

# COHEN INDEPENDENT RESEARCH GROUP

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# **Q**UICK VIEW

# VIASPACE INC.

Symbol VSPC.OB
Current Recommendation STRONG BUY
Current Price \$0.01
Valuation Target Price Range \$0.08-\$0.10
Year End 31-Dec
Dividend Yield N.A.
Industry Alternative Energy

VIASPACE INC. is an exciting high-growth alternative energy company transformed and restructured to focus on renewable energy—through its license for a fast-growing grass as a feedstock for nonfood crop biofuels—and clean energy—through its fuel-cell cartridge business and portfolio of direct methanol fuel cell patents licensed from Caltech, which manages NASA's Jet Propulsion Laboratory where the direct methanol fuel cell was invented.

The Company recently acquired Inter-Pacific Arts (IPA), which has a license for a fast-growing high yield hybrid grass called Giant King Grass that has the potential to be used in the production of nonfood biofuels and, in the more immediate term, animal feedstock for dairy cows, pigs, sheep, goats, fish and other animals. IPA also operates a profitable framed-art business with positive cash flows that will enable the Company to develop and expand its alternative energy businesses.

#### Financial Overview

52-Week High	\$0.07
52-Week Low	\$0.01
High Price - 3 Months	\$0.01
Low Price - 3 Months	\$0.01
Beta (60 month)	10.57
Price Change - 3 Months %	-50.0%
Price Change vs. Market - 3 Months	52.0%
Average Daily Volume ('000 shares)	1,704.80
Shares Outstanding (in million)	818.33
Market Capitalization (in \$ million)	8.48
Short Interest (% of float)	N.A.

OVCIVICW	
Institutional Ownership (%)	0.1%
Insider Ownership (%)	48.0%
Float (in million)	333.31
% Float Outstanding	40.7%
2009E Sales Growth %	56.1%
2009E EPS Growth %	N.A.
Debt/ Equity Ratio	4.84
Price/ Earnings est. 2009	14.8
Price/ Sales est. 2009	1.0
Price/ Oprtg. Cash Flow est. 2009	6.1
Price/ Book Value est. 2009	0.4



**Operating Profit Forecasts** 

All figures in US \$ million	2009	2010	2011	2012	2013
Optimistic Case	1.53	6.90	14.27	28.83	58.27
Base Case	1.39	6.27	12.74	25.75	52.97
Pessimistic Case	1.18	5.39	11.21	23.17	47.67

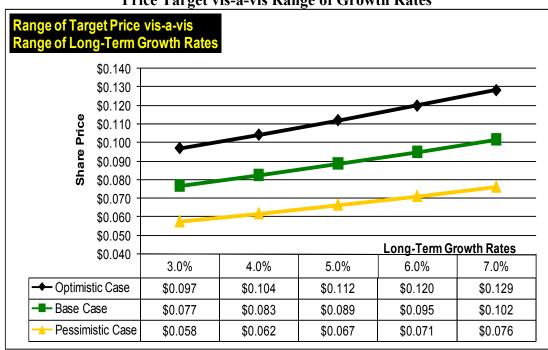
#### **EPS Forecast**

All figures in US\$	2009	2010	2011	2012	2013
Optimistic Case	0.001	0.004	0.008	0.016	0.033
Base Case	0.001	0.003	0.006	0.012	0.026
Pessimistic Case	0.001	0.002	0.005	0.009	0.020

#### **Sales Estimates**

All figures in US \$ million	2009	2010	2011	2012	2013
Optimistic Case	9.50	18.42	30.86	53.99	96.85
Base Case	8.63	16.75	27.56	48.21	88.05
Pessimistic Case	7.34	14.40	24.25	43.38	79.24

# Price Target vis-à-vis Range of Growth Rates





# VIASPACE EXECUTIVE SUMMARY

- In fourth-quarter 2008, VIASPACE Inc. (OTC Bulletin Board: VSPC) transformed itself into an alternative energy company with an acquisition of Inter-Pacific Arts (IPA). VIASPACE has reduced its operating costs and sold an unprofitable division and reduced debt. This restructuring and new corporate direction has created an exciting new company with revenue and profit potential that completely turns around the Company's prior financial outlook.
- IPA markets high quality, copyrighted, framed artwork that is manufactured in its plant in China and sold in U.S. retail chain stores. IPA reported audited revenues of \$5.4 million, a net profit of \$1.1 million in 2007, \$5 million in unaudited revenue and \$1 million of net profit during first three quarters of 2008. In addition, IPA had \$3 million in unaudited cash equivalents as of December 31, 2008.
- VIASPACE's renewable energy business is based on a worldwide license, obtained through the acquisition of IPA, to cultivate and sell Giant King Grass, a natural hybrid, non-genetically modified, fast-growing, perennial grass for livestock feed as well as a feedstock for non-food crop biofuel production. This grass grows to four meters in height in two months and produces four crops a year in tropical and subtropical areas of the world.
   VIASPACE has initially planted 1.2 million seedlings on leased cropland in China, holds options to lease additional acreage in China, and plans to expand the grass business into other areas of the world.
- Giant King Grass supports China's top three national initiatives: improved agriculture to feed its people; alternative energy and a cleaner environment. Burning a grass-based biofuel produces carbon dioxide; however this grass crop absorbs carbon dioxide. The net process is very green.
- Giant King Grass has immediate use as animal feed for cattle, sheep, horses, rabbits, pigs, poultry and fish. The \$40 billion global animal feed market, according to Feed International reports, has grown by 14% annually for the last ten years.
- Biofuels are the Company's ultimate target. The market for biofuels is expected to grow to more than \$86 billion according to latest industry reports. The grass can be used as a non-food source to produce cellulosic ethanol, methanol, biocrude and green gasoline. However the Company expects to make substantial profits in the short-term from animal feed even before biofuels become dominant. Because of this, the Company will not be dependent on timing of construction of biofuel plants.
- Direct Methanol Fuel Cell Corporation (DMFCC), a subsidiary in which VIASPACE owns a 71.4% stake, remains the third corporate division of the restructured company. DMFCC is engaged in the development of disposable fuel cell cartridges for fuel-cell powered portable electronics such as notebook computers and mobile phones. DFMCC is also developing the cartridge manufacturing and distribution infrastructure. The Company plans to leverage its strong fuel cell patent portfolio licensed from Caltech and USC into key strategic partnerships with market leading OEMs and fuel cell manufacturers by offering them required patent protection.
- Since the cartridges are a disposable consumable item, they represent a significant ongoing recurring revenue stream similar to razor blades or printer cartridges. DMFCC is a cartridge partner with Samsung in Korea and other companies in potential multi-billion dollar markets. According to Frost & Sullivan, the market for commercial fuel cells used in portable devices is expected to reach \$616 million by 2013.

#### **Valuation Summary**

• Cohen Independent Research Group valued VIASPACE common stock based on our Discounted Cash Flow (DCF) method of valuation to derive the long-term price target. We used three scenarios—Base Case, Optimistic Case and Pessimistic Case—while valuing VIASPACE through the DCF valuation methodology. Based on our valuation approach, we derived a Base Case target price for the stock at \$0.09. Even under our Pessimistic Scenario, VSPC is valued at \$0.06 per share.



# INVESTMENT THESIS AND RECOMMENDATION

VIASPACE's alternative energy strategy is to deliver consumable products that produce a recurring revenue stream. Products include the fast-growing Giant King Grass, which is used as a renewable feedstock for nonfood based biofuels (and for animal feed), and disposable fuel cartridges for fuel cell-powered notebook computers and mobile phones. VIASPACE's products have excellent profit margins and do not require major capital investment. The Company's fuel cell business is based on breakthrough technologies developed by NASA's Jet Propulsion Laboratory, which is managed by California Institute of Technology (Caltech), and licensed to VIASPACE's subsidiary, Direct Methanol Fuel Cell Corporation. The acquisition of Inter-Pacific Arts has enabled the Company to create a presence in the Renewable Energy industry as well as secure a profitable, positive cash flow business to support its growth in renewable and clean energy. VIASPACE is well-positioned to benefit from the expected growth in renewable energy, and its strategy and proven ability to partner with leading fuel-cell OEMs will help the Company to leverage the partners' customers, channel partners and manufacturers, thus fueling future earnings. In our opinion, VIASPACE's presence in high growth markets of renewable sources of energy and fuel-cell cartridges is expected to result in a significant market opportunity. VSPC common stock has declined from an all-time high of \$5.36 to a recent low of \$0.01. This decline has occurred despite a significant restructuring and improvement in the Company's fundamentals, especially post-acquisition of IPA, which should make VSPC a cashpositive Company. We believe this decline has moved share prices close to a bottom, thus providing investors with a unique and extraordinary opportunity for significant share price improvement from current levels. At \$0.01 per share, with a valuation target of \$0.09, we recommend the purchase of VIASPACE common stock for long-term growth investors.



# **DCF Valuation Summary**

**Chart 1: DCF Target Price** 

All figures in US \$ million except share data	2009	2010	2011	2012	2013
FREE CASH FLOW TO FIRM (FCFF)					
NOPLAT	0.80	3.67	7.16	14.08	29.65
Change in Working Capital	-0.71	-0.67	-1.61	-2.46	-3.05
Capital Expenditure (Including Acqusitions)	-0.13	-0.47	-0.93	-1.85	-3.70
Free Cash Flow To Firm (FCFF)	-0.04	2.53	4.62	9.77	22.91
DCF VALUATION - FCFF APPROACH					
Free Cash Flow To Firm (FCFF)	-0.04	2.53	4.62	9.77	22.91
Discount Factor	0.85	0.72	0.61	0.52	0.44
Present Value of Free Cash Flow to Firm	-0.04	1.82	2.81	5.04	10.01
Continuing Value	185.0				
Discount Factor	0.44				
Present Value of Continuing Value	80.9				
Enterprise Value	100.5				
Less: Debt	0.50				
Add: Cash	0.61				
Equity Value	100.62				
Number of Shares Outstanding	780.83				
Equity Value Per Share/ DCF Target Price	\$0.13				
Current Stock Price	\$0.01				
Upside/ (Downside) Potential	1188.68%				

At \$0.01 per share, we believe VIASPACE Inc. is considerably undervalued even when compared to our most conservative valuation model. The Discounted Cash Flow methodology employed to value the Company indicates that an investment in VSPC is likely to yield high returns in the long term. We used three different scenarios – Base Case, Optimistic Case and Pessimistic Case – while valuing the Company through our Discounted Cash Flow method. Under our most conservative long-term valuation approach based on the Pessimistic Scenario, VIASPACE is valued at \$0.06 per share. There is significant potential for appreciation from current levels.

Table 1 : Price Targets<sup>1</sup>
Target Price Range vs. Different Growth Rates

All figures in US\$	3.0%	4.0%	5.0%	6.0%	7.0%
Optimistic Case	\$0.097	\$0.104	\$0.112	\$0.120	\$0.129
Base Case	\$0.077	\$0.083	\$0.089	\$0.095	\$0.102
Pessimistic Case	\$0.058	\$0.062	\$0.067	\$0.071	\$0.076

<sup>&</sup>lt;sup>1</sup> Long-term price target based on our Discounted Cash Flow Method of Valuation



# **COHEN GROWTH DRIVER ANALYSIS – BASE CASE**

Annual Revenues, Margins, Assets, Turns	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
Gross Margin	36%	41%	53%	60%	64%	68%
Operating Margin	-127%	16%	37%	46%	53%	60%
Net Margin - Income Avail. To Shreholders	-159%	9%	22%	26%	29%	33%
EPS - Diluted	(0.01)	0.00	0.00	0.01	0.01	0.03
EBITDA	(7.0)	1.4	6.3	12.7	25.7	53.0
Free Cash Flow	(26.2)	0.58	2.59	4.70	9.84	22.94
Cash	0.7	2.5	9.1	22.1	47.0	96.8
Working Capital	2.8	2.6	1.9	0.2	(2.3)	(5.4)
Long Term Debt (Outstanding to Chang)	4.8	-	-	-	-	-
Total Debt	4.8	-	-	-	-	-
Total Assets	20.0	21.1	28.3	42.3	69.3	123.4
DSO	44.9	54.8	32.9	23.7	17.9	14.6
Inventory Turns	84.4	91.3	65.7	51.1	29.2	18.3
Fixed Asset Turns	56.3	41.6	31.7	31.6	32.1	32.9
Cash Cycle	0.7	1.1	0.8	0.5	0.4	0.4

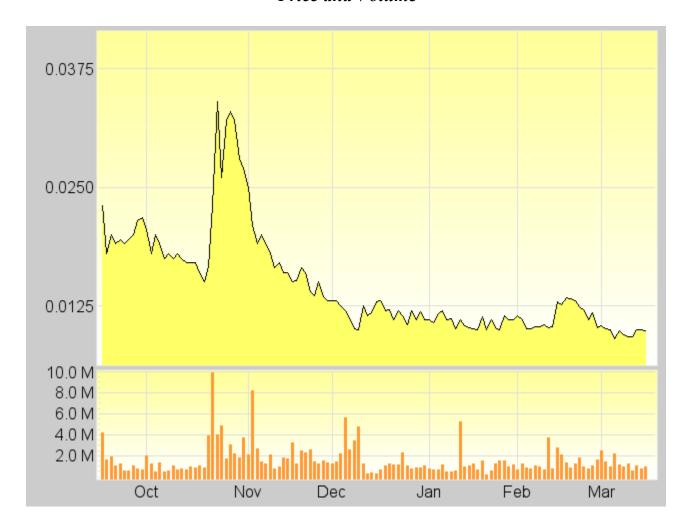
Percentage Change in Annual Revenues, Ma	2008E	2009E	2010E	2011E	2012E	2013E
Revenues		56.1%	94.0%	64.5%	74.9%	82.6%
Gross Margin		14.1%	28.3%	12.2%	7.1%	6.4%
Operating Margin		-112.7%	132.7%	23.6%	15.5%	12.6%
Net Margin		-105.6%	145.3%	17.4%	11.7%	14.9%
EPS - Diluted		-106.3%	375.8%	93.1%	95.4%	109.9%
EBITDA		-119.8%	351.4%	103.3%	102.0%	105.7%
Free Cash Flow		-102.2%	349.8%	81.4%	109.4%	133.3%
Cash		255.0%	264.8%	143.3%	113.1%	106.0%
Working Capital		-7.3%	-27.8%	-87.8%	-1096.2%	135.4%
Long Term Debt		-100.0%	n.a.	n.a.	n.a.	n.a.
Total Debt		-100.0%	n.a.	n.a.	n.a.	n.a.
Total Assets		5.5%	33.7%	49.8%	63.8%	78.1%
DSO		22.0%	-40.0%	-27.8%	-24.6%	-18.4%
Inventory Turns		8.1%	-28.0%	-22.2%	-42.9%	-37.5%
Fixed Asset Turns		-26.2%	-23.8%	-0.3%	1.5%	2.6%
Cash Cycle		52.6%	-32.5%	-34.5%	-23.0%	-8.1%

The growth story is exciting. In 2009E, VIASPACE should generate \$8.6 million in top line revenues growing to an estimated \$88.0 million by 2013. Between 2009 and 2016, Gross Margins are estimated to settle between 60% and 68%. In 2009E, the Company should generate \$1.4 million of EBITDA and \$0.001 EPS primarily due to its framed art business. The Company, through its DMFCC subsidiary, is currently developing fuel-cell products and technologies targeting high-growth clean energy markets. The Company's renewable energy operation is growing and expects to sell Giant King Grass as a vital feedstock source for

cellulosic ethanol and other biofuels, as well for animal feed that will generate near-term revenue and profit. IPA's framed-art business is expected to generate enough cash flows to fuel the Company's CAPEX for development of its alternative energy businesses. Company's fuel-cell patent portfolio exclusive license agreements, coupled with the enormous clean and renewable energy markets, will attract partners and leading players in each key business segment, thus leveraging the Company's customer, networks and manufacturing base.



