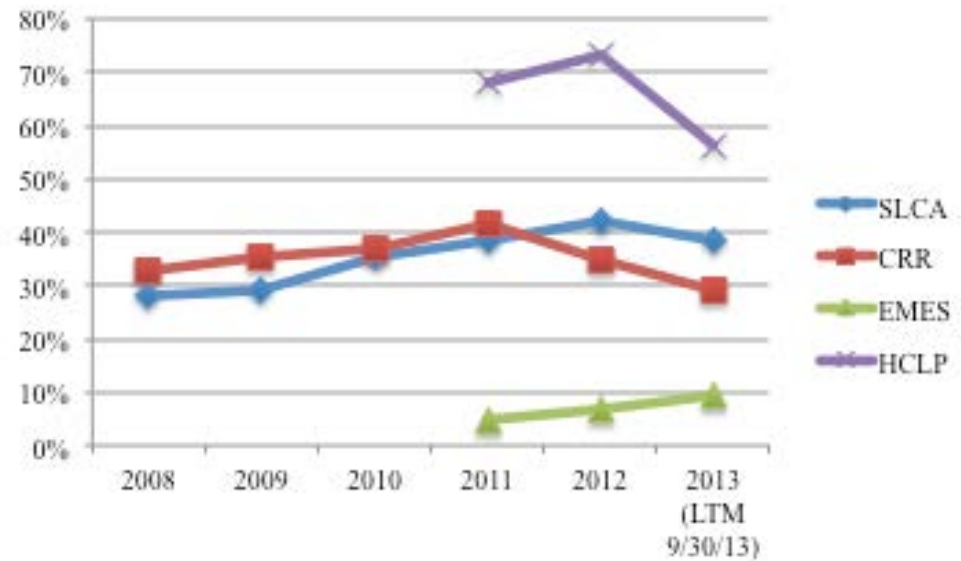
- High entry barriers
- Price driven alternatives still fiscally unpopular, yet warrant attention
- Recently more competitive on national scale given logistics battles
- Logistics is key differentiator in established supply chains, giving most leverage to suppliers



SLCA vs. Competitors

- US Silica
- CARBO Ceramics
- Emerge Energy Services
- Hi-Crush Partners

Gross Profit Margin Analysis





Financial Analysis





Financial Analysis

- EBITDA Drivers
 - Oil & Gas Sales volume
 - Logistics growth
 - Improvement in CM of ISP segment
 - A gradual sales mix to the more profitable O&G business segment





Financial Analysis

- Revenue Drivers
 - Increase in demand for silica sand in different end markets
 - Increase in production capabilities, Sparta, Greenfield
 - Logistical expansion into previously untapped markets





Valuation





DCF Valuation

- DCF Analysis

- Revenue Growth rates calculated based on earnings calls, increase in production capacity volume, and macroeconomic outlook

Fiscal Year	2013	2014	2015	2016	2017	2018
Forecasted Growth	24%	28%	12%	16%	17%	19%

- Terminal Value calculated using perpetuity growth of 5%

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Valuation Assumptions

- Limited historical data:
 - Revenue: sequential growth rates based on historical averages
 - Quarterly sales volume projected from historical capacity sales %
 - Historical segmented revenues retroactively derived from 2012 O&G growth rates
 - Subtract O&G revenue from total yields ISP revenue

WACC assumptions	
Target D/E Ratio	1.08
Cost of Debt	3%
Tax Rate	25%
Risk Free Rate	3.50%
Beta	1.66
Market Premium	8.75%

WACC computed at 12.4%





WACC and Sensitivity Analysis

\$39.70	10.9%	11.4%	11.9%	12.4%	12.9%	13.4%	13.9%
3.5%	\$41.45	\$38.43	\$35.76	\$33.40	\$31.28	\$29.38	\$27.66
4.0%	\$44.28	\$40.86	\$37.88	\$35.25	\$32.91	\$30.83	\$28.96
4.5%	\$47.54	\$43.64	\$40.28	\$37.33	\$34.74	\$32.44	\$30.39
5.0%	\$51.36	\$46.86	\$43.02	\$39.70	\$36.80	\$34.24	\$31.98
5.5%	\$55.88	\$50.63	\$46.20	\$42.41	\$39.14	\$36.28	\$33.76
6.0%	\$61.32	\$55.09	\$49.91	\$45.55	\$41.81	\$38.58	\$35.76
6.5%	\$68.00	\$60.46	\$54.32	\$49.21	\$44.90	\$41.22	\$38.04





Main Drivers

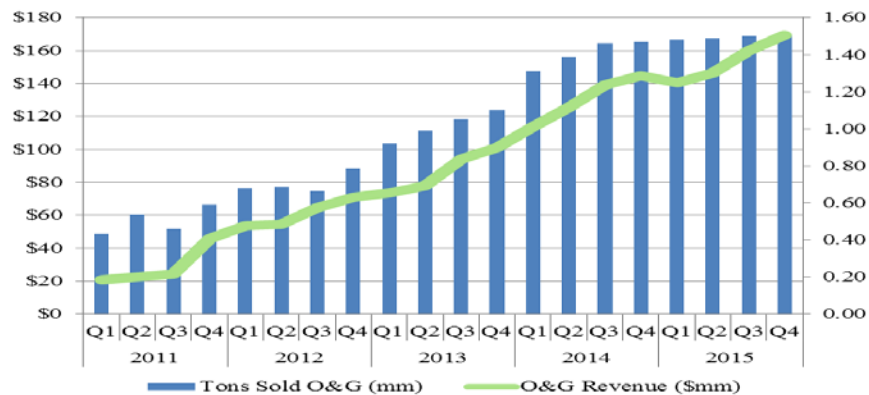
	2011				2012				2013				2014				2015			
Volume (mm)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Tons Sold O&G	0.43	0.54	0.46	0.59	0.68	0.68	0.66	0.79	0.92	0.99	1.05	1.10	1.31	1.39	1.46	1.47	1.48	1.49	1.50	1.51
Tonnage Capacity O&G	NM	NM	NM	NM	0.94	0.94	0.94	0.94	0.94	1.15	1.15	1.15	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
Tons Sold ISP	1.04	1.11	1.10	1.10	1.06	1.09	1.10	0.97	0.97	1.06	1.10	1.12	1.13	1.15	1.17	1.19	1.20	1.22	1.24	1.26
TOTAL SOLD	1.50	1.64	1.60	1.60	1.70	1.80	1.90	1.80	1.90	2.00	2.10	2.22	2.44	2.54	2.63	2.66	2.68	2.71	2.74	2.77
	2011				2012				2013				2014				2015			
Revenue (mm)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
O&G	\$20.8	\$22.5	\$24.3	\$45.9	\$53.8	\$54.5	\$64.5	\$70.9	\$73.6	\$77.7	\$94.2	\$101.2	\$113.7	\$125.9	\$139.2	\$144.7	\$140.5	\$146.3	\$159.8	\$169.4
O&G Growth	8%	8%	8%	47%	17%	1%	18%	10%	4%	6%	21%	7%	12%	11%	11%	4%	-3%	4%	9%	6%
ISP	44	46	49	38	49	50	51	48	49	52	52	49	45	47	45	42	48	51	42	40
ISP Growth	10%	6%	6%	-23%	29%	3%	2%	-6%	2%	7%	0%	-6%	-8%	5%	-5%	-6%	15%	5%	-17%	-6%
	2011				2012				2013				2014				2015			
Price (per ton)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
O&G Price	\$47.9	\$42.0	\$52.8	\$77.8	\$79.2	\$79.7	\$97.3	\$90.2	\$80.0	\$78.6	\$89.7	\$92.0	\$86.8	\$90.6	\$95.3	\$98.4	\$94.9	\$98.2	\$106.6	\$112.2
ISP Price	\$42.3	\$42.0	\$44.7	\$34.3	\$46.0	\$46.0	\$46.5	\$49.2	\$50.5	\$49.2	\$47.5	\$43.9	\$39.6	\$41.0	\$38.2	\$35.4	\$40.2	\$41.6	\$34.0	\$31.5
Total Revenue	\$64.6	\$74.1	\$73.5	\$83.6	\$102.6	\$104.6	\$115.9	\$118.8	\$122.3	\$129.8	\$144.4	\$150.3	\$158.7	\$173.0	\$183.8	\$186.6	\$184.0	\$192.0	\$202.0	\$209.0
	2011				2012				2013				2014				2015			
Contribution Margin (mm)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
O&G	\$11.5	\$16.7	\$15.6	\$23.8	\$35.1	\$33.3	\$34.2	\$37.5	\$36.2	\$35.5	\$40.1	\$42.1	\$46.3	\$44.5	\$45.8	\$47.6	\$48.1	\$50.5	\$52.1	\$57.8
O&G Growth	-	45%	-7%	53%	47%	-5%	3%	10%	-3%	-2%	13%	5%	10%	-4%	3%	4%	1%	5%	3%	11%
ISP	\$9.9	\$14.8	\$13.7	\$14.5	\$12.4	\$14.0	\$14.1	\$13.0	\$13.2	\$15.4	\$14.5	\$14.4	\$13.4	\$17.0	\$16.3	\$16.1	\$15.1	\$19.0	\$18.2	\$18.1
ISP Growth	-	49%	-7%	6%	-14%	13%	1%	-8%	2%	17%	-6%	-1%	-6%	26%	-4%	-1%	-6%	26%	-4%	-1%