## Price and Volume



	Open	High	Low	Close	Volume
2009/03/16	0.01	0.01	0.01	0.01	966,900

	Last Month	Last 3 Months	Last 6 Months	Last 9 Months	Last 12 Months
High Price	0.01	0.01	0.04	0.05	0.05
Low Price	0.01	0.01	0.01	0.01	0.01
Close Price	0.01	0.01	0.02	0.04	0.05
Total Volume	12,417,700	59,042,200	181,355,100	234,137,200	396,473,400
Average Daily Volume	1,128,900	1,180,800	1,590,800	1,315,400	1,638,300
Price Change vs Market (%)	98	120	77	42	35



	Last 4 Weeks	Last 13 Weeks	Last 26 Weeks	Last 52 Weeks
High Price	0.01	0.01	0.04	0.06
Low Price	0.01	0.01	0.01	0.01
Close Price	0.01	0.01	0.02	0.05
Total Volume	18,548,500	66,799,200	187,054,300	401,023,500
Average Daily Volume	1,159,300	1,171,900	1,545,900	1,617,000
Price Change (%)	0.0	0.0	-50.0	-80.0
Price Change vs Market (%)	102	118	83	35

Current Market Value	8,149,133
Market Value As % Of Revenues	1,811
Reported Shares Out. (2008/11/10) (#)	823,144,792
Balance Sheet Shares Out. (2008/09) (#)	508,830,743
Float (#)	685,627,775
Float As % Of Shares Outstanding	83.3

Weekly Volume As % Of Shares Out.	0.12
Liquidity Ratio (\$000s)	3.00
On-Balance Volume Index Last 4 Weeks (%)	49

5 Day Moving Average	0.01
10 Day Moving Average	0.01
10 Week Moving Average	0.01
30 Week Moving Average	0.02
200 Day Moving Average	0.02

200 Day Price Index vs Market (%)	62
Price Momentum This Week (%)	51
Price Momentum Prior Week (%)	55
Beta (60 Month)	9.97
Beta (36 Month) Average	-0.27



# THE REPORT

VIASPACE INC.

(OTC BB: VSPC)

STRONG BUY CURRENT PRICE \$0.01 TARGET PRICE \$0.08- \$0.10



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# THE REPORT

VIASPACE INC. (OTC BB: VSPC)
STRONG BUY
CURRENT PRICE \$0.01
TARGET PRICE \$0.08- \$0.10

March 18, 2009

# THE COMPANY

Business
restructuring and
acquisition has made
VIASPACE an
exciting growth
story.

VIASPACE Inc, through acquisitions and business restructuring, has re-invented itself by focusing on alternative energy:

- Renewable Energy through its license to cultivate a unique fast-growing grass as a feedstock for non-food crop biofuels. This grass can be used for the production of cellulosic biofuels such as ethanol, methanol biocrude and green gasoline. The grass is also used as an animal feed.
- Clean Energy through the Company's disposable fuel cartridges for fuel cell powered notebook computers and mobile phones
- A growing and profitable Framed Art business as a cash-producing noncore segment.

VIASPACE Inc was founded in 1998 to commercialize proven technology from NASA and the Department of Defense Technology originally developed at the NASA Jet Propulsion Laboratory (JPL). This technology was licensed from the Caltech which manages JPL for NASA. The Company recently announced the acquisition of Inter-Pacific Arts Corp. This company is a profitable framed art business and owns the license for proprietary fast-growing Giant King grass. The Company's presence in alternative energy along with its experienced management team makes it an exciting investment opportunity

The Company's business segments are targeting the green energy space, slated to grow at a significant rate in the near future.

VIASPACE is likely to gain a significant competitive advantage in the market due to the following factors:

- The license to cultivate Giant King Grass, which VIASPACE obtained through the acquisition of IPA, is likely to enhance its position in the renewable energy industry as this grass can be used as a non-food feedstock for biofuels. In the near term, VSPC will benefit from the sale of this grass as animal feedstock and ingredient for manufacturing juices, ice-creams and other products.
- <u>DMFCCs expertise in fuel cell cartridge safety and design, coupled with its business model to partner with leading OEMs such as Samsung and other</u>



manufacturers by offering them patent protection, will make the Company a partner of first choice for large fuel cell manufacturers. This not only lays the foundation for a long term relationship with key players in the industry but also ensures the Company a recurring revenue stream.

• IPA Framed Art Business is a self-sufficient and positive cash flow business segment. This segment is likely to generate significant cash flows for the Company; thus feeding the nearer-term capital requirements of the Company's core business segments. As a result, IPA will reduce the Company's dependence on external funds and significantly reduce VIASPACE's financial risks.

These factors representing VIASPACE's diversified business model targeting multi-billion dollar alternative energy markets makes it an exciting long-term investment story.

#### Evolution of the Company

VIASPACE Inc., formerly known as Global-Wide Publications Ltd. (GWP), was incorporated in July 2003, and effected a reverse merger with ViaSpace Technologies, LLC on June 22, 2005. GWP was engaged in the production and distribution of an ethnic bilingual weekly newspaper. However, the Company sold its newspaper operations and entered an agreement to acquire ViaSpace Technologies LLC through a reverse merger.

ViaSpace Technologies LLC, was established in July 1998. Its purpose was to develop, transform and commercialize space and defense technologies from NASA and the Department of Defense into hardware and software solutions that can be used to solve complex problems relating to homeland security and alternative energy needs.

Recently, on October 21, 2008, VIASPACE Inc., through its wholly-owned subsidiary, VIASPACE Green Energy Inc. (VGE), entered into a Securities Purchase Agreement to acquire 100% of Inter-Pacific Arts (IPA) Corp., a British Virgin Islands international business company. VIASPACE owns 59.3% of VGE post-acquisition.

IPA specializes in the manufacturing of high quality, copyrighted, framed artwork sold in U.S. retail chain stores. IPA China also has a license to grow and sell a new fast-growing hybrid grass to be used for production of non-food based biofuels and as feed for livestock.

As a part of its re-organization efforts, VIASPACE announced that it sold its unprofitable non-core Security Business line to Knovitech, Inc for \$479,000 in cash and debt forgiveness. This move is likely to allow VIASPACE to strengthen its focus on its core Alternative Energy businesses, which offer

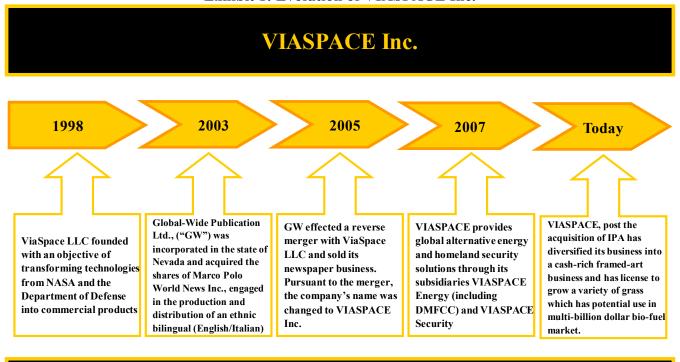
Earlier focus was to develop and commercialize proven space and defense technologies into hardware and software solutions.

Business
restructuring has
resulted in sale of its
non-core and less
profitable Security
Business line.



significant growth opportunities. Thus, the IPA acquisition and sale of its non-core and unprofitable business line bodes well for its future.

**Exhibit 1: Evolution of VIASPACE Inc.** 



# **Evolution of the Company**

Today, VIASPACE Inc. is an alternative energy company providing global renewable and clean energy solutions. Through its subsidiaries, the Company is engaged in raw material for cellulosic biofuels, the development and marketing of Direct Methanol Fuel Cell (DMFC) products, and a non-core framed-art business. VSPC conducts its core operations through VIASPACE Green Energy, which through IPA holds the license for cultivating Giant King Grass, and its Direct Methanol Fuel Cell Corporation subsidiary.

In last quarter of 2008, VIASPACE acquired IPA which operates a profitable framed art business and has license for high yield grass.

#### IPA Acquisiton Overview

On October 21, 2008, VIASPACE's, through its wholly-owned subsidiary VIASPACE Green Energy, announced the acquisition of Inter-Pacific Arts (IPA), an established and profitable framed-art business that also holds a license for fast-growing high yield grass, which is expected to be a key growth driver for the Company.



#### **Terms of the Acquisition**

As per the terms of the Securities Purchase Agreement, VIASPACE Green Energy Inc. (VGE), would acquire 100% of Inter-Pacific Arts Corp. (IPA BVI) including the entire equity interest of Guangzhou Inter-Pacific Arts Corp. China (IPA China) from Sung Hsien Chang, the former sole shareholder of IPA BVI and IPA China. In exchange, VGE agreed to pay \$10.4 million in a combination of cash, and newly-issued shares of VIASPACE and VGE stock.

The closing of this agreement will be completed through two closings. As per the first closing (completed on October 21, 2008), VGE issued 3,500,000 newly-issued shares to Chang and his designees. VIASPACE also issued 245,960,622 shares of its common stock to Chang, the licensor of the grass and a finder as part of his commission. In return, Chang delivered 70% of the outstanding common stock of IPA BVI. VIASPACE owns 59.3% of VGE post-acquisition. Chang and his designees hold the remaining minority interest of VGE.

As per the Agreement, the second closing has to occur within 240 days of the first closing. The second closing will require VGE/VIASPACE to pay \$4.8 million as a Cash Consideration (with applicable interest as put forth in the document) to Chang. As per the agreement, VIASPACE will also issue 1.8% of its then outstanding common stock to designees. In return, Chang will deliver the remaining 30% of the outstanding shares of IPA BVI (making IPA China a wholly-owned subsidiary of IPA BVI) to VGE.

The Company has notified us that the second closing is expected to be completed in one of several ways listed below:

- Issue VIASPACE shares of stock at an agreed upon price to a 3<sup>rd</sup> party in exchange for \$4.8 million in cash. Use these proceeds for the second closing.
- Convert the \$4.8 million dollars into long-term debt that is repaid from future profits. This approach will likely include a cash premium and issuing a negotiated number of VIASPACE shares of stock as additional stock compensation.
- Sell certain business units of VIASPACE to raise cash to pay all or a portion of \$4.8 million. The remaining amount owed could be repaid to out of future profits of IPA. This method may also include an additional cash or stock compensation component.
- Use existing cash of IPA to repay a portion of the \$4.8 million with the remaining amount repaid out of future profits of IPA.

Since there are multiple scenarios that could satisfy the second closing, we have chosen to use in the financial model the scenario that is most dilutive to existing shareholders. In our view, issue of additional equity shares in exchange for \$4.8 million in cash proceeds would be most dilutive. Hence, we have assumed issue of 160-480 million equity shares under our different forecast and valuation



scenarios. These shares may be issued at a discount to the current market price of the stock.

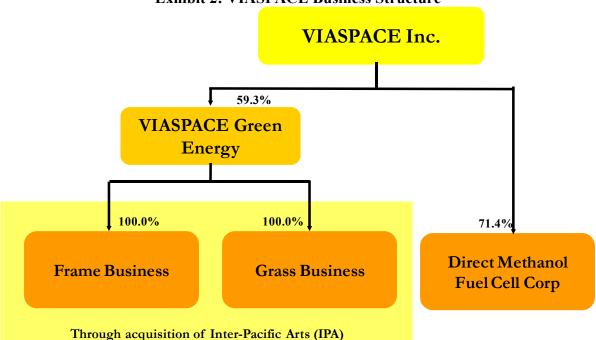
## **Our View of the Acquisition**

Company to benefit from the positive cash flows generated by the framed art business, which will be re-invested to develop other business units

The profits and positive cash flows generated by IPA are likely to be extremely important for VSPC, especially in short term, as acquiring additional capital and funds is typically the most challenging factor for small and mid sized companies. Going forward, the grass business is expected to quickly become profitable, as it can be immediately used as animal feed. The acquisition has made VIASPACE a diversified player in the Alternative Energy industry with its new focus on biofuel and fuel-cell potential. The Company's decision to maintain its framedart business is also a significant positive in our view. The profits and cash flows from this business will be reinvested into growth of its renewable biofuel and fuel-cell businesses. As a result of these factors, we are optimistic that this acquisition is likely to add significant value to the overall potential of VIASPACE and should enhance shareholder value.

# Company's Business Structure

**Exhibit 2: VIASPACE Business Structure** 





#### **VIASPACE Alternative Energy Business Units**

The primary purpose of VIASPACE's Alternative Energy business units is to produce recurring revenue stream products that can result in non-food based green biofuels, effective energy conservation, reduced emissions of carbon dioxide and other pollutants, and increased performance and convenience for the consumer.

DMFCC is focused on developing methanol fuel cell infrastructure for micro-fuel cells, a potential replacement for traditional batteries

## Direct Methanol Fuel Cell Corporation

The Company has a 71.4% ownership in Direct Methanol Fuel Cell Corporation (DMFCC). DMFCC is currently engaged in developing the methanol fuel infrastructure for micro-fuel cells. Methanol fuel cells are likely to be used as replacements for traditional batteries in many portable electronic devices such as laptop computers and cell phones. Methanol fuel cells are expected to gain a substantial market share, because they offer a longer operating time as compared to current lithium ion batteries and may be instantaneously recharged by simply replacing the disposable fuel cartridge. DMFCC is a cartridge partner with Samsung and other companies.

DMFCC is focusing on the cartridge business-designing, manufacturing and distributing disposable packaged fuel containers for the fuel cells industry. Its expertise is in cartridge design, safety certification and marketing. DMFCC has developed a global network of manufacturing partners that are already trusted suppliers to large consumer electronics manufactures. DMFCC is also establishing distribution capabilities through a network of partners.



**Exhibit 3: DMFCC's Fuel Cartridge Prototype** 

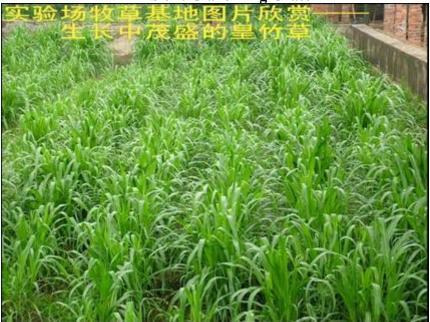


Source: Company Presentation

IPA is cultivating a high-yield grass that can be used for production of cellulosic biofuels and in the near-term as an excellent animal feed VIASPACE Green Energy, through the acquisition of IPA, is actively pursuing cultivation of its licensed Giant King Grass, which is likely to be an excellent renewable source for producing cellulosic biofuels including ethanol. Giant King Grass was originally developed as an animal feed for cows, pigs, sheep, goats, rabbits, turkeys and fish. Animal feed provides an immediate market for the grass which is also being grown as a feedstock for production of cellulosic ethanol, methanol, bio-crude and green gasoline. VIASPACE expects to generate \$20 million in revenue over the next two years including the sale of grass for livestock feed and biofuels.



**Exhibit 4: Giant King Grass** 





Source: Company Presentation

High quality framed artwork manufactured by IPA in China is sold to large retail chains in the United States.

#### Framed Art Business

Inter-Pacific Art specializes in high quality, copyrighted, framed artwork sold in large U.S. retail chain stores. IPA conducts framed-art marketing and sales in Atlanta and owns a manufacturing plant in Guangzhou China. The current positive cash flow and net income from IPA's framed-art business is expected to be a continuing and reliable financing source for the development of its alternative energy businesses.