Segmented Revenue v. Tons Sold

O&G Revenue v. Tons Sold

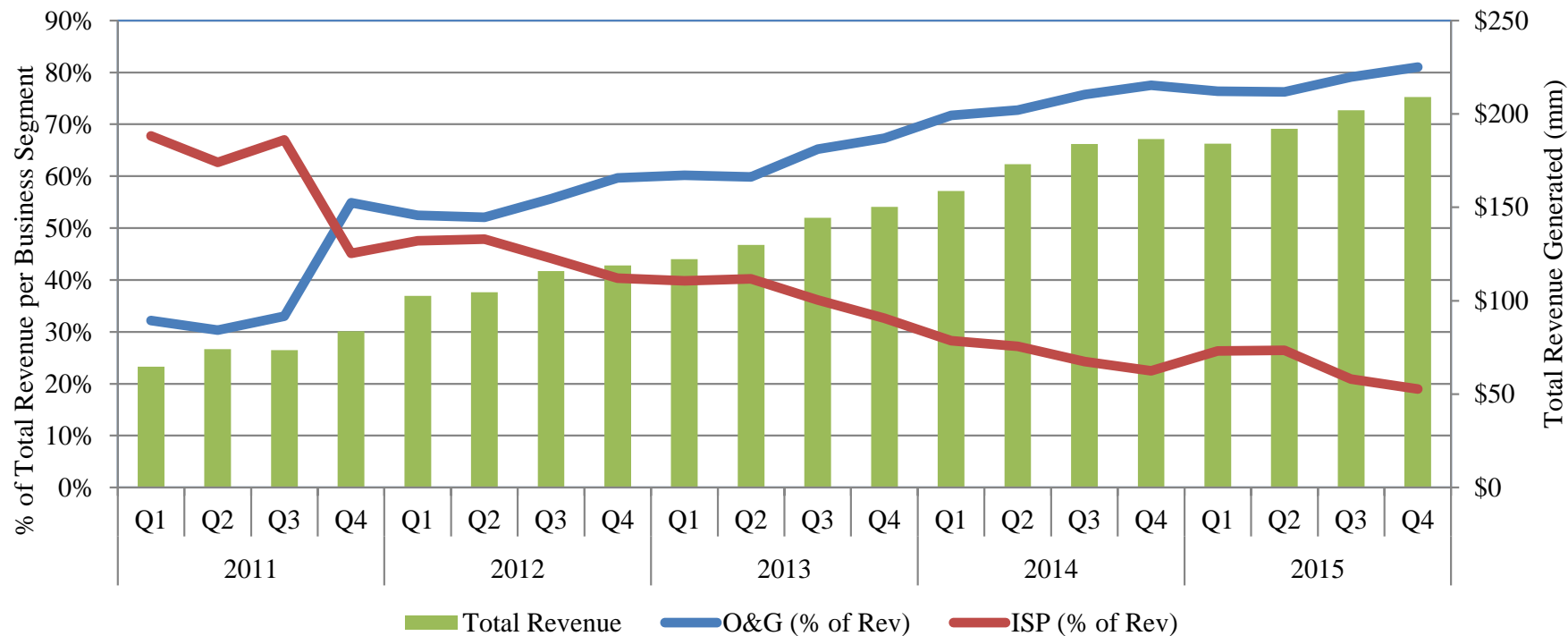


ISP Revenue v. Tons Sold



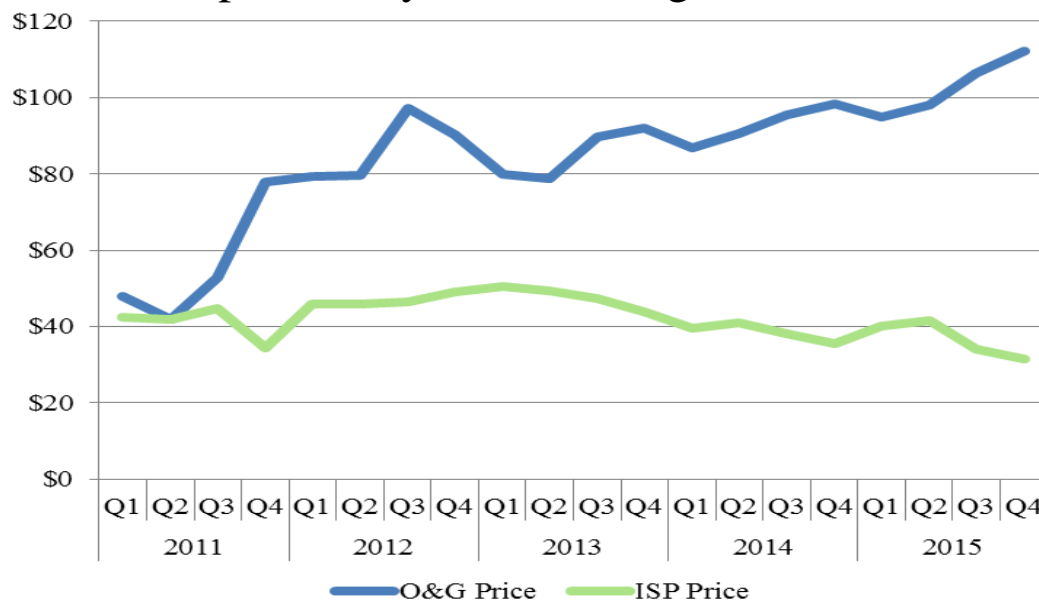


Segmented Revenue Percentage



Segmented Prices

Price per Ton by Business Segment



Team Estimates	1 Year Projection
EV/Sales	3.62x
EV/EBITDA	12.05x
EV/EBIT	14.46x
Forward P/E	19x
EPS	\$2.06

Company Overview

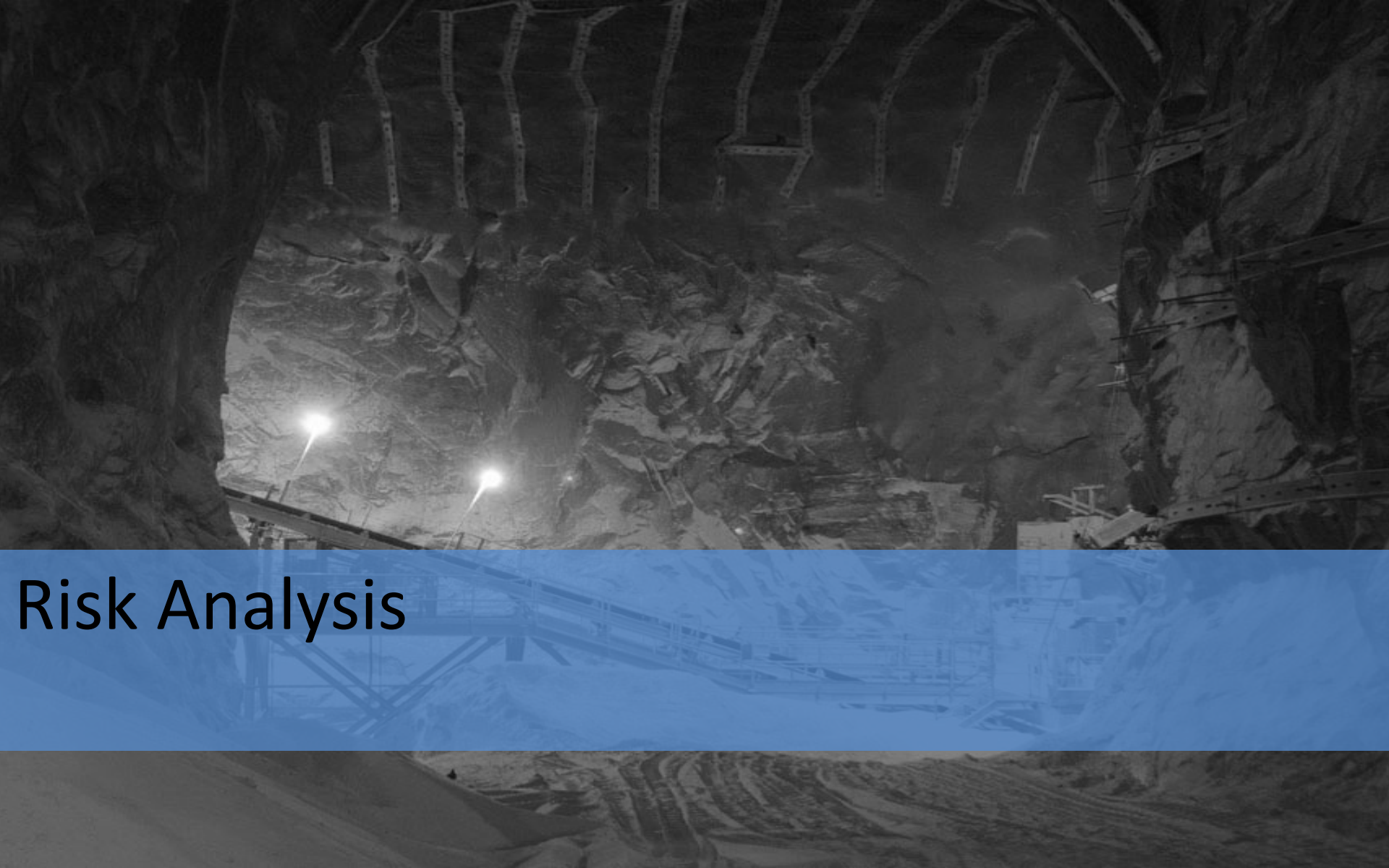
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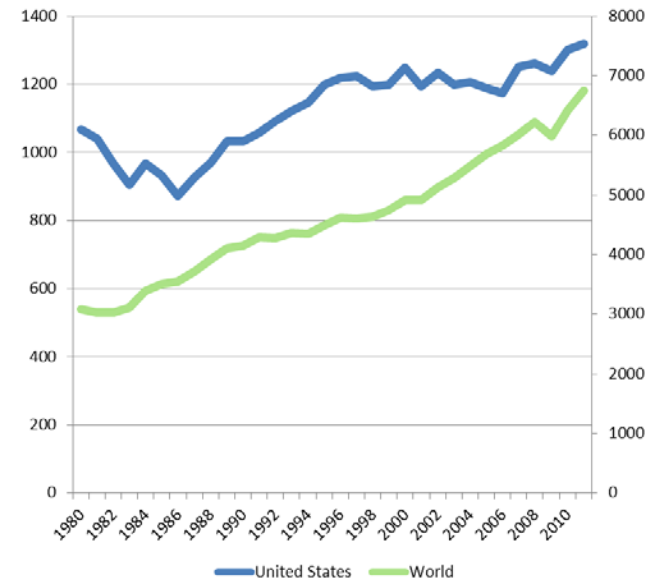
Risk Analysis