**Exhibit 5: Samples of Company's Framed Art** 



Source: Company Presentation



# **BULLISH CASE**

- VIASPACE, backed by corporate restructuring and an acquisition, has become an exciting investment story.
- Strong product portfolio and proprietary technology/licenses target exciting, high growth markets.
- A strong and expanding patent and license portfolio provides entry into the worldwide fuel cell and biofuels markets.
- The Company leverages research and development completed by NASA to commercialize products.
- As a part of its acquisition of Inter-Pacific Arts (IPA), VIASPACE acquired exclusive license to cultivate Giant King Grass, likely to have potentially significant demand as non-food feedstock for producing biofuels.
- VIASPACE's fuel cell cartridge business is a razor/razor blade business model targeted at fulfilling the fuel manufacturing and distribution infrastructure needs of the exciting fuel cell market.
- Strong partnerships across the value chain help VIASPACE to leverage its fuel cell products and technology expertise with key industry players; OEMs, contractors and manufacturers, rather than individually competing with them.
- The Company has already partnered with some of the world's largest OEMs including Samsung.
- The grass, developed in China, is a very fast growing, perennial livestock feed that grows to four meters high in 60 days and can yield four harvests per year in subtropical and tropical areas.
- A significant plus for Giant King Grass is that it can be used as a feedstock for the production of nonfood biofuels such

- as cellulosic ethanol while its immediate sales are targeted as animal feed.
- The grass can also be used as an ingredient for preparing juices and icecreams, thus resulting in immediate additional sources of revenues.
- The IPA framed art unit employs five people in the U.S. and 84 in China. This production facility is spread across 1.6 hectares of land in China including two manufacturing buildings and one employee dorm. This facility can be utilized for VSPC's other future requirements.
- IPA with its framed art business, has an established and stable production facility in China and distribution network in United States.
- The framed art business segment generated audited annual sales of \$5.4 million and net profits of \$1.2 million during 2007. This source of positive cash flow will lower VIASPACE's funding requirements for developing its core business units.
- The market forecast for the fuel cell business (Frost and Sullivan) is more than \$600 million by 2013. Biofuels should be an \$86 billion industry. The market for animal feed in China alone is estimated to be \$40 billion.
- VIASPACE is targeting the Alternative Energy space, which has received, and is expected to continue receiving, substantial interest in reducing the world's dependence on fossil fuels.
- The current share price of VSPC does not reflect the projected positive cash flows to the Company's books due to the recent acquisition of IPA.
- A strong buy scenario exists, because VSPC common stock has fallen from an all-time high of \$5.36 and is currently trading at \$0.01.



# **BEAR CASE**

- Some products developed by VIASPACE are still in the development phase of commercialization.
- Change in market dynamics could curtail the Company's plans.
- There will be a need to produce commercially viable products on a mass scale.
- Use of grass as a non-food feedstock to produce cellulosic ethanol still needs to be commercially tested.
- The grass is likely to be grown in tropical and sub-tropical regions. This may limit major markets to countries such as China, India and Brazil. The viability for transport of biofuels to Europe and the U.S. needs to be established.
- Cellulosic biofuels, such as ethanol, as a source of energy in countries such as China and India may initially not be as important as in the United States. However, biofuels will be produced near

- the source of grass. The biofuel itself will be shipped to the markets in the U.S. and elsewhere, just as oil is shipped today.
- The Company has limited experience in commercial manufacturing of fuel cells and cultivating farm lands.
- Severe competition may arise from larger corporate entities and original equipment manufacturers in the fuel cell industry.
- Reliance on stability of partners for technological development and customer access is an unknown.
- Logistical problems might limit access to important markets.
- Cash burn is likely to make access to capital markets an ongoing need but is also likely to be mostly offset by cash flows from the framed-art business.
- Trading liquidity in the Company's shares needs to improve via corporate successes and announcements.



11/05/2008

# SUMMARY OF RECENT EVENTS

02/02/2009 Direct Methanol Fuel Cell Corporation and GasHub to Support Clean Energy Testbed in Singapore VIASPACE Inc. subsidiary Direct Methanol Fuel Cell Corporation and its partner GasHub Technology Pte. Ltd. of Singapore attended the inauguration of the Clean Energy Testbedding Community in Singapore. ... VIASPACE Acquisition Audit Shows \$5.4 Million Revenue and \$1.1 Million Net Profit in 2007 01/13/2009 VIASPACE Inc. announced today that the audit of the combined financial statements of Inter-Pacific Arts Corp. and Affiliate for the years ended December 31, 2007 and 2006 has been completed by Goldman Parks Kurland Mohidin LLP. ... 12/29/2008 VIASPACE Sells Non-Core Security Business Line for \$479,000 VIASPACE Inc. today announced that it has sold its non-core security business line to Knovitech, Inc for \$479,000 in cash and debt forgiveness. 12/10/2008 VIASPACE Plants Biofuel & Animal Feed Grass and Signs Land Lease in China VIASPACE Inc. announced today that it has planted 1.2 million seedlings of its proprietary fast-growing China Giant King Grass near the IPA factory in Guangdong province in China. ... 12/04/2008 VIASPACE Delivers Cartridges to CMR Fuel Cells VIASPACE Inc., reported today that that its Direct Methanol Fuel Cell Corporation subsidiary has delivered fuel cartridges, and device side valves to CMR Fuel Cells of the United Kingdom. ... 12/02/2008 VIASPACE Targets \$25 Billion Biofuel Market VIASPACE Inc. today announced the Company is cultivating a new fast-growing hybrid grass to be used for production of cellulosic ethanol, methanol, biocrude and green gasoline. ... 11/25/2008 VIASPACE CEO Discusses Strategy for Profitability VIASPACE Inc. today presented an overview of the company's strategy for future profitability. VIASPACE CEO Dr. Carl Kukkonen reports, "I want to discuss the changes that we are making to help ensure that the company will reap large profit potential... CMR Fuel Cells Orders Cartridges From VIASPACE VIASPACE Inc., announced today that that 11/18/2008 its Direct Methanol Fuel Cell Corporation subsidiary has received an order from CMR Fuel Cells of the United Kingdom for the development of methanol fuel cell cartridges for CMR's stand-alone, hybrid Direct... 11/14/2008 VIASPACE Announces Third Quarter Financial Results VIASPACE Inc., a company that transforms proven space and defense technologies from NASA and the Department of Defense into hardware and software solutions, announced today its financial results for the quarter ending September 30, 2008. Commen... 11/14/2008 [video] Wall St. Network's 3-Minute Press Show Features Executive Interviews and Highlights Recent Press for the Following: STX, Wall St. Network's 3-Minute Press Show is a daily program hosted by WSN reporter Tracee Tolentino that features in-depth interviews with public company executives on their company and most recent press releases. The show is designed to provide v... VIASPACE Ships Humidity Sensor Instrument to Taiwan Customer VIASPACE Inc., announced 11/12/2008 today that that its VIASPACE Energy business unit has shipped a HS-1000 VIASENSOR, a state of the art, laser-based humidity detection instrument, to a new customer in Taiwan. T...

held in Phoenix, AZ October 28-30, 2008. W...

<u>VIASPACE Meets With Customers at Largest U.S. Fuel Cell Show</u> VIASPACE Inc. exhibited its products and met with current and potential customers and business partners at the Fuel Cell Seminar



11/03/2008 VIASPACE Subsidiary Projects \$20 Million in Revenue from New Hybrid Grass VIASPACE Inc.

today announced the Company is focused on commercial farming of its new fast-growing hybrid grass

to initially capture a significant share of China's \$40 billion market for animal feed. T...

10/29/2008 <u>Inter-Pacific Acquisition Has Potential to Rapidly Accelerate Revenue Growth</u> VIASPACE Inc.

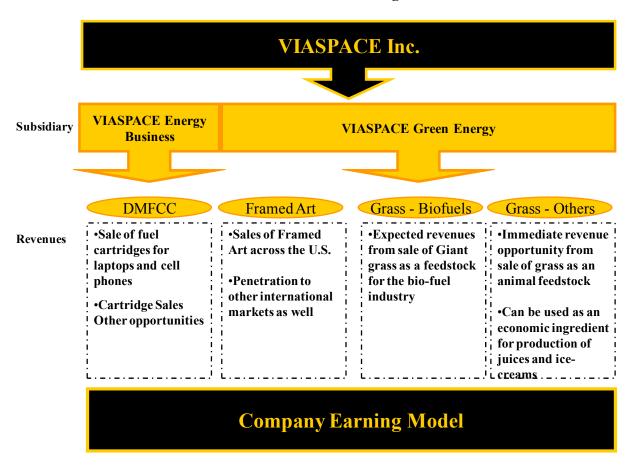
today commented on its announced acquisition of Inter-Pacific Arts Corp., a company with ongoing profitable operations generating unaudited 2007 revenues of approximately \$5 million, net income of

\$1.2 million, and \$3 million in cash ...



# COMPANY'S EARNING MODEL

**Exhibit 6: VIASPACE's Earnings Model** 



Multiple and high growth potential revenue streams will result in significant rise in top-line and de-risk the revenue related risk.

VIASPACE Inc, is expected to have multiple revenues streams because the Company's proprietary technologies, licenses and diversified business segments can be used to serve different market segments. This is likely to not only increase its top line, but also diversify its revenue related risk and ensure recurring streams of revenues. In line with the Company's business structure, VIASPACE's earning model can also be divided into two main categories; revenues from the alternative energy businesses and revenues from the framedart business. In the short- to- immediate term, the framed-art business is expected to generate a major percentage of total revenues. In later years, once the grass—as a biofuels feedstock—and the fuel cartridge technology are commercialized and accepted in the market, alternative energy is likely to account for more than 70% of VIASPACE's total revenues. A detailed description about the Company's revenues streams and customers follow.



Prime focus to sell grass as a feedstock for cellulosic ethanol, a potentially \$86 billion industry and in short-term sell as animal feedstock.

Framed art business to account for largest component of total revenues in the short-term.

Since, DMFCC is targeting the disposable cartridge segment, demand is likely to be continuous generating recurring revenues

#### Grass Business

The Giant King Grass has various useful applications. In the immediate term, the Company is expected to generate revenues by selling this grass as animal feed. Giant King Grass can be used as feed for cattle, sheep, horses, rabbits, pigs, wild boar, chicken, turkey, grass carp, fish, ducks, geese, guinea pigs and other animals. The animal feed market is available now and is not dependent on the exact timing of biofuel production Also, the juice from the grass potentially has significant economic value. However, the most significant long-term source of revenues from this segment is likely to come from use of grass as a feedstock for producing cellulosic biofuel such as ethanol, methanol, biocrude and green gasoline. This non-food feedstock is likely to be the most preferred raw-material for multi-billion dollar biofuel industry.

#### Framed Art Business

In the near-term, VIASPACE is expected to generate a substantial percentage of its revenues and cash flows from sale of framed art across the United States. The framed art business is well-established with manufacturing facilities in China including a U.S. sales network.

# Direct Methanol Fuel Cell Corporation (DMFCC)

DMFCC is targeting the emerging direct methanol fuel cartridge market, especially disposable cartridges that would be used in laptops and cell phones. The Company intends to leverage its expertise in fuel cell cartridge design and safety certification and work cooperatively with all fuel cell and electronics manufacturers worldwide. Since methanol cartridges are disposable, the use of cartridges is likely to be continuous, giving the cartridge business an exciting opportunity to generate recurring revenues.



# VIASPACE INC. – VALUE DRIVERS

#### **Exhibit 7: VIASPACE Inc. – Value Drivers**

Unique Business Model	Diversified operations, with established segment generating positive cash flows that are invested in potentially multi-billion dollar businesses
Proprietary technology portfolio	VIASPACE owns patents and licenses for fuel cell cartridges and fast growing grass that have been developed through millions of dollars of investment and experience
Targeting potentially multi-billion dollar industry	The Company's grass business is targeting the potentially \$86 billion biofuel market, while the he market for commercial fuel cells used in portable devices is expected to reach \$616 million by 2013.
Growing importance of Green Energy	With a view to reduce to its dependence on oil and gas, countries across the globe are making significant investments and encouraging the use of alternative and green energy
Excellent Management Team	The top management at VIASPACE, with its experience and knowledge, provides a distinct advantage and strengthens its long-term growth story

# Unique Business Model

Diversifies business model based on partnerships, strong distribution networks and target multibillion dollar industries. DMFCC is expected to partner with leading OEMs and manufacturers by offering them patent protection. The Company believes that fuel cell manufacturers might need protection under certain patents licensed by VIASPACE in their pursuit of developing and commercializing fuel cell technology. This, coupled with the Company's expertise in fuel cell cartridge design and safety, will make it an attractive partner for large OEMs. This will allow the Company to participate in a huge market for its cartridge business which is DMFCC's core strength.

Similarly, the framed art business has an established production facility in China and well networked distribution channel in the United States. The framed art business generated an audited \$5.4 million in revenues and \$1.1 million in net profits in 2007 which are likely to be used in expanding its other business segments.

The grass business is an exciting story. It has multiple uses as animal feed, ingredient for juices and ice-creams, and most important, as non-food feedstock for the production of biofuels.



All of the Company's alternative energy products/technologies target multibillion dollar industries. This strategy should not only help the Company to expedite the process of commercialization of its products, but also ensure a recurring stream of revenues. Most important, it will significantly reduce the risk associated revenues from a single source of revenues.

# Strong product and patent portfolio<sup>2</sup>

VIASPACE has a strong portfolio of patents which can allow the Company to pursue growth in the fuel cell business. However, the Company has decided to partner with leading OEMs, contractors and manufacturers instead of going it alone in the market place. This, we believe, is a unique business strategy and is likely to pay important dividends in the future. Further, it allows the Company to concentrate its efforts on its core strengths of superior product development.

VIASPACE's licensed patents can be leveraged to develop products and services to serve the needs of high-growth alternative energy markets. The Company has licensed a portfolio of fuel cell patents that represents innovation developed at NASA's Jet Propulsion Laboratory (JPL). In addition to patents licensed from Caltech, the Company has its worldwide license to cultivate Giant King Grass from its acquisition of IPA.

VIASPACE's large methanol fuel cell IP portfolio positions it as one of the key participants in the direct methanol fuel cell industry. The Company's strategy, expertise, and strength in the disposable fuel cartridge development, manufacturing and distribution segment of the fuel cell infrastructure business makes the Company a natural partner for OEM's. These partnerships, combined with the Company's business model, are powerful growth drivers.

The Giant King grass is likely to be used as a non-food feedstock to produce cellulosic ethanol and other biofuels that have received significant importance in recent times to reduce the world's dependence on fossil fuels. Further, cellulosic ethanol has gained significant importance as it is expected to be more efficient than ethanol production by fermentation of corn.

Most of the Company's products have overlapping markets. For instance, direct methanol fuel cartridges can be used in cell phones, laptops and other commercial consumer electronic. As mentioned earlier, the grass can be used as feedstock for producing biofuels and is also an excellent animal feed.

Strong patent portfolio and worldwide license will allow the Company to serve the needs of high growth markets.

<sup>&</sup>lt;sup>2</sup> A detailed description about the Company's Patent and Product portfolio is outlined in the Appendix



Partnerships with leading players across the value chain coupled with excellent management likely to drive growth.

## Attractive Market Dynamics

All of the Company's renewable and clean energy products and technologies are targeted at addressing the needs of potential billion-dollar markets. According to Frost & Sullivan, the market for commercial fuel cells used in portable devices is expected to reach \$616 million by 2013. Similarly, the market for biofuels is expected to grow to over \$86 billion according to latest industry reports.

## Strategic Partnerships

The Company has forged key partnerships with industry leaders to gain access to advanced technology, skilled human resources, and customer networks. VIASPACE's ability to successfully enter into contracts with companies along its value chain is a significant positive.

VIASPACE is likely to continue to benefit from its relationships with Caltech and JPL which is expected to ensure the Company's strong position in receiving key patents and technologies developed by NASA and Department of Defense.