Pricing & Emissions

Prices Affecting the Production and Distribution Processes



CO2 Emissions from the Consumption and Flaring of Natural Gas



Company Overview

Industry &
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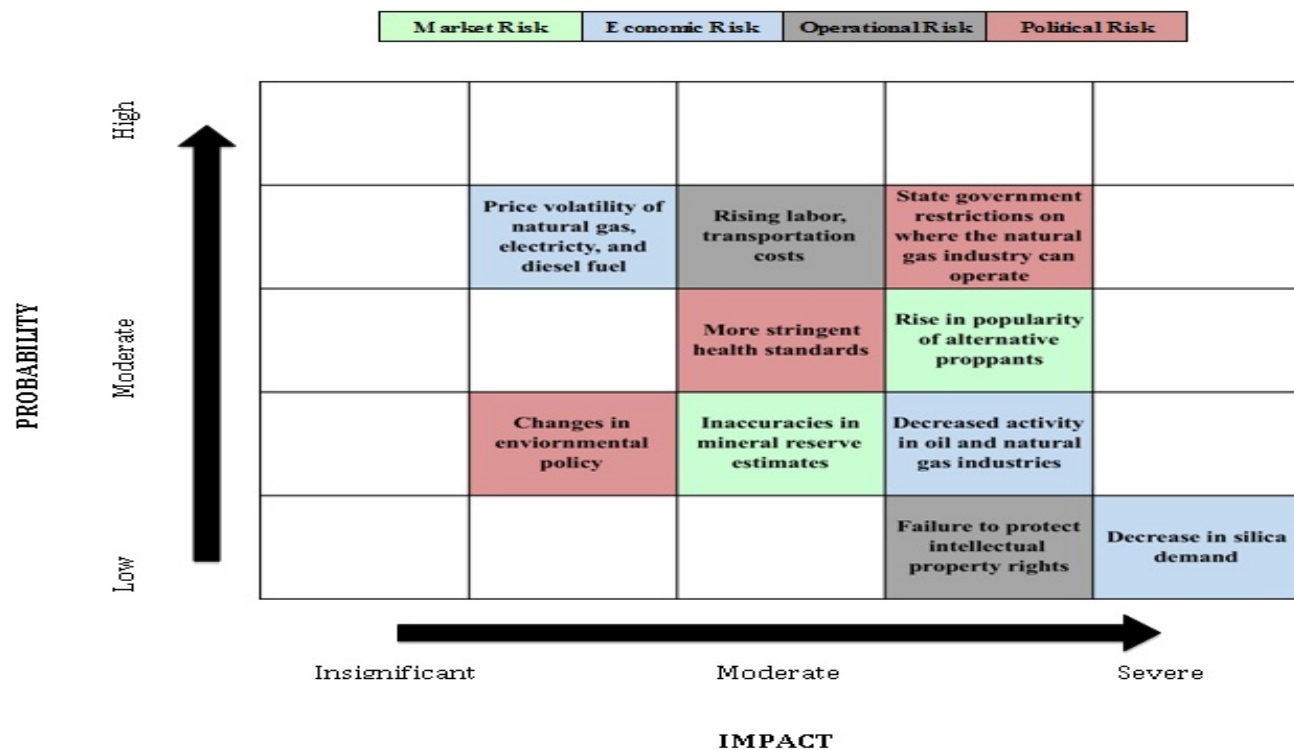
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Risk Matrix



Company Overview

Industry & Competitors

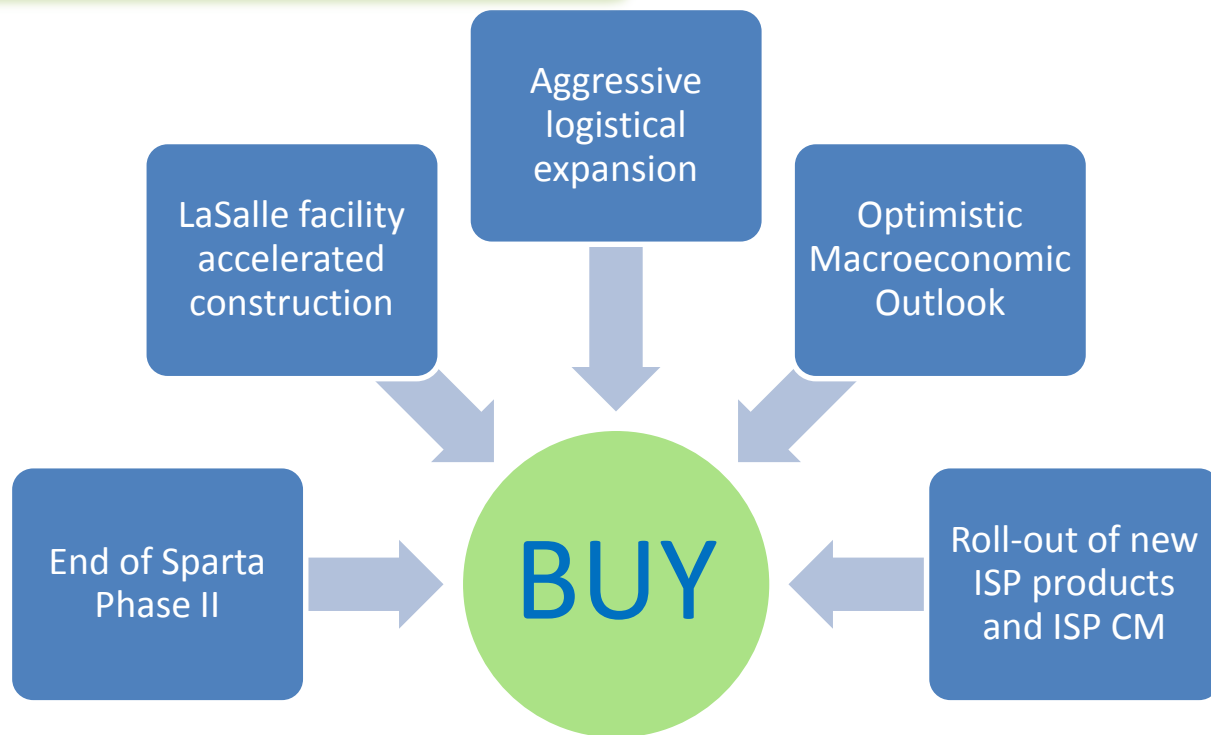
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Main Drivers