#### Excellent Management Team

The top management at VSPC provides a distinct advantage against competitive companies. Management has experience in all facets of establishing start-ups and seeing them through the start-up to mature phase.



# **FUEL CELL INDUSTRY**

Fuel cells, due to its attractive economics, are likely to replace use of batteries in various applications.

#### Fuel Cells - An Overview

A fuel cell is an electrochemical energy conversion device similar to a battery. A fuel cell provides continuous Direct Current (DC) power by converting the chemical energy from a given fuel into electricity and heat. In a fuel cell, hydrogen is used as an input (fuel), producing electrical energy and clean water. Unlike a battery, chemicals are constantly fed into the fuel cell, producing electric power.

Fuel cells can be used to generate power in industries ranging from consumer electronics to automobiles. Currently, no fuel cell products are in use, and only a handful of prototypes are available in the market. Fuel cells are capable of generating higher power than both batteries and internal combustion engines. Hundreds of millions of dollars have been invested in the development of fuel cell technologies.

# The Micro Fuel Cell Industry

Micro fuel cells shall be used in laptops, mobiles, PDAs, digital imaging devices and various gaming and portable devices. The advances in technology have lead to a growing use of portable devices such as notebook computers, smart/mobile phones, PDAs, digital imaging devices, portable audio/video devices, and various other gaming and daily use devices. Increasing competition and changing technology has induced manufacturers of these devices to provide advanced features, allowing the use of multiple applications. This is increasing the rate of power drain. Batteries used to run these devices are challenged to provide extended run times.

World Market for Portable Devices 3500 Shipments (Millions 3000 2500 2000 1500 1000 500 2004 2005 2006 2007 2008 2009 2010 2011 2012 2003 □ Cell/Converged Phones ■ Notebook Computers □ Portable Audio/Video Devices

**Exhibit 8: World Market for Portable Devices** 

Source: Frost & Sullivan

Digital Imaging Devices

■ Other Portable Devices



Fuel cells will help in reduction of maintenance costs, uninterrupted power, easy recharging and reduction of harmful emissions.

Micro fuel cell industry for portable devices is likely to grow to \$3.2 billion by 2013 according to Frost & Sullivan.

A fuel cell resembles a battery. However, the fuel is supplied externally so that it can continue to generate power for as long as fuel is available. The unique process used to convert fuel into electricity enables it to achieve higher efficiency than the currently available energy generators (Lithium-Ion, Lithium-Ion Polymer). Conventionally, fuel cells require pure hydrogen to operate. However, there exists a multitude of technologies which use different fuels to produce energy.

The development of micro fuel cells for use in portable devices and other small stationary applications has been an area of focus in the industry. These micro fuel cells are expected to be widely commercialized by mid-2008-2009, replacing the currently used L-Ion and L-Ion Polymer batteries. The commercial deployment of these cells is expected to bring about advantages such as reduction in maintenance costs, uninterrupted power supply, ease in recharging and reduction of harmful emissions.

There are various small fuel cell technologies existing in the market today. Some have already been successfully used in areas such as space programs, commercial power, cogeneration units, automobiles, military use, and portable devices. There has yet to be a large scale commercial deployment of these technologies. However, the Direct Methanol Fuel Cell (DMFC) technology which uses methanol is fast becoming the technology of choice for the development of portable fuel cells, generating substantial interest with a large number of patents being filed for the technology.

The fuel cell market is a niche market and is expected to record slow growth during the initial stages of commercial deployment. The products are expected to slowly penetrate the market. Growth is expected to be minimal as consumers get used to and accept the technology.

World Micro Fuel Cell Market for Portable Devices 350.0 Unit Shipments (Millions) 300.0 250.0 200.0 150.0 100.0 50.0 2006 2007 2008 2009 2010 2011 2012 2013 Cell/Converged Phones ■ Notebook Computers □ Portable Audio/Video Devices □ Digital Imaging Devices ■ Other Portable Devices

Exhibit 9: World Market for Fuel Cells in Portable Devices

Source: Frost & Sullivan



Currently there are approximately couple of dozens of fuel cell companies who have invested hundreds of million dollars in R&D.

The current global market for fuel cells consists of 23 publicly traded companies and a number of small companies which are increasingly developing new products. The global fuel cell market for portable devices recorded revenues of \$8.4 million in 2006 and is expected to grow at a CAGR of 117.1% from 2006 to 2013, reaching \$616.7 million in 2013. According to a report by Frost & Sullivan, the global market for fuel cells for notebook computers alone is expected to grow at a CAGR of 77.7% from 2006-20013, leading to unit shipments of 76.9 million cells in 2013.

The industry is segmented and competition is intense. Fuel stack developers and manufacturers, system integrators, parts suppliers, distribution participants and energy service companies all form different segments of the industry. A few prominent companies in the industry include Ballard Power System, Hydrogenics Corporation, Versa Power Systems, and Plug Power Inc.



## ETHANOL INDUSTRY

## Ethanol Industry Key Facts and Figures

- The new Renewable Fuels Standard (RFS) seeks increase bio-fuel blending requirement to 36 billion gallons from 2022 onward. EIA predicts that this target will not be easily met and there might a shortage of biofuels in 2022. This target will probably be met in 2030, indicating rapid expansion in the biofuels industry for the next 22 years.
- The United States imports 58% of its petroleum needs of about 19.6 million barrels per day, with domestic production contributing only about 6 million barrels per day. According to the Energy Information Administration (EIA), imports are expected to go down to 41% by 2030 by using biofuels to serve the additional demand for oil from 2008 onwards. This is expected to decrease America's dependence on foreign fossil fuels.
- Average demand for ethanol in Sep 2008 rose 27,000 barrels per day (bpd) (over Aug 2008) to 688,000 bpd, representing a 63% increase from a year earlier.
- Advancements in technology made the net energy value of ethanol positive, increasing the viability of its production.

## Ethanol Industry Overview

The United States is increasingly dependent on imported energy to meet its personal, transportation, and industrial needs. Ongoing violence in the Middle East, disruption of oil production in the Gulf of Mexico due to an active hurricane season, and the increasing demand for oil from the growing Asian economies all contributed to the July 2008 peak price of oil near \$147 a barrel. The recent drop in gasoline prices from \$140 to \$38 a barrel has depressed the price of ethanol stocks. Ethanol can reduce America's dependence on foreign oil and increase its ability to control its own security and economic future by increasing the availability of domestic fuel supplies. According to the Energy Information Administration (EIA), imports are expected to decrease to 41% by 2030. The EIA further states that oil prices are not expected to rise soon and will trade above \$60/barrel through 2030. President George W. Bush stated, "Our dependence on foreign energy is like a foreign tax on the American people. It's a tax our citizens pay every day in higher gasoline prices and higher costs to heat and cool their homes. It's a tax on jobs and it's a tax that is increasing every vear."

Growing demand for fuels and increasing concerns over volatile supply has resulted in positive outlook towards alternative fuels.



#### **Exhibit 10: RFS Outlook for Biofuel Industry**

# US Renewable Fuels Standard – December 19, 2007 Corn Ethanol Cellulosic Bio Fuels Advanced Bio Fuels 2022 − 36bn 2008 − 9bn 2008 − 9bn 12% 73%

Two-thirds of globally known oil reserves are located in the volatile Middle East region. The United States spends nearly \$50 billion each year for military protection of Middle East oil supplies. According to the Government Accounting Office, the United States spent more than \$130 billion over the last 32 years in government subsidies to the oil industry. These factors emphasize the need for a strong domestic renewable fuels industry. Ethanol, as an additive to gasoline, can help extend the fuel supply by adding volume to the market and lowering consumer costs while driving down demand for foreign oil.

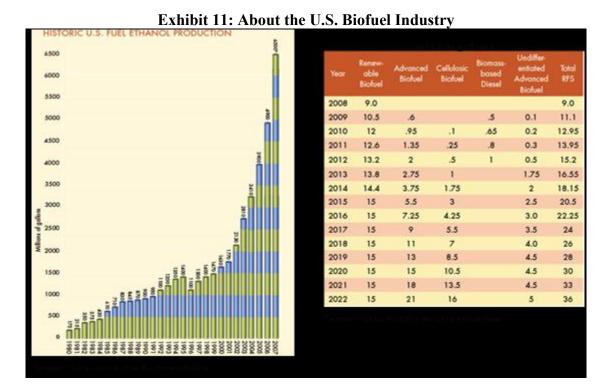
Increased use of fossil fuels have also raised environment concern, resulting in government support for development of alternative energy.

According to the U.S. Environmental Protection Agency (EPA), fossil fuel-based gasoline is the largest source of man-made carcinogens and the main source of toxic emissions. Ethanol is a renewable, environmentally friendly fuel that is inherently cleaner than gasoline. Ethanol reduces harmful tailpipe emissions of carbon monoxide, particulate matter, oxides of nitrogen, and other ozone-forming pollutants. Blended with gasoline, ethanol acts as an oxygenating agent to help gasoline burn more completely. The use of ethanol-blended fuel helps reduce the environmental and economic impacts of gasoline consumption on our society.

The U.S. ethanol industry is highly-fragmented and with new companies entering the market place it currently is operating over capacity. A few large players and many other small entities dominate the industry. According to Renewable Fuels Association, a total of 174 ethanol bio-refineries were



producing ethanol at the end of 2008 with 30 plants under construction and in an expansion stage.



Use of food-based feedstock for producing ethanol has raised concerns of depletion of food resources pushing the development of cellulosic ethanol

#### Cellulosic Ethanol

Cellulose is found in the plant cell walls and is the most common organic compound on earth. It can be extracted from a variety of sources such as corn stalks, rice straw, wood chips of fast-growing trees, grasses, and municipal solid waste. The US government is optimistic about the contribution of cellulose ethanol in reaching the goal of greater energy independence. The government announced funding for additional research in methods of producing conventional and cellulosic ethanol. Cellulosic ethanol could greatly increase the volume of ethanol produced in the United States A recent report found that the United States has sufficient land resources to produce a sustainable supply of 1.3 billion tons a year of biomass. It further stated that 30% of America's current petroleum consumption could be displaced after consuming only 1 billion tons of this biomass (See Appendices for production process of Cellulosic Ethanol).

Cellulosic ethanol reduces greenhouse gas emissions by 85% over reformulated gasoline. By contrast, ethanol reduces greenhouse gas emissions by 18%-29% over gasoline. Furthermore, the price per ton of the raw material used is cheaper than corn. This is because the production of cellulosic ethanol only uses the cellulose part of the plant which is considered a waste and is not digested by humans. Cellulosic ethanol also creates significant opportunities for new jobs and economic growth outside of the traditional "corn belt" in the Mid-West.



Various incentives and benefits have been introduced by the U.S. Government to increase the development of cellulosic ethanol.

The RFS mandate states that of the stipulated 36 billion gallons of biofuels produced by 2022, 44% has to be through cellulosic biofuels

The United States Government continues to promote the development of cellulosic ethanol and outlined specific incentive programs to boost cellulosic ethanol production through the Energy Independence and Security Act of 2007, including the creation of:

- A credit program of \$0.25 or difference between \$3 and wholesale price of gas below \$3, whichever is higher, if RFS requirements are not met.
- Authorizes \$500 million annually for FY08-FY15 for the production of advanced biofuels that have at least an 80 percent reduction in lifecycle GHG emissions relative to current fuels.
- Authorizes \$25 million annually for FY08-FY10 for R&D and commercial application of biofuels production in states with low rates of ethanol and cellulosic ethanol production.
- Production incentives to deliver the first billion gallons of annual cellulosic ethanol production.
- The Department of Energy, in June 2006, stated that the cost of producing cellulosic ethanol was \$2.25/gallon, a price that was not competitive after factoring in distribution costs. However, there is still optimism about this technology. The DOE requested a doubling of its research funding to find efficient ways of cellulosic ethanol production.

### Ethanol Industry Outlook

- We expect the demand for ethanol in the United States to increase substantially in the near future. One of the key factors driving this growth is the RFS benchmarks. This has guaranteed a minimum demand for ethanol for the next 22 years as it is the only feasible renewable fuel available in the market.
- The phase out of MTBE has also increased the use of ethanol in the United States. The average demand for ethanol in September 2008 rose by 27,000 barrels per day (bpd) to 688,000 bpd, representing a 63% increase from a year earlier. Refineries are increasingly using ethanol as an oxygenating agent, blending it with gasoline.
- Higher sales of flex-fuel vehicles (FFVs) denote an increasing awareness about the use of ethanol. This is backed by the increasing E85 (85% ethanol, 15% gasoline) stations in the U.S. the recent announcement by the Big 3 automakers, DaimlerChrysler, Ford Motor Company, and General Motors Corporation, to double annual production of FFVs to 2 million by the year 2010 is also encouraging.
- On the industry front, we expect consolidation to gain momentum as there
  are a large number of small and mid-size farmer-owned plants. The larger
  companies are expected to acquire these small players in their quest to attain
  efficiencies and optimize costs. This process will be accelerated in the
  current situation where there is over capacity and the weaker players will be
  forced out of the market.



Art Publishers Association estimates that the U.S. framed art industry is worth \$45 billion.

### U.S. FRAMED ART INDUSTRY

Industry sources believe that the U.S. Frame Art industry experienced significant growth during the last few years. According to Art Publishers Association, the U.S. Framed Art industry is estimated to be around \$45 billion (2002 published figure indicates it to \$35.3 billion). The published report of 2002 stated that one-third population of the country on an average spent more than \$500 on art frames. This market value consists of sales of unframed art, already-framed art, original art, custom-framed art and other related items. Key reasons for the growth of this industry and emerging trends include:

- Renewed interest in home décor was the primary driver for growth.
   Cultural shifts and youth oriented purchasing; emphasizing taste is an important factor. People who spend considerable time and resources in the beautification of their homes, has helped the industry's growth.
- Another key factor for growth has been the sharp rise in Art licensing. Due
  to this, consumers are finding more reasonable prices to more valuable
  versions of an artist's work. This has been a key driver in the growth of the
  art-market.
- The growing number of artists and the increase in attendance levels at museums indicate younger buyers are entering the market. This demand includes modern, classical and traditional art.
- The demand for readily available framed art increased, because younger buyers have preferred this art over custom framed art. This has resulted in furniture stores, mass merchants and specialty gift and home décor stores capturing market share from the custom frame makers who have the largest market share.



## CHINA ANIMAL FEED INDUSTRY

China is the second largest Animal Feed industry in the world and is approximately \$40 billion in size. The Chinese Animal Feed industry has experienced significant growth during the past 20 years. According to estimates, China's feed industry has grown at CAGR of 20% during most of the past stated period and is estimated to be worth approximately \$40 billion. This has made it one of the most important industries of China. In terms of production, China is the world's second largest feed producer which drives the development of the planting and breeding industries shown in exhibit below.

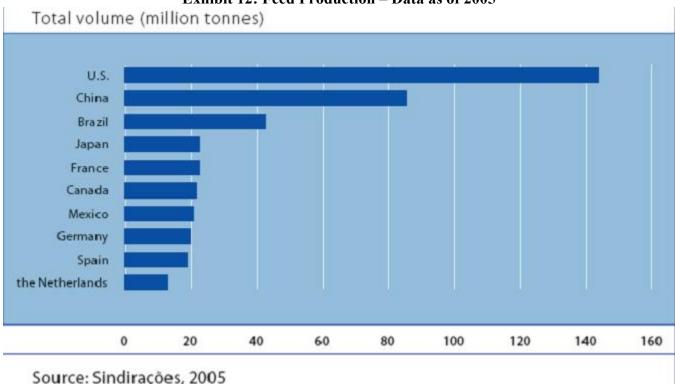


Exhibit 12: Feed Production – Data as of 2005

The growth in the Chinese Animal Feed industry can be directly linked with the growth in population which has resulted in substantial increases in demand for meat and other animal-related products. More meat means more grain and thus growth in animal feed. Also, expansion of GDP and consumer purchasing power has impacted and driven growth in the animal feed industry. However, in the near term, we expect a substantial shift in the animal feed industry resulting from growing health and safety concerns. Concerns include the melamine case, environmental concerns and demand for feedstock from ethanol and bio-diesel companies. While the industry has entered into the mature period we still expect it to grow long term at an average rate of 5-6%.