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Appendices

Income Statement	2009 A	2010 A	2011 A	2012 A	2013 E	2014 E	2015 E	2016 E	2017 E	2018 E
Total Revenue	191.6	245.0	295.6	441.9	546.8	702.1	787.0	912.9	1068.1	1271.1
Cost of Sales & Service	136.2	158.0	181.2	256.5	328.1	421.3	472.2	547.8	640.9	762.6
Gross Profit	55.4	87.0	114.4	185.4	218.7	280.8	314.8	365.2	427.2	508.4
SG&A Expense	15.2	20.9	35.2	44.7	54.7	70.2	78.7	91.3	106.8	127.1
Depreciation & Amort	17.9	19.3	21.0	25.1	29.7	35.0	38.3	43.8	50.7	59.3
Operating Income	22.3	46.8	58.2	115.6	134.3	175.6	197.8	230.1	269.8	322.0
Interest Expenses	-28.2	-23.0	-18.3	-13.6	-14.4	-14.4	-33.9	-37.6	-43.6	-51.2
Other Non-Operating Income	4.8	0.9	1.0	4.4	4.3	4.3	4.3	4.3	4.3	4.3
Unusual Items	3.3	-11.0	-3.4	3.4	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
Earnings Before Taxes (EBT)	2.2	13.7	37.5	109.8	122.3	163.6	166.2	194.9	228.6	273.2
Tax Expenses	-3.3	2.3	7.2	30.7	27.1	36.7	36.2	42.5	50.1	59.6
Net Income (NI)	5.5	11.3	30.3	79.2	80.6	110.1	108.6	127.4	150.2	178.9
Adjusted EBITDA	40.2	66.1	79.2	140.7	164.0	210.6	236.1	273.9	320.4	381.3

Appendices

Balance Sheet	2009 A	2010 A	2011 A	2012 A	2013 E	2014 E	2015 E	2016 E	2017 E	2018 E
Assets										
Cash and Cash Equivalents	14.5	64.5	59.2	61.0	153.7	187.6	207.9	241.2	283.1	336.1
Receivables	31.8	32.2	50.5	59.6	74.7	91.2	101.0	117.2	137.6	163.3
Inventories	23.3	22.4	29.3	39.8	59.1	72.2	80.0	92.8	108.9	129.3
Other Current Assets	6.9	7.7	36.6	16.8	23.4	20.8	20.8	20.8	20.8	20.8
Current Assets	76.5	126.9	175.6	177.3	310.9	371.8	409.7	471.9	550.4	649.5
Long-Term Investments	90.4	87.5	87.1	87.5	90.5	88.2	88.2	88.2	88.2	88.2
Net PPE	285.2	283.0	328.4	409.1	431.7	527.1	584.1	677.5	795.4	944.2
Other-Non Current Assets	11.9	11.2	14.7	13.0	15.3	13.2	13.2	13.2	13.2	13.2
Total Assets	464.0	508.5	605.8	686.8	848.5	1000.4	1095.2	1250.9	1447.3	1695.1
Liabilities and Shareholder Equity										
Short-Term Borrowing	1.2	3.7	5.6	5.4	3.7	3.7	3.7	3.7	3.7	3.7
Accounts Payable and Accrued Exp.	16.8	21.1	48.1	46.8	51.4	62.8	69.5	80.7	94.7	112.4
Other Current Liabilities	5.5	8.0	16.8	27.9	10.4	10.0	10.0	10.0	10.0	10.0
Total Current Liabilities	23.5	32.8	70.5	80.1	65.5	76.4	83.2	94.3	108.3	126.1
Long-Term Liabilities	177.6	251.9	270.4	253.0	368.8	444.6	467.5	535.6	627.9	750.6
Other Non-Current Liabilities	135.8	126.2	143.0	122.0	126.5	125.6	125.6	125.6	125.6	125.6
Total Liabilities	336.9	411.0	483.9	455.1	560.9	646.7	676.4	755.6	861.9	1002.3
Shareholders Equity & Paid-Up Capital	127.1	103.0	104.3	164.1	172.6	172.6	172.6	172.6	172.6	172.6
Retained Earnings	3.7	-0.2	30.0	82.7	128.2	194.3	259.4	335.9	426.0	533.3
Other Components of Equity	-3.8	-5.2	-12.4	-15.2	-13.1	-13.1	-13.1	-13.1	-13.1	-13.1
Total Equity	127.0	97.6	121.9	231.6	287.7	353.7	418.9	495.3	585.4	692.7
Total Liabilities and SH Equity	464.0	508.6	605.8	686.8	848.5	1000.4	1095.2	1250.9	1447.3	1695.1