# **COMPETITIVE SCENARIO**

### FUEL CELL INDUSTRY

Participants in the fuel cell industry range from small companies operating in niche markets to large diversified corporations. Currently, there are no fuel cell products; however, some companies produce products in low volume for demonstration, R&D and educational purposes. The slow rate of fuel cell commercialization is primarily attributable to the durability of the fuel cell stack that remains a challenge to most fuel cell manufacturers.

DMFCC faces competition from two types of players, cartridge manufacturers and companies that provide IP protection to fuel cell manufacturers. BIC Corporation (France and US) and Tokai Corporation (Japan) have showcased their cartridges for direct methanol fuel cells. These companies are direct competitors. Further, in the patent protection business, the Company is expected to face competition from the other two companies that were awarded licenses for the direct methanol fuel cell. These companies are DTI Energy and Ballard Power Systems.

The Caltech patent portfolio includes claims on the use of polymer electrolyte membranes or PEMs, on the direct hydrocarbon (including methanol) fuel cell, the types of catalysts, construction of the anodes, cathodes, and membrane electrode assemblies ("MEAs"), as well as alternative membranes. Other claims address water recovery, methanol sensors and filters, monopolar geometry, aerosol feed fuel cells, and electrolysis of methanol to produce hydrogen.

The Caltech intellectual property that DMFCC has licensed involves patents that were filed beginning in 1993 and ending in 2005. These patents fall into three categories with different rights granted to DMFCC:

MTI, a privately held company, is engaged in the development of small methanol fuel cells for portable electronic devices. MTI's fuel cell has not become commercially successful due to its high degree of toxicity and the fear that fumes from its fuel cell could cause blindness. MTI is still trying to find solutions to overcome these challenges. MEDIAS, a private company, is engaged in the development of a liquid electrolyte fuel cell. Although liquid electrolyte is primitive and offers low performance, it is more reliable and can be commercialized early. MEDIAS has plans to commercially produce fuel cells by 2009. Parker, a \$10 billion company, has developed fuel cell technology with educational applications.

ReliOn is a fuel cell manufacturer for backup power supply. The company has produced a fuel cell with higher reliability by swapping the individual cells during operation. Despite the increased reliability of the overall system, it is difficult to commercially sell the system to distant markets due to the huge volume of the device. Since ReliOn is concentrating on only one market, its raw

23 fuel cell companies targeting various large and niche markets have been affected by slow commercialization of the technology.

DMFCC to face completion from cartridge manufactures (BIC & Tokai) and patent protection companies (DTI and Ballard).



material purchasing costs are high compared to competitors focused on multiple markets with greater purchasing power.

Plug Power, Inc. (PLUG) is focusing on developing both stationary and backup power supplies. The economic difficulty with stationary power fuel cells is that the cost of power produced is much higher than the conventionally-produced power obtained from power grids. On the other hand, Plug Power's backup power supply division is profitable. The division recently announced a large investment in this field.

Hydrogenics Corporation (HYGS) is a fuel cell company producing medium to large sized systems. The company's agreement with General Motors (GM), which owns a majority stake in the company, bars it from entering the passenger car market. This may hinder Hydrogenics' ability to purchase raw materials at a lower cost because growth in the fuel cell business is largely expected to come from the passenger car market.

Ballard Power Systems, Inc. (BLDP) is the official supplier for Ford and DaimlerChrysler. The company's fuel cells run in cars and bus prototypes worldwide and are also used for demonstration and educational purposes. Ballard has also signed agreements with Ford and DaimlerChrysler that prohibit it from producing complete fuel cell systems in-house. The company is, therefore, totally dependent on its customers.



# PROFORMA CONSOLIDATED FINANCIALS

**Exhibit 13: Consolidated Pro-forma Financials** 

	VIASPACE	Inter-Pacific		Pro Forma
All figures in US \$	Inc.	Arts	Adjustments	<b>Consolidated</b>
REVENUES	\$ 356,000	\$ 5,066,000	<b>\$</b> —	\$ 5,422,000
COST OF REVENUES	191,000	3,264,000	<u> </u>	3,455,000
GROSS PROFIT	165,000	1,802,000	<u> </u>	1,967,000
OPERATING EXPENSES				
Research and development	1,742,000	_	<u> </u>	1,742,000
Selling, general and administrative expenses	6,394,000	799,000	273,000	7,466,000
Total operating expenses	8,136,000	799,000	273,000	9,208,000
INCOME (LOSS) FROM OPERATIONS	(7,971,000)	1,003,000	(273,000)	(7,241,000)
OTHER INCOME (EXPENSE)				
Interest income	6,000	_	<u> </u>	6,000
Interest expense	(36,000)	(2,000)	<u> </u>	(38,000)
Gain on sale of marketable securities	29,000	_		29,000
Other income	212,000	_	<u> </u>	212,000
Total other income (expense)	211,000	(2,000)	<u> </u>	209,000
INCOME (LOSS) BEFORE MINORITY				
INTEREST AND INCOME TAXES	(7,760,000)	1,001,000	(273,000)	(7,032,000)
Income taxes	_	2,000		2,000
Minority interest loss (income) in consolidated				,
subsidiaries	(4,000)	_	(295,000)	(299,000)
NET INCOME (LOSS)	(7,764,000)	999,000	(568,000)	(7,333,000)
Other Comprehensive Income:				
Unrealized holding gain (loss) on securities	(49,000)	_		(49,000)
Less reclassification adjustment for realized gain on				
securities included in net loss	(29,000)	_	_	(29,000)
Foreign currency translation income	_	14,000		14,000
COMPREHENSIVE INCOME (LOSS)	\$ (7,842,000)	\$ 1,013,000	\$ (568,000)	\$ (7,397,000)

September IPA financials show a profit of \$1.01 million on sale of approximately \$5.06 million.

The above pro forma consolidated income statement, as per the recently filed 8K, presents the accounts of VIASPACE, IPA as if the acquisition occurred on January 1, 2008 for pro-forma purposes.

As seen above, post the acquisition of IPA there has been a significant improvement in the Company's Income Statement and hence the Balance Sheet. Revenues of the consolidated Company have increased by \$5.1 million and there has been a direct addition of \$1.0 million to the Company's net income prior to the pro forma adjustments for minority interest. Also, IPA has a positive net cash balance (deducting all debt), which lowers the acquisition cost by an equivalent amount. The cash plus stock acquisition will result in the creation of intangibles



equivalent to \$13.0 million. Thus, post acquisition, VSPC's total assets on its proforma balance sheet increased to \$20.0 million from the initial \$3.0 million.



Forecast based on the earning potential & commercialization of Company's products indicate a strong and positive outlook.

Green energy businesses (grass and fuel cells) likely to contribute over 90% of revenues by 2013.

# FINANCIAL FORECAST

Our forecasts indicate a strong and positive outlook for VSPC in the intermediate-to-long term. The expected commercial success of its products and technology are likely to lead to significant growth in Company's top-line. This has been further strengthened by the acquisition of IPA. The IPA acquisition is likely to add significantly to Company's top-line in the short term due to framed art business revenues. Strong growth drivers include the Company's technology development-contract pipeline coupled with partnerships with reputed organizations. The Giant King Grass has multiple uses including use as a non-food feedstock for biofuels. The favorable market dynamics for the Company's products and technologies further enhances our outlook. In addition to forecasting the Company's financial statements under the realistic Base Case Scenario, we also forecasted its financial condition under the Optimistic and Pessimistic Case Scenario.

### Revenue Forecast

We forecast the revenues of the Company based on the Company's key subsidiary— VIASPACE Green Energy, which includes DMFCC, the Grass Business and the Framed Art Business. We do not expect the Company to generate significant revenues from the grass segment until mid 2009. In the initial year, the majority of the Company's revenues and cash flow are expected to come from the framed art business. However, once the use of fuel cells in portable devices gains acceptance worldwide, revenues from DMFCC are likely to grow at significant pace and become the second most important sources of revenues for VIASPACE. Also, commercialization and acceptance of grass as a feedstock for ethanol will lead to significant growth from this segment, making this business the single largest source of revenues.

We believe the Company's clean fuel business line is likely to provide fuel cell cartridge and infrastructure to leading OEMs and Manufacturers. Under this segment, the Company is expected to record significant growth in its fuel cell cartridge business (DMFCC). In addition to supplying cartridges for use in laptops and cell phones, the Company is also likely to pursue other opportunities in the fuel cell cartridge business. <u>DMFCC's revenues are expected to increase</u> from \$330,000 in 2009 to \$8.02 million in 2013.

The grass business is also likely to experience significant growth in coming years. While we do not expect this segment to generate substantial revenues in the current year, revenue growth will increase once the product is accepted in the biofuel market. In line, revenues from grass business are likely to grow from \$2.3 million in 2009 to \$67.6 million in 2013; a CAGR of nearly 200%.



In contrast, the framed art business is likely to grow at a steadier rate of 20% CAGR in FY 2013. Revenues from this segment are likely to reach \$12.5 million by 2013 from current levels of \$5.0 million.

**Exhibit 14: Revenues Forecast – Base Case Scenario** 

All figures in US \$ million	2008	2009	2010	2011	2012	2013
Fuel Cell Business	0.03	0.33	1.10	2.02	4.05	8.02
Frame Business	5.50	6.00	7.20	8.64	10.37	12.44
Grass Business	-	2.30	8.45	16.90	33.79	67.58

**Exhibit 15: Revenue Break-Up – Base Case** 

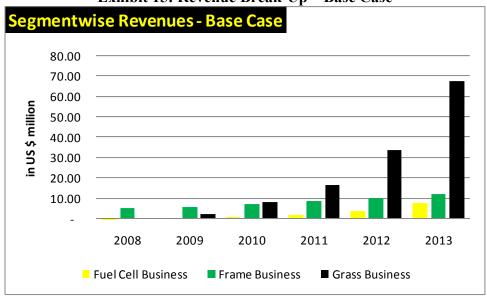
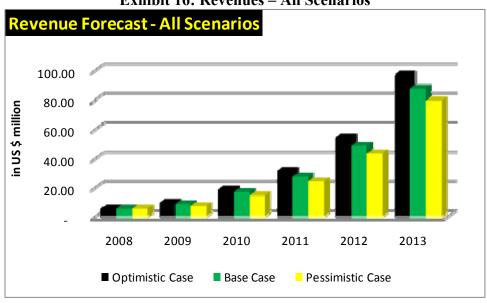


Exhibit 16: Revenues – All Scenarios





Partnerships for manufacturing and low production costs will result in higher gross and operating profit margins.

#### Cost Forecast

The Company's cost structure depends upon whether it decides to undertake inhouse production/cultivation or outsource it. For its DMFCC segment VSPC plans to outsource the production of its fuel cell cartridges to other manufacturers. However, for the framed art business, IPA has an established production facility in China which it will continue to utilize. Similarly, the Company itself plans to purchase and cultivate land for Giant King Grass.

In the framed art business, we expect the cost of goods sold trend (70% of revenues) to continue throughout the forecast period. In the DMFCC division, we expect VSPC to incur substantially higher costs until its products become commercial. Initially, we expect the Company to spend about 70% of its revenues in direct costs of goods sold which we forecast to decrease to 32% by 2013.

Regarding the grass business, it is too early to estimate its cost structure. However, based on estimates provided by management, we believe it to be a significantly high margin business. Gross margins are expected to be in the range of 76%. We will fine tune our estimates in the future.

Selling, general and administrative (SG&A) expense is also expected to be considerably higher in the initial product development stages. The Company is expected to incur SG&A expenses of \$2.2 million in 2009, increasing at a decreasing rate to \$6.9 million in 2013 Following 2009, we anticipate the Company will improve its operating margins from 20% in 2009 to 60% in 2013.

**Exhibit 17: Segment-wise COGS and Operating Expenses – Base Case** 

Segment-wise COGS Break-up

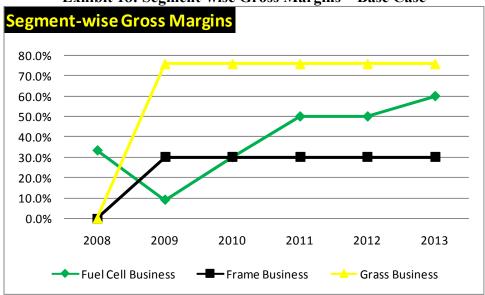
All figures in US \$ million	2008	2009	2010	2011	2012	2013
Fuel Cell Business	0.02	0.30	0.77	1.01	2.02	3.21
Frame Business	3.50	4.20	5.04	6.05	7.26	8.71
Grass Business	-	0.55	2.03	4.06	8.11	16.22

Segment-wise Operating Expense Break-up

organism wide operating Expense Broak up										
All figures in US \$ million	2008	2009	2010	2011	2012	2013				
Fuel Cell Business	-	0.03	0.11	0.20	0.40	0.64				
Frame Business	0.30	0.36	0.43	0.52	0.62	0.75				
Grass Business	0.02	0.38	0.73	1.24	2.16	3.95				



**Exhibit 18: Segment-wise Gross Margins – Base Case** 



**Exhibit 19: Segment-wise Operating Margins – Base Case** 

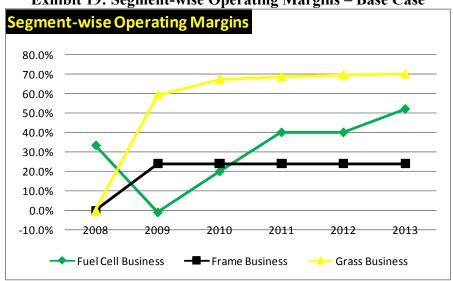


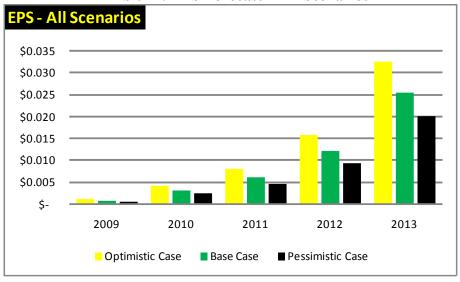
Exhibit 20: Net Profit - All Scenarios

All figures in US \$ million	2008	2009	2010	2011	2012	2013
Optimistic Case	(8.82)	0.72	3.71	7.64	15.34	31.73
Base Case	(8.82)	0.64	3.34	6.75	13.57	28.90
Pessimistic Case	(8.82)	0.51	2.82	5.82	12.03	26.02



### **Earnings Forecast**

Since the Company has not begun operations in the grass business, and for the most part in the fuel cell business, its EPS has been negative. However, following the commercialization of its products and technology in 2009 and with positive cash flow from the IPA acquisition, the Company is expected to begin generating income. We expect the Company's earnings to increase from \$0.002 per share in 2009 to \$0.05 per share in 2013.



**Exhibit 21: EPS Forecast – All Scenarios** 



# **VALUATION**

Long-term valuation as indicated by our DCF approach results in a price target of \$0.08-\$0.10 We calculated the long term price target for VSPC using our discounted cash flow (DCF) analysis<sup>3</sup>. Our fair value estimate for VSPC ranges between \$0.08-\$0.10 based on our Base Case forecast, with an estimated long term terminal growth rate of 4%-6% and discount rate of 15.3%. Based on our mid-level target price estimates, the Company's stock is significantly under-priced and carries a large premium over the Company's current market price of \$0.01. We calculated the fair value range for the stock price based on our free cash flow projections under three scenarios – Base Case, Optimistic Case, and Pessimistic Case.

Our fair value estimate for the stock is based on the cash flows forecasted for the Company during our forecast period. Thereafter (beyond 2013), we have used an appropriate growth rate to derive the long-term fair value for the stock. We have broadly used the following assumptions<sup>4</sup> to derive the 12-month fair value of the stock:

**Beta:** Since VSPC does not have a relevant trading history, we have used a beta of 1.5 instead of its historical beta. We believe this beta measure captures the volatility associated with a development stage Company such as VIASPACE.

**Risk-Free Rate:** We have used the US 10-year Treasury yield as the benchmark Risk Free Rate. As of the valuation date, the US 10-Year yield stood at 2.75%.

**Equity Risk Premium:** The equity risk premium represents the expected return of the stockholder over and above the returns from investing in a risk-free asset. We have assumed an equity risk premium of 7.0% in order to calculate the cost of equity applicable to VSPC common stock.

Cost of Equity: Based on our assumptions regarding the beta, risk-free rate and equity risk premium, the *Cost of Equity for VSPC is estimated to 15.3%*.

**Long-Term Growth Rate:** We have developed explicit FCF estimates until the year 2013. After 2013, we have assumed a *perpetual growth rate of 5.0%*.

The following chart and table describes the target price range for the stock for each scenario for a range of terminal growth rates with the discount rate of 15.3%.

<sup>&</sup>lt;sup>3</sup> Refer appendices for a detailed explanation of Discounted Cash Flow Valuation method

<sup>&</sup>lt;sup>4</sup> A detailed description about our valuation assumptions is given in the Appendix Section of this report.



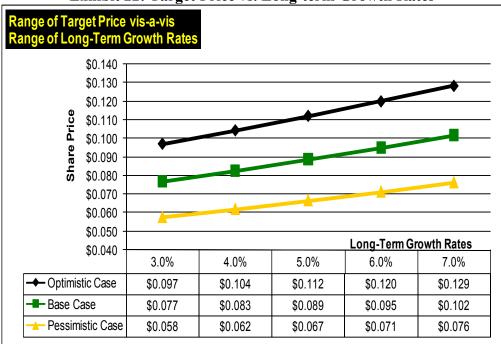
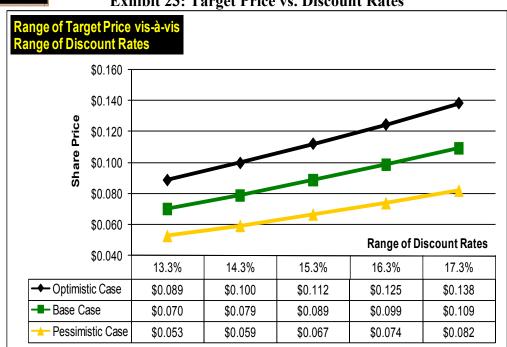


Exhibit 22: Target Price vs. Long-term Growth Rates

Stock price more sensitive to change in growth rate than compared to discount rate.

The following chart and table describes the target price range for the stock in each scenario for a range of discount rates with the terminal growth rate at 5%. This indicates that the target price for VSPC is more sensitive to changes in the growth rates.



**Exhibit 23: Target Price vs. Discount Rates** 



Even our most pessimistic valuation target price of \$0.06 highlights significant upside potential from current stock price levels.

It is interesting to note that the stock is considerably undervalued given our Pessimistic Case scenario. Our Pessimistic Case price target of \$0.06 translates to a very large premium over the current market price. We believe this is due to the Company's limited visibility in the marketplace and uncertainty over its revenue growth in the future. Also, the diversification through the acquisition of IPA had not been included in the current share price due to lack of understanding the importance of restructuring this company. However, we believe the Company's robust products, patent portfolio and positive cash flow from the framed art business will expedite the commercialization of its technologies and bolster the Company's top and bottom line. As this happens, investor confidence will increase in the Company's ability to generate positive cash flows.



## CONCLUSION

We are excited and optimistic about VIASPACE'S long-term prospects including its current acquisition of the framed art and grass business. VIASPACE Inc., recently acquired Inter-Pacific Arts, a profitable company engaged in the manufacturing of framed art, that also has a worldwide license to cultivate fast-growing high yield Giant King grass. The Company's first planting is a significant initial step in an exciting market.

The current positive cash flow and net income from IPA's framed art business is expected to be a continuing and reliable source for the development of its grass business. The Company's licensed fast-growing grass can be currently used as animal feed and can be potentially used for production of cellulosic biofuel such as ethanol, methanol, biocrude and green gasoline. Animal feed is a \$40 billion per year market. The biofuels market is approximately a \$25 billion per year industry and expected to grow to \$86 billion per year.

VSPC's strong intellectual property portfolio licensed from Caltech and advanced products backed by its robust technology presents a strong corporate outlook. VSPC's presence in the fuel cell infrastructure industry is likely to lead to significant growth in its top-line. DMFCC strength in setting safety standards and partnering with OEM's to offer them patent

protection is likely to establish it as a leading player in the global fuel cell market. DMFCC's disposable fuel cartridges represent a recurring revenue stream similar to the razor/razor blade model

The IPA acquisition will further diversify VIASPACE from a high-tech fuel-cell company to a company providing unique fuel cell applications through Direct Methanol Fuel Cell Corp, agriculture and alternative energy. All of these markets have enormous potential. We believe the Company will attract significant investor interest. This diversification in our view should also help the Company raise additional capital as its investor base grows. We believe this restructuring will reduce expenses, expand the top line, and position the Company in three exciting growth markets.

We recommend the purchase of VIASPACE's common stock for long term investors who want to participate in the potentially multi-billion dollar industries of Fuel Cells, Agriculture and Alternative/Green Energy.

RS/Cohen Independent Research Group



# FINANCIAL EXHIBITS

VIASPACE INC.

(OTC BB: VSPC)

STRONG BUY CURRENT PRICE \$0.01 TARGET PRICE \$0.08- \$0.10



**Exhibit 24: Consolidated Income Statement – Base Case** 

		ome State				
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
% growth		56%	94%	65%	75%	83%
Cost of Goods Sold	3.5	5.1	7.8	11.1	17.4	28.1
Gross Profit	2.0	3.6	8.9	16.4	30.8	59.9
Selling and Admin Expenses	9.0	2.2	2.6	3.7	5.1	6.9
Operating Profit/ EBITDA	(7.0)	1.4	6.3	12.7	25.7	53.0
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
EBIT	(7.1)	1.3	6.2	12.6	25.5	52.4
Interest Expense, Net	3.5	-	_	_	_	_
Other Income	2.1	_	_	_	_	_
Minority Interest	0.4	0.5	2.5	5.0	10.1	20.7
ЕВТ	(8.8)	8.0	3.7	7.6	15.3	31.7
Provision for Taxation	0.0	0.0	0.0	0.5	1.5	2.5
Net Profit from Continued Operations	(8.8)	8.0	3.7	7.1	13.9	29.2
Net Profit from Discontinued Operations	-	-	-	-	-	-
Net Profit	(8.8)	0.8	3.7	7.1	13.9	29.2
Sharaa Outatanding Basia	823.0	1,143.0	1,143.0	1,143.0	1,143.0	1,143.0
Shares Outstanding - Basic Shares Outstanding - Diluted	823.0	1,143.0	1,143.0	1,143.0	1,143.0	1,143.0
EPS Continued Operations - Basic	(0.011)	0.001	0.003	0.006	0.012	0.026
•	` ,				0.012	
EPS Continued Operations - Diluted	(0.011)	0.001	0.003	0.006	0.012	0.026
EPS - Basic	(0.011)	0.001	0.003	0.006	0.012	0.026
EPS - Diluted	(0.011)	0.001	0.003	0.006	0.012	0.026



**Exhibit 25: Consolidated Balance Sheet – Base Case** 

Exhibit 25: Colls						
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
ASSETS						
Cash	0.7	2.5	9.1	22.1	47.0	96.8
Inventory	0.8	1.3	1.4	1.6	1.4	1.4
Account Receivables	0.7	1.3	1.5	1.8	2.4	3.5
Other Receivables	0.7	0.8	8.0	0.9	0.9	1.0
Deferred Income Taxes	-	-	-	-	-	-
Prepaid Expenses and Advances	2.6	0.7	0.4	0.2	0.3	0.2
Total Current Assets	5.4	6.5	13.2	26.5	51.9	102.9
Property, Plant and Equipment, Net	0.9	1.0	1.5	2.4	4.2	7.9
Intangibles	13.6	13.5	13.4	13.2	12.9	12.4
Intellectual Property	0.2	0.2	0.2	0.2	0.2	0.2
Deferred Income Taxes	-	-	-	-	-	-
Others	0.0	-	-	-	-	-
Total Assets	20.0	21.1	28.3	42.3	69.3	123.4
LIABILITIES						
Current Portion of LTD	0.1	-	-	-	-	-
Accounts Payable	0.9	1.1	2.0	3.6	6.1	9.9
Accrued Expenses	0.2	0.1	0.1	0.3	0.6	0.8
Others	0.7	0.2	0.2	0.3	0.6	0.8
Total Current Liabilities	1.9	1.4	2.3	4.2	7.2	11.5
Long-Term Debt	4.8	-	-	-	-	-
Deferred Tax Liabilities and Others	-	-	-	-	-	-
Total Liabilities	6.7	1.4	2.3	4.2	7.2	11.5
Minority Interest	7.0	7.5	10.0	15.0	25.1	45.8
Shareholders Equity	6.3	12.2	16.0	23.1	37.0	66.2
Total Liabilities, Shareholders Equity, MI	20.0	21.1	28.3	42.3	69.3	123.4



**Exhibit 26: Consolidated Cash Flow Statement – Base Case** 

11.61	0000		0040=	00445	0040	00.40=
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
Operating Activity						
Net Income	(8.8)	1.1	3.8	7.1	13.9	29.2
Add: Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Less: Change in Working Capital	2.8	(0.2)	(0.7)	(1.7)	(2.5)	(3.1)
Cash Flow from Operating Activities	(6.0)	1.0	3.1	5.6	11.7	26.6
Investing Activity						
Investment in PP&E	(0.1)	(0.1)	(0.5)	(0.9)	(1.9)	(3.7)
Acquisitions	(13.6)	0.0	0.0	(0.0)	-	-
Other Investing Cash Inflow / Outflow	-	-	-	-	-	-
Cash Flow from Investing Activities	(13.7)	(0.1)	(0.5)	(0.9)	(1.9)	(3.7)
Financing Activity						
Increase (Decrease) in Debt	-	(4.8)	-	-	-	-
Increase (Decrease) in Equity	19.8	4.8	-	-	-	-
Minority Interest	0.4	0.5	2.5	5.0	10.1	20.7
Cash Flow from Financing Activities	20.2	0.5	2.5	5.0	10.1	20.7
Net Change in Cash	0.5	1.4	5.1	9.7	19.9	43.6
Opening Cash Balance	0.6	0.7	2.5	9.1	22.1	47.0
Ending Cash Balance	0.7	2.5	9.1	22.1	47.0	96.8

**Exhibit 27: DCF Valuation – Base Case** 

All figures in US \$ million except share data	2009	2010	2011	2012	2013
FREE CASH FLOW TO FIRM (FCFF)					
NOPLAT	0.95	3.81	7.28	14.19	29.73
Change in Working Capital	-0.20	-0.72	-1.65	-2.51	-3.08
Capital Expenditure (Including Acqusitions)	-0.06	-0.47	-0.93	-1.85	-3.70
Free Cash Flow To Firm (FCFF)	0.68	2.61	4.70	9.84	22.94
DCF VALUATION - FCFF APPROACH					
Free Cash Flow To Firm (FCFF)	0.68	2.61	4.70	9.84	22.94
Discount Factor	0.85	0.72	0.61	0.52	0.44
Present Value of Free Cash Flow to Firm	0.58	1.88	2.86	5.07	10.03
Continuing Value	185.3				
Discount Factor	0.44				
Present Value of Continuing Value	81.0				
Enterprise Value	101.4				
Less: Debt	0.50				
Add: Cash	0.61				
Equity Value	101.53				
Number of Shares Outstanding	1,143.00				
Equity Value Per Share/ DCF Target Price	\$0.09				
Current Stock Price	\$0.01				
Upside/ (Downside) Potential	788.27%				



Exhibit 28: Consolidated Income Statement - Ontimistic Case

Exhibit 28: Consolida	Exhibit 28: Consolidated Income Statement – Optimistic Case									
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E				
Revenues	5.5	9.5	18.4	30.9	54.0	96.9				
% growth		56%	94%	65%	75%	83%				
Cost of Goods Sold	3.5	5.6	8.6	12.4	19.5	31.0				
Gross Profit	2.0	3.9	9.8	18.4	34.5	65.9				
Selling and Admin Expenses	9.0	2.4	2.9	4.1	5.7	7.6				
Operating Profit/ EBITDA	(7.0)	1.5	6.9	14.3	28.8	58.3				
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.4	0.7				
EBIT	(7.1)	1.5	6.8	14.1	28.4	57.6				
	(/					01.10				
Interest Expense, Net	3.5	-	-	-	-	-				
Other Income	2.1	-	-	-	-	-				
Minority Interest	0.4	0.6	2.7	5.6	11.3	22.8				
EBT	(8.8)	0.9	4.1	8.5	17.1	34.8				
Provision for Taxation	0.0	0.0	0.0	0.5	1.5	2.8				
Net Profit from Continued Operations	(8.8)	0.9	4.1	8.0	15.7	32.0				
N ( D 5) ( ) 10 ( )										
Net Profit from Discontinued Operations	-	-	-	-	-	-				
Net Profit	(8.8)	0.9	4.1	8.0	15.7	32.0				
Shares Outstanding - Basic	823.0	983.0	983.0	983.0	983.0	983.0				
Shares Outstanding - Diluted	823.0	983.0	983.0	983.0	983.0	983.0				
EPS Continued Operations - Basic	(0.011)	0.001	0.004	0.008	0.016	0.033				
EPS Continued Operations - Diluted	(0.011)	0.001	0.004	0.008	0.016	0.033				
EPS - Basic	(0.011)	0.001	0.004	0.008	0.016	0.033				
EPS - Basic EPS - Diluted	(0.011)	0.001	0.004	0.008	0.016	0.033				
	(5.5.7)									



**Exhibit 29: Consolidated Balance Sheet – Optimistic Case** 

all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
ASSETS						
Cash	0.7	2.4	9.6	24.0	51.3	105.7
Inventory	0.8	1.4	1.6	1.7	1.6	1.5
Account Receivables	0.7	1.4	1.7	2.0	2.6	3.9
Other Receivables	0.7	0.8	8.0	0.9	0.9	1.0
Deferred Income Taxes	-	-	-	-	-	-
Prepaid Expenses and Advances	2.6	0.7	0.4	0.2	0.3	0.2
Total Current Assets	5.4	6.7	14.0	28.9	56.7	112.3
Property, Plant and Equipment, Net	0.9	1.0	1.6	2.8	5.7	10.1
Intangibles	13.6	13.5	13.4	13.2	12.8	12.1
Intellectual Property	0.2	0.2	0.2	0.2	0.2	0.2
Deferred Income Taxes	-	-	-	-	-	-
Others	0.0	-	-	-	-	-
Total Assets	20.0	21.4	29.2	45.1	75.4	134.7
LIABILITIES						
Current Portion of LTD	0.1	-	-	-	-	-
Accounts Payable	0.9	1.3	2.2	4.0	6.8	10.9
Accrued Expenses	0.2	0.1	0.1	0.4	0.6	0.9
Others	0.7	0.2	0.2	0.4	0.6	0.9
Total Current Liabilities	1.9	1.5	2.5	4.7	8.1	12.6
Long-Term Debt	4.8					
Deferred Tax Liabilities and Others	4.0	-	-	-	-	-
	6.7	- 4 5	2.5	- 47		- 42.6
Total Liabilities	0.7	1.5	2.5	4.7	0.1	12.6
Minority Interest	7.0	7.6	10.3	15.9	27.2	50.0
Shareholders Equity	6.3	12.3	16.4	24.5	40.1	72.1
Total Liabilities, Shareholders Equity, MI	20.0	21.4	29.2	45.1	75.4	134.7