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Statement of Cash Flows	2009 A	2010 A	2011 A	2012 A	2013 E	2014 E	2015 E	2016 E	2017 E	2018 E
Cash flow from operation										
Net Income	5.5	11.3	30.3	79.2	80.6	110.1	108.6	127.4	150.2	178.9
Depreciation and Amortization	17.9	19.3	21.0	25.1	33.5	30.0	32.9	37.5	43.4	50.9
Other Non-Cash Adjustments	-6.0	1.3	-5.2	-4.7	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1
Changes in Non-Cash Capital	-3.5	4.7	-3.5	1.4	-51.7	-10.5	-10.5	-10.5	-10.5	-10.5
Total cash from operation	13.9	36.7	42.7	101.0	60.3	127.4	128.8	152.3	181.0	217.1
Cash flow from investing										
Net CAPEX	-13.4	-15.2	-66.8	-105.7	-77.7	-64.1	-56.7	-62.4	-68.7	-75.5
Disposal of Fixed Assets	0.0	0.1	0.1	1.3	0.2	0.4	0.4	0.4	0.4	0.4
Other Investing Activities	-	-	-	-	-25.0	-	-	-	-	-
Total cash from investing	-13.3	-15.2	-66.6	-104.5	-102.5	-63.7	-56.3	-62.0	-68.3	-75.1
Cash flow from financing										
Dividend Paid	-	-51.6	-	-26.5	-6.6	-	-	-	-	-
Total Debt Issued	3.3	83.4	264.9	-	372.9	125.1	94.8	125.3	80.0	52.8
Total Debt Repaid	-3.5	-11.2	-240.5	-6.7	-264.0	-170.4	-147.0	-193.8	-170.4	-170.4
Issuance of Common Stock	-	11.8	-	50.1	6.6	-	-	-	-	-
Other Financing Activities	-0.1	-3.9	-5.6	-10.5	-3.7	-5.9	-6.4	-6.6	-5.7	-6.2
Total cash from financing	-0.3	28.5	18.8	6.4	105.2	-51.2	-58.7	-75.2	-96.1	-123.7
Net change in cash	0.3	50.0	-5.2	2.9	62.9	12.5	13.8	15.1	16.6	18.2
Beginning Cash		14.5	64.5	59.2	61.0	128.7	141.2	155.0	170.1	186.7
Ending Cash	14.5	64.5	59.2	61.0	128.7	141.2	155.0	170.1	186.7	204.9

Appendices

Period End Date							
USD (Millions)	2012 A	2013 E	2014 E	2015 E	2016 E	2017 E	2018 E
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Discounted Cash Flow (DCF) Valuation Analysis							
Revenue	441.9	546.8	702.1	787.0	912.9	1068.1	1271.1
Adjusted EBITDA	140.7	164.0	210.6	236.1	273.9	320.4	381.3
(+) Depreciation and Amortization	25.1	29.7	35.0	38.3	43.8	50.7	59.3
(-) Net Increase in Working Capital	7.9	-148.2	-50.0	-31.1	-51.1	-64.5	-81.3
(-) CapEx	-80.7	-22.6	-95.4	-56.9	-93.5	-117.9	-148.7
Free Cash Flow	93.1	22.8	100.2	186.4	173.1	188.7	210.6
EBITDA Margin	32%	30%	30%	30%	30%	30%	30%
FCF/EBITDA	66%	14%	48%	79%	63%	59%	55%
<hr/>							
	2013 E	2014 E	2015 E	2016 E	2017 E	2018 E	
Year for Value of CF			0	1	2	3	4
Discounted Cash Flows	\$ 22.8	\$ 100.2	\$ 165.8	\$ 137.0	\$ 132.9	\$ 131.9	

Appendices

Critical Driver Assumptions	
Valuation Period	1 Year Forecast
Tax Rate	25%
5Y CAGR (2013-2018)	18.4%
WACC	12.40%
Perpetual Growth Rate	5.0%

SLCA	
PT	\$ 39.70

WACC Computation	
Beta	1.66
Risk Free Rate	3.50%
After Tax Debt	2.25%
Debt/Capital	32.1%
Equity Capital	67.9%
Capital	\$2,341.45
Cost of Equity	17.20%
Risk Premium	8.25%
WACC Computation	12.40%
Market Cap	\$1,590.80
Debt	\$750.65
Check	100.0%

Per Share Calculation	
Terminal Value	\$2,986.31
NPV of TV	\$1,870.73
PV FCF	\$667.86
Enterprise Value	\$2,538.59
Debt	\$750.65
Cash (2018)	\$336.07
Equity Value	\$2,124.02
Fully Diluted Shares	53.5
Equity Value Per Share	\$39.70

Implied Terminal EBITDA Multiple	
2018 Unlevered FCF	\$210.57
Perpetual Growth Rate	5%
Terminal FCF	\$221.10
WACC - Terminal	12.40%
Enterprise	\$2,986.31
EBITDA Multiple	7.8x

Appendices

Key Financial Ratios										
	2009A	2010A	2011A	2012A	2013E	2014E	2015E	2016E	2017E	2018E
Liquidity Ratios										
Current Ratio	3.26	3.86	2.49	2.21	4.75	4.87	4.93	5.00	5.08	5.15
Quick Ratio	2.64	1.90	1.65	1.45	2.40	2.41	2.43	2.45	2.47	2.49
Cash Ratio	0.62	1.96	0.84	0.76	2.35	2.46	2.50	2.56	2.61	2.67
Efficiency Ratios										
Total Asset Turnover	0.41	0.48	0.49	0.64	0.64	0.70	0.72	0.73	0.74	0.75
NWC Turnover	3.62	2.60	2.81	4.55	2.23	2.38	2.41	2.42	2.42	2.43
Inventory Turnover	8.23	10.93	10.09	11.09	9.25	9.73	9.84	9.84	9.81	9.83
Profitability Ratios										
Gross Profit Margin	28.9%	35.5%	38.7%	42.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
EBIT Margin	11.6%	19.1%	19.7%	26.2%	24.6%	25.0%	25.1%	25.2%	25.3%	25.3%
EBIDTA Margin	21.0%	27.0%	26.8%	31.8%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
ROA	1.2%	2.2%	5.0%	11.5%	9.5%	11.0%	9.9%	10.2%	10.4%	10.6%
ROE	4.4%	11.0%	29.1%	48.2%	46.7%	63.8%	62.9%	73.8%	87.0%	103.7%
Solvency Ratios										
Debt Ratio	38%	50%	45%	37%	43%	44%	43%	43%	43%	44%
Debt to Equity Ratio	140%	258%	222%	109%	128%	126%	112%	108%	107%	108%