Exhibit 30: Consolidated Cash Flow Statement - Optimistic Case

all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
Operating Activity						
Net Income	(8.8)	1.2	4.1	8.0	15.7	32.0
Add: Depreciation and Amortization	0.1	0.1	0.1	0.2	0.4	0.7
Less: Change in Working Capital	2.8	(0.0)	(8.0)	(1.8)	(2.8)	(3.3)
Cash Flow from Operating Activities	(6.0)	1.2	3.4	6.4	13.3	29.4
Investing Activity						
Investment in PP&E	(0.1)	(0.2)	(0.6)	(1.2)	(2.9)	(4.4)
Acquisitions	(13.6)	-	-	-	-	-
Other Investing Cash Inflow / Outflow	-	-	-	-	-	-
Cash Flow from Investing Activities	(13.7)	(0.2)	(0.6)	(1.2)	(2.9)	(4.4)
Financing Activity						
Increase (Decrease) in Debt	-	(4.8)	-	-	-	-
Increase (Decrease) in Equity	19.8	4.8	-	-	-	-
Minority Interest	0.4	0.6	2.7	5.6	11.3	22.8
Cash Flow from Financing Activities	20.2	0.6	2.7	5.6	11.3	22.8
Net Change in Cash	0.5	1.6	5.6	10.8	21.7	47.8
Opening Cash Balance	0.6	0.7	2.4	9.6	24.0	51.3
Ending Cash Balance	0.7	2.4	9.6	24.0	51.3	105.7

**Exhibit 31: DCF Valuation – Optimistic Case** 

All figures in US \$ million except share data	2009	2010	2011	2012	2013
FREE CASH FLOW TO FIRM (FCFF)					
NOPLAT	1.03	4.19	8.21	16.07	32.71
Change in Working Capital	-0.02	-0.80	-1.83	-2.81	-3.33
Capital Expenditure (Including Acquisitions)	-0.17	-0.60	-1.20	-2.90	-3.33 -4.40
Free Cash Flow To Firm (FCFF)	0.84	2.78	5.17	10.36	24.98
DCF VALUATION - FCFF APPROACH					
Free Cash Flow To Firm (FCFF)	0.84	2.78	5.17	10.36	24.98
Discount Factor	0.85	0.72	0.61	0.52	0.44
Present Value of Free Cash Flow to Firm	0.72	2.00	3.15	5.34	10.92
Continuing Value	201.7				
Discount Factor	0.44				
Present Value of Continuing Value	88.2				
Enterprise Value	110.3				
Less: Debt	0.50				
Add: Cash	0.61				
Equity Value	110.41				
Number of Shares Outstanding	983.00				
Equity Value Per Share/ DCF Target Price	\$0.11				
Current Stock Price	\$0.01				
Upside/ (Downside) Potential	1023.21%				



**Exhibit 32: Consolidated Income Statement – Pessimistic Case** 

Exhibit 52: Consolida						
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	7.3	14.4	24.2	43.4	79.2
Cost of Goods Sold	3.5	4.3	6.7	9.8	15.7	25.3
Gross Profit	2.0	3.0	7.7	14.5	27.7	53.9
Selling and Admin Expenses	9.0	1.9	2.3	3.3	4.6	6.2
Operating Profit/ EBITDA	(7.0)	1.2	5.4	11.2	23.2	47.7
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
EBIT	(7.1)	1.1	5.3	11.1	22.9	47.2
Interest Expense, Net	3.5	-	-	-	-	-
Other Income	2.1	-	-	-	-	-
Minority Interest	0.4	0.5	2.1	4.4	9.1	18.6
EBT	(8.8)	0.7	3.2	6.7	13.8	28.6
Provision for Taxation	0.0	0.0	0.0	0.5	1.5	2.3
Net Profit from Continued Operations	(8.8)	0.6	3.2	6.2	12.4	26.3
Net Profit from Discontinued Operations	-	-	-	-	-	-
Net Profit	(8.8)	0.6	3.2	6.2	12.4	26.3
Shares Outstanding - Basic Shares Outstanding - Diluted	823.0 823.0	1,303.0 1,303.0	1,303.0 1,303.0	1,303.0 1,303.0	1,303.0 1,303.0	1,303.0 1,303.0
EPS Continued Operations - Basic EPS Continued Operations - Diluted	(0.011) (0.011)	0.000	0.002 0.002	0.005 0.005	0.009 0.009	0.020 0.020
EPS - Basic EPS - Diluted	(0.011) (0.011)	0.000 0.000	0.002 0.002	0.005 0.005	0.009 0.009	0.020 0.020



**Exhibit 33: Consolidated Balance Sheet – Pessimistic Case** 

all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2042
			_	LVIIL	20 1 ZE	2013E
ASSETS						
Cash	0.7	2.6	8.2	19.5	41.9	87.2
Inventory	0.8	1.1	1.2	1.4	1.3	1.3
Account Receivables	0.7	1.1	1.3	1.6	2.1	3.2
Other Receivables	0.7	0.8	8.0	0.9	0.9	1.0
Deferred Income Taxes	-	-	-	-	-	-
Prepaid Expenses and Advances	2.6	0.6	0.3	0.2	0.2	0.2
Total Current Assets	5.4	6.1	11.9	23.5	46.4	92.8
Property, Plant and Equipment, Net	0.9	1.0	1.4	2.3	3.9	6.7
Intangibles	13.6	13.5	13.4	13.2	13.0	12.5
Intellectual Property	0.2	0.2	0.2	0.2	0.2	0.2
Deferred Income Taxes	-	-	-	-	-	-
Others	0.0	-	-	-	-	-
Total Assets	20.0	20.7	26.9	39.2	63.4	112.2
LIABILITIES						
Current Portion of LTD	0.1	-	-	-	-	-
Accounts Payable	0.9	1.0	1.7	3.1	5.5	8.9
Accrued Expenses	0.2	0.1	0.1	0.3	0.5	0.7
Others	0.7	0.1	0.2	0.3	0.5	0.7
Total Current Liabilities	1.9	1.2	1.9	3.7	6.5	10.3
Large Tarres Dalet	4.0					
Long-Term Debt	4.8	-	-	-	-	-
Deferred Tax Liabilities and Others		-	-	<u> </u>	<del>-</del> -	-
Total Liabilities	6.7	1.2	1.9	3.7	6.5	10.3
Minority Interest	7.0	7.4	9.6	14.0	23.1	41.7
Shareholders Equity	6.3	12.1	15.3	21.5	33.9	60.2
Total Liabilities, Shareholders Equity, MI	20.0	20.7	26.9	39.2	63.4	112.2



Exhibit 34: Consolidated Cash Flow Statement – Pessimistic Case

		5 11 × 000000111				
all figures in \$ million	2008E	2009E	2010E	2011E	2012E	2013E
Operating Activity						
Net Income	(8.8)	1.0	3.2	6.2	12.4	26.3
Add: Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Less: Change in Working Capital	2.8	(0.5)	(0.6)	(1.4)	(2.3)	(2.8)
Cash Flow from Operating Activities	(6.0)	0.6	2.7	4.9	10.4	24.0
Investing Activity						
Investment in PP&E	(0.1)	(0.1)	(0.4)	(0.9)	(1.6)	(2.8)
Acquisitions	(13.6)	(0.0)	-	-	-	-
Other Investing Cash Inflow / Outflow	-	-	-	-	-	-
Cash Flow from Investing Activities	(13.7)	(0.1)	(0.4)	(0.9)	(1.6)	(2.8)
  Financing Activity						
Increase (Decrease) in Debt	-	(4.8)	-	-	-	-
Increase (Decrease) in Equity	19.8	4.8	-	-	-	-
Minority Interest	0.4	0.5	2.1	4.4	9.1	18.6
Cash Flow from Financing Activities	20.2	0.5	2.1	4.4	9.1	18.6
Net Change in Cash	0.5	0.9	4.5	8.4	17.9	39.8
Opening Cash Balance	0.6	0.7	2.6	8.2	19.5	41.9
Ending Cash Balance	0.7	2.6	8.2	19.5	41.9	87.2

**Exhibit 35: DCF Valuation – Pessimistic Case** 

All figures in US \$ million except share data	2009	2010	2011	2012	2013
EDEE OAGU ELOW TO EIDM (EGEE)					
FREE CASH FLOW TO FIRM (FCFF)	0.00	0.00	0.05	40.00	00.75
NOPLAT	0.82	3.28	6.35	12.63	26.75
Change in Working Capital	-0.48	-0.60	-1.43	-2.26	-2.77
Capital Expenditure (Including Acqusitions)	-0.10	-0.40	-0.90	-1.60	-2.80
Free Cash Flow To Firm (FCFF)	0.24	2.28	4.02	8.76	21.18
DCF VALUATION - FCFF APPROACH					
Free Cash Flow To Firm (FCFF)	0.24	2.28	4.02	8.76	21.18
Discount Factor	0.85	0.72	0.61	0.52	0.44
Present Value of Free Cash Flow to Firm	0.20	1.64	2.45	4.52	9.26
Continuing Value	157.3				
Discount Factor	0.44				
Present Value of Continuing Value	68.8				
Enterprise Value	86.8				
Less: Debt	0.50				
Add: Cash	0.61				
Equity Value	86.95				
Number of Shares Outstanding	1,303.00				
Equity Value Per Share/ DCF Target Price	\$0.07				
Current Stock Price	\$0.01				
Upside/ (Downside) Potential	567.32%				



# **APPENDICES**

VIASPACE INC.

(OTC BB: VSPC)

STRONG BUY CURRENT PRICE \$0.01 TARGET PRICE \$0.08- \$0.10



# APPENDIX 1: FINANCIAL ANALYSIS AND VALUATION

# **Financial Analysis**

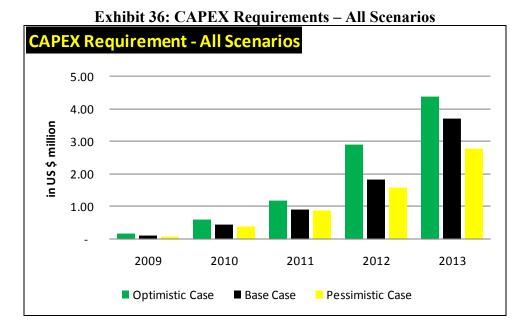
## Capital Expenditure

VSPC's acquisition of IPA has enabled it operate its business without large amounts of capital infusions from external sources at all stages of its business development process, starting from development efforts establishing mass manufacturing/ cultivating **DMFCC** capabilities. Also. since commercializes products and technologies already developed after making large investments in research development by NASA Department of Defense, the capex requirement is further reduced. Similarly, the license acquired for the giant king grass shall ensure that the capex required for this segment is only cultivation of land and seeds. Further,

the Company's framed art business is selfsufficient and does not require further capital expenditure. Hence, the Company will have minimal capital requirement.

Post-acquisition, we anticipate VSPC to financing its operations from internally generate funds. In future also VSPC intends to finance its Capex primarily through internally generated funds, and remaining through mix of debt and equity. Also, if required, the Company will tap the capital markets to increase its equity to fund its capital requirements.





### Cohen Net Cash Flows from Operations

We derive our Cohen Net Cash Flow from Operations (NCFO) to analyze cash flowing through the enterprise. The Cohen NCFO analysis uses income statement and balance sheet data to reconstruct how cash is generated and used. We start with revenues, adjusting for the change in receivables to determine Gross Cash Collections. Cost of Goods Sold, and SG&A expenses are aggregated to determine Total Operating Expenses. We then look at the changes in all working capital accounts, except

receivables and cash, to determine how much cash was used or generated while managing current assets and liabilities, such that a negative value for change in working capital is a generator of cash. We derive the Cohen NCFO adding the working capital cash by requirements/generation with operating expenses and then subtracting from Gross Cash Collections. For comparison purposes, Reported Cash from Operations in the Statement of Changes in Cash is displayed in the following table.



**Exhibit 37: Cohen Net Cash Flows from Operations** 

Cohen Net Cash Flow from Operations	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
plus decrease (-increase) in AR	(0.7)	(0.6)	(0.2)	(0.3)	(0.6)	(1.2)
Gross Cash Collections from Operations	4.9	8.0	16.5	27.3	47.6	86.9
Operating Expenses						
Cost of Goods Sold	3.5	5.1	7.8	11.1	17.4	28.1
General an Administrative Expenses	9.0	2.2	2.6	3.7	5.1	6.9
R&D Expenses	_	_	_	_	_	_
Total Operating Expenses	12.5	7.2	10.5	14.8	22.5	35.1
Working Capital Changes						
Decrease (Increase) in Inventories	(8.0)	(0.4)	(0.1)	(0.1)	0.2	(0.0)
Decrease (Increase) in Short Term Investmer	-	-	-	-	-	- /
Decrease (Increase) in Other Current Assets	(3.2)	1.8	0.2	0.1	(0.1)	0.0
Increase (Decrease) in Accounts Payable	0.9	0.2	8.0	1.6	`2.5 <sup>´</sup>	3.8
Increase (Decrease) in Notes Payable	-	_	-	_	-	-
Increase (Decrease) in STD	-	-	-	-	-	-
Increase (Decrease) in Accrued Expenses	0.2	(0.2)	0.0	0.2	0.2	0.2
Increase (Decrease) in Other Current Liab	0.7	(0.5)	0.0	0.1	0.2	0.2
Total Changes in Working Capital	(2.2)	0.9	0.9	1.9	3.1	4.2
Total Cash Outflows for Op (Op Exp+Chg W	10.3	8.1	11.4	16.7	25.5	39.3
Net Cash Flow from Operations (NCFO)	(5.5)	(0.1)	5.1	10.5	22.1	47.6

**Exhibit 38: Cohen Cash Flow from Operations Analysis** 

Cohen NCFO Analysis	2008E	2009E	2010E	2011E	2012E	2013E
NCFO / Diluted Share	(0.01)	(0.00)	0.00	0.01	0.02	0.04
Diluted EPS	(0.01)	0.00	0.00	0.01	0.01	0.03

The Cohen NCFO and the Reported Cash provided by/used in Operations (i.e., Net Cash from Operating Activities) may follow a similar trend, but their value and sources are different. The Cohen NCFO is a top-down analysis starting with Revenues that inherently provides clarity about how cash changes. Reported Net Cash from Operating Activities begins with Net Income (Profit or Loss). A negative Cohen NCFO is a good indicator of the cash burn rate of a company before capital expenditures and interest expenses. Since we use changes in short-term debt as a component of change in the

working capital, the Cohen NCFO data for VSPC indicates the cash burn rate after debt financing. According to our Cohen NCFO analysis, VSPC has a positive Cohen NCFO balance, indicating that the cash outflows (operating expenditure) has not been absorbed by cash inflows. This can be attributed to the development stage of the Company.

### Cohen Free Cash Flow/Assets

Another cash flow metric we find to be insightful is the Cohen Free Cash Flow to Assets (FCF/A) ratio. The value of FCF/A



reflects operational expertise and competitive pressures. The trend in this ratio rather than the absolute value is more important for this metric. When improving, the trend indicates that management is creating value; in other words,

for every dollar invested, the Company receives higher returns in the form of cash flows. This metric is highly correlated to the trend in stock prices of many companies.