Appendices

Competitor's Name	Ownership	LTM Revenue (mm)	TEV/EBITDA		P/EPS	
			LTM 2014	NTM 2014	LTM 2014	NTM 2014
U.S. Silica Holdings Inc.	Public	515.4	12.23x	12.05x	20.61x	19x
Badger Mining Corporation	Private	25	-	-	-	-
CARBO Ceramics Inc. (NYSE:CRR)	Public	656.5	14.6x	12.9x	30.6x	27.3x
Emerge Energy Services LP (NYSE:EMES)	Public	1,118.58	14.2x	11.1x	41.9x	14.8x
Fairmount Minerals Ltd.	Private	47.9	-	-	-	-
Hi-Crush Partners LP (NYSE:HCLP)	Public	106.46	19.3x	13.2x	20.3x	14.1x
Preferred Proppants LLC	Private	-	-	-	-	-
Preferred Sands LLC	Private	-	-	-	-	-
Premier Silica LLC	Private	302.2	-	-	-	-
Superior Silica Sands LLC	Private	31.4	-	-	-	-
Unimin Corporation	Private	497.9	-	-	-	-

Appendices: Corp. Governance

Social Responsibility as of 2012	
Number of Employees	785
Employee Turnover (%)	8.0
Health & Safety Policy	Yes
Business Ethics Policy	Yes
Fair Remuneration Policy	No
Training Policy	No
Employee CSR Training	No
Equal Opportunity Policy	No
Human Rights Policy	No
Policy Against Child Labor	No
Employee Protection / Whistle Blower Policy	No

Source: Bloomberg

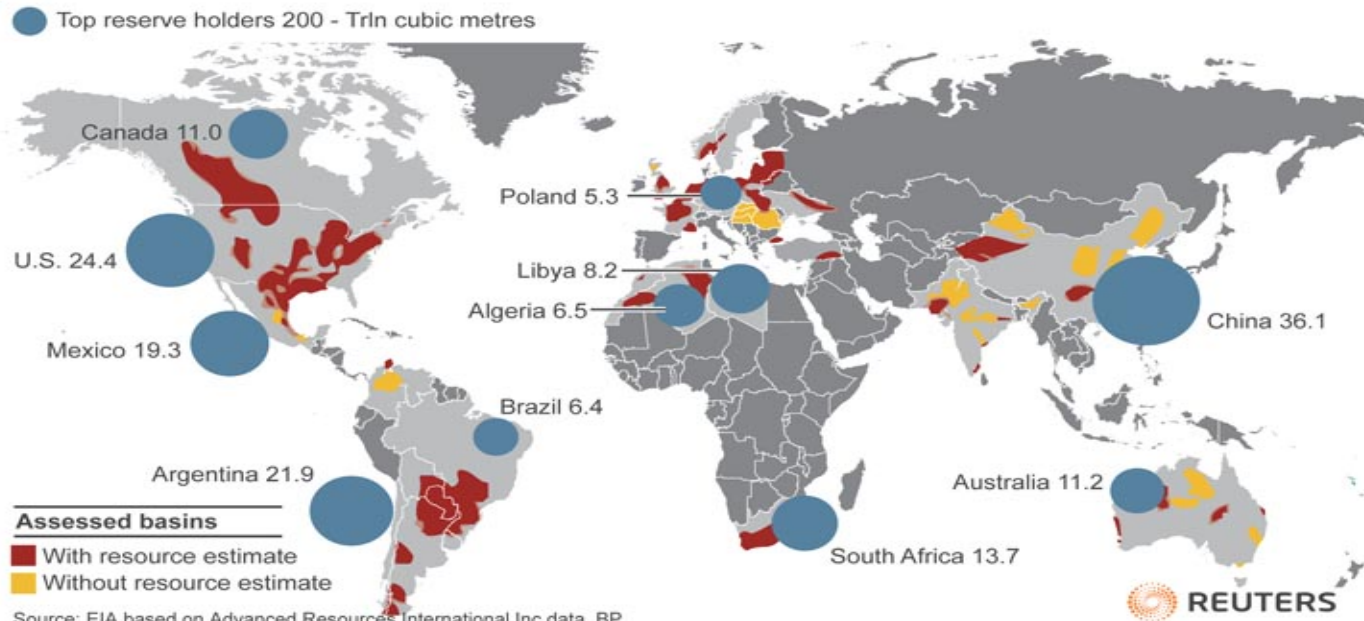
Corporate Governance as of 2012	
Size of the Board	7
Independent Directors	3
Board Duration	1
Number of Board Meetings	6
Attendance for Board Meetings (%)	100%

Source: Bloomberg

Criteria Based on OCED Principles	SLCA's Rating
Corporate Governance Framework	9
Shareholder Rights	8
Treatment of Shareholders	8
Role of Stakeholders	9
Disclosure and Transparency	8
Responsibilities of the Board	7

Appendices


Global shale gas basins, top reserve holders



Reuters graphic/Catherine Trevethan



U.S. Silica Holdings Inc.



Hilton Garden Inn
Washington, D.C.
February 21, 2014