**Exhibit 39: Cohen Free Cash Flows to Assets** 

Cohen Free Cash Flows	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow = ni+depr+amort	(8.8)	1.2	3.9	7.3	14.2	29.7
Net Cash Flow (CF-Div)	(8.8)	1.2	3.9	7.3	14.2	29.7
Exchange rate effects	2.1	-	-	-	-	-
Working Capital Change		5.4	5.2	5.4	11.6	25.5
Free Cash Flow	(26.2)	0.7	2.6	4.7	9.8	22.9
Cash Flow/Assets	(0.4)	0.1	0.1	0.2	0.2	0.2
Net Cash Flow/Assets	(0.4)	0.1	0.1	0.2	0.2	0.2
Free Cash Flow/Assets	(1.3)	0.0	0.1	0.1	0.1	0.2
Net Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
Free Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
NCFO Per Share	(0.0)	(0.0)	0.0	0.0	0.0	0.0
Diluted EPS, Before Extraordinary Items	(0.0)	0.0	0.0	0.0	0.0	0.0

The Cohen Free Cash Flow/Assets (FCF/A) metric for VSPC has not been following a declining trend. However, going forward, we expect this metric to improve substantially from current levels. Beyond 2008, we expect the FCF to significantly rise as a result of the acquisition

of IPA. Also, the increase in top line and profitability is likely to result in higher operating cash flows. The consequent increase in revenues will outpace the growth in operating and capital expenses and improve cash flows, going forward.

# Valuation Assumptions

To determine an appropriate valuation for VSPC, we apply a present valuation formula to the forecasted free cash flows to equity. An important component of the present valuation

formulation is the discount rate used for calculation. We normally determine an appropriate discount rate beginning with the 10-year Treasury bond yield of 2.75%, adjusting it



for the equity risk premium and stock volatility. For VSPC, we have assumed the total market risk premium to be 7.0%.

The volatility measure, Beta, is based on the last five years of trading. Since VSPC does not have a relevant trading history, using the historical beta as a measure of volatility to determine the discount rate, in our view, is not reasonable. However, we assume that the stock will be volatile in the near future. The Company is still in the development phase which we believe will lead to increased trading activity. Therefore, the beta for VSPC is estimated at 1.5.

Another important component of the present for stock analyses valuation determining the growth rate investors will attribute to the Company toward the end of the forecast period (beyond 2013 in the case of VSPC). Assuming strong growth in free cash flows during the next few years of our forecast period, our conservative estimate for the terminal growth rate (after 2013) is in the 3%-7% range. We discount the respective streams of cash flows in the forecast period using a present valuation formulation. We then add the present value of the terminal value to derive the value of the Company.



# APPENDIX 2: OVERVIEW OF THE COMPANY'S KEY SEGMENTS

### Direct Methanol Fuel Cell Company

VIASPACE Inc, owns 71.4% of Direct Methanol Fuel Cell Company (DMFCC). DMFCC is currently pursuing its interest primarily in the disposable fuel cartridge business. The company has significant expertise in the safety and design of fuel cartridges. This coupled with its strong patent portfolio which the company plans to offer OEM's and manufacturers of fuel cells, is likely to give DMFCC a significant competitive advantage in the fuel cell industry.

### Product Overview

Fuel cartridges provide the energy source for the expected fuel cell-powered portable electronic devices, including laptop computers and cell phones. Currently, world leading OEMs of portable electronic devices are developing fuel cells which are expected to be permanently built into a notebook computer or mobile phone. Fuel cells are expected to have a longer operating time as compared to the currently used lithium ion batteries. Another advantage of fuel cells is that they can be instantaneously recharged by replacing the disposable fuel cartridge.

In simple terms, a fuel cell is like a razor and fuel cartridge is like the blade used in the razor. Like the razor, fuel cells have a longer life, while the fuel cartridge, similar to the blade needs to be disposed and replaced at regular intervals. Fuel cells will produce environmentally-friendly electricity, as long as there is fuel available. The International Electrochemical Commission has made it mandatory to pack the fuel required by fuel cells in cartridges. Further, it is now compulsory that these cartridges must be disposed once the fuel is over and cannot be re-filled by consumers. As a result, while the expected life of fuel cells is likely to be approximately 3 years, portable devices are expected to consume 24 fuel cartridges in a year.

DMFCC plans to partner with leading OEMs and manufacturers, to provide them with fuel cell cartridges that will be used in their electronic devices to supply the power source for the fuel cell electronic devices. The Company has begun developing fuel cell cartridges in-house as well as using manufacturing partners to assist in product development. At present, the Company is focusing on methanol fuel cartridges, but in the



future also plans to produce cartridges for other liquid hydrocarbons including formic acid.

The Company's key advantage lies in its expertise in cartridge safety and design. DMFCC has closely worked with leading key industry participants to develop standards for performance and safety of fuel cells and fuel cartridges. This has enabled the Company to design cartridges that comply with these safety To date, the Company has regulations. distributed and exhibited prototypes of its cartridges at various international exhibitions. The Company will soon start distributing samples of its cartridges to OEMs.

Direct Methanol Fuel Cell Corporation has designed and developed a new plastic-based methanol fuel cartridge. It is designed to be inserted into a laptop computer or similar portable electronic device. Other designs in development are for applications such as cell phones and PDAs. The picture below shows the prototype of a cartridge designed by DMFCC.

Applications for DMFCC Cartridge Technology Include: **Notebook Computers** Portable Electronic Devices DMFCCs Prototype Laptop Cartridge

**Exhibit 40: DMFCC's Fuel Cartridge Prototype** 



Given its expertise in cartridge design and safety, the Company plans to only design safety test and market fuel cartridges. DMFCC plans to partner with leading companies to manufacture these cartridges on its behalf. The Company has carefully selected manufacturing partners that have a successful track record of supplying critical products to OEMs. The intent of these agreements is to enable each partner to codevelop prototype and manufacture cartridges and related products exclusively for DMFCC. The Company, in exchange, will provide initial cartridge designs, licenses and intellectual property rights, and training in cartridge manufacturing. Agreements signed with partners across the globe help the Company to concentrate its effort on product design and safety.

### Patent Overview

DMFCC has licensed 59 issued and 59 pending patents from Caltech and USC on the direct liquid hydrocarbon fuel cell technology. In addition, DMFCC has directly applied for a few patents related to this technology. Some of these patents even have import, sub-licensing and have made rights. This has placed DMFCC in a very comfortable position, as it can now either sub-contract or import or can by itself

manufacture fuel cells and related products such as cartridges.

DMFCC intends to work with fuel cell manufacturers and OEMs to provide them with the patent protection and allow them to expedite the process of fuel cell commercialization. Its strong portfolio of patents makes the Company an ideal partner for OEMs and manufacturers. In return, the Company, rather than charging a one-time fee or royalty income, will try to encourage its partners to use fuel cartridges manufactured by DMFCC. Using this approach, the Company will be able to share the market risk with the OEM in addition to supplying cartridges to the marketplace.

## **Partnering Agreements**

Since its inception, DMFCC has been working closely with key industry players along its value chain to establish itself as a key player in the fuel cell industry and also expedite the process of fuel cell commercialization. A few of the partnership agreements signed by DMFCC are highlighted below:

#### **Agreements with OEMs and Manufacturers**

Over the past several years, DMFCC has had relationships with a number of fuel cell manufacturers, including OEMs and component manufactures that have invested millions of



dollars in developing fuel cell technology. The Company has had meeting with manufactures present in US, Europe, Japan, Korea, China, Taiwan, Singapore and in the Middle East. At present DMFCC has received cartridge

development contracts from Samsung and from CMR Fuel Cells. Nevertheless, given its expertise and business strategy, we expect that the Company would become a preferred partner by OEMs worldwide.

Exhibit 41: OEMs Displaying Products Powered Using Fuel Cells (a)

### **Agreements with Cartridge Manufacturers**

In order to outsource it cartridge manufacturing, DMFCC has partnered with key players that have a proven track record of successfully supplying critical products to OEMs. In addition to cartridge manufacturing, these partners will also serve as the Company's marketing and distribution agents in different geographies. The Company's partners for cartridge manufacturing include Elentec Co. Ltd. (Korea) the largest ion

battery supplier to Samsung, SMC Co. Ltd. (Korea) supplier of lithium battery to LG Electronics and Sato Corporation (Japan). In addition, the Company has recently entered into an agreement with e-Fuel Cell Technologies of Malaysia to expand its distribution in Asia. Further, DMFCC also has agreements with Hyun Won (Korea) and Nypro, a large US-based global supplier of plastic products with factories in 55 countries.



#### Grass Business

IPA has a license to cultivate a proprietary fast-growing grass which can be used as livestock feed and cellulosic ethanol. The Giant King Grass is a fast growing and perennial natural hybrid and not genetically modified. The grass, currently developed in China grows to approximately 4m height in 2 months and can harvest upto four times per year in subtropical and tropical areas. A potential second grass called Taishu No. 2 or TS-2 has been developed by Dr. Cheng of Taiwan Livestock Research Institute as a very fast growing, perennial livestock feed. TS-2 is a hybrid of Napier grasses (also called elephant grass native to Africa). The main specifications of the grass are highlighted in the table below:

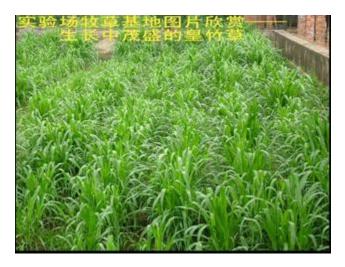
**Exhibit 42: Specifications of Giant King Grass** 

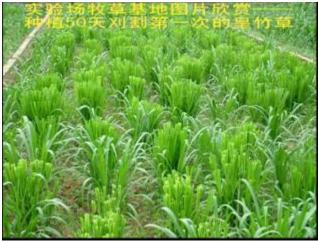
Height:	As high as 4-5m, max: 6m reported
Max. growth rate:	10cm/day (under optimal condition)
Productivity:	Average 375 tons/hectare & Max: 480tons/hectare
Crude protein in dried grass:	18.46%、Protamine 16.68%、sugar: 8.3%; 17 kinds of Amino acids
Crude protein:	18.46% and fiber 26%; or crude protein: 14% and fiber: 35%, under different harvest conditions

#### Can be used to feed:

Cattle, sheep, horses, rabbits, pigs, wild boar, chicken, turkey, grass carp, Qing-Zhu fish, ducks, geese, Zhu Shu, guinea pigs and other animals. It is so tasty that soon as animals eat this grass, they will not like other grasses.

**Exhibit 43: Sample Pictures of Giant King Grass** 











### Potential Uses of Grass

As an immediate use the grass can be used as an animal feedstock for cattle, sheep, horses, rabbits, pigs, wild boar, chicken, turkey, grass carp, Qing-Zhu fish, ducks, geese, Zhu Shu, guinea pigs and other animals. Based on current data, 1hectare of this giant grass can feed over 60-75 cows and as proven milk yield of cows feeded on this grass has increased by 0.62 kg/day. Another potential use of the Giant Grass and TS-2 is as a feedstock for cellulosic ethanol. Increased harvest per year, higher productivity and better economies makes TS-2 a preferred feedstock for cellulosic ethanol. Lastly, TS-2 grass produces drinkable juice and jelly with economic value.

**Exhibit 44: Potential Uses of Grass** 







#### Framed Art Business

As a part of IPA deal, VIASPACE acquired an established framed art business. IPA BVI, has a marketing and sales company offices in Atlanta and a wholly-owned manufacturing company IPA China in Guangzhou. The framed art business is a stable, low technology and highly profitable business. IPA BVI provides copyrighted art prints to IPA China which manufactures and frames the art and exports it back to IPA BVI in the U.S. IPA BVI sells the art to leading retail outlets including Hobby Lobby, Tuesday Morning, Ross, etc.

**Exhibit 45: Pictures of Framed Art manufactured by IPA** 









The Company employee 5 people in U.S. and has a China staff of 84 employees. The manufacturing unit in China is spread across 1.6 hectares of land which houses 2 manufacturing buildings and 1 staff quarters. The manufacturing unit in China is big enough to accommodate current framed art business and can also be utilized by VIASPACE for other production related purposes.



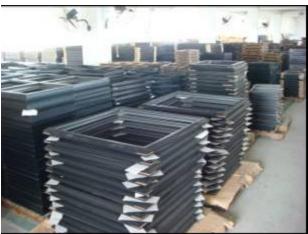
### **Exhibit 46: Pictures of IPA China**















# APPENDIX 3: VALUE DRIVERS – FUEL CELL INDUSTRY

### VALUE DRIVERS – FUEL CELL TECHNOLOGY

#### **Reliable and Secured Power Supply**

The energy infrastructure in the U.S. is a huge centralized power generation system with long-distance, high voltage power grids. Such a centralized system is vulnerable to terrorist attacks. This risk can be avoided by employing more distributed power systems using fuel cells. As a result, the demand for fuel cells in the U.S. is projected to rise substantially.

The National Power Laboratory in the U.S. estimates that on an average any given computer location experiences 289 power disturbances in a year. As a result of these power outages in the U.S., businesses are losing approximately \$29 billion annually. Since fuel cells offer clean, continuous, and high quality power, they can be used to run sensitive computers, medical equipment, and machines thereby preventing huge losses. Fuel cells can also be used to provide backup power to a grid-connected customer in the case of a grid failure. They can be configured to provide completely grid-independent power or can use the grid as the backup system. Fuel cells offer less than one

minute of down time during a six year period, implying 99.99% reliability.

#### **High Efficiency**

In electric power generation, the efficiency of fuel cells is higher than fossil fuels. Since fuel cells can produce energy electrochemically rather than burning fuel, they are fundamentally more efficient compared to combustion engines. Fuel cells used in automobiles are expected to be up to three times more efficient than internal combustion engines. Also, the waste heat from fuel cells can be utilized for other purposes (cogeneration). In huge building systems, fuel cell co-generation systems help cut facility energy service costs by 20–40% compared to conventional energy systems.

#### **Environmental Benefits**

A fuel cell power plant is estimated to emit less than one ounce of pollution per 1,000 kilowatthours of electricity produced compared to the 25 pounds of pollutants emitted by conventional combustion systems. Also, fuel cells in vehicles are expected to emit lesser pollutants compared to gasoline vehicles. Fuel cell vehicles with hydrogen stored on-board emit zero pollution.

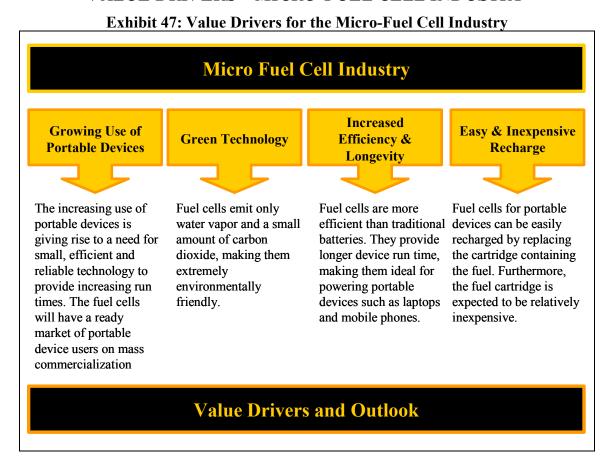


The only byproducts are water and heat. Fuel cells also have an environmental advantage over batteries since fuel cells do not require special disposal handling. This environmentally green nature of fuel cells makes them an attractive option for power generation purposes.

#### **Battery Replacement/Alternative**

Fuel cells catering to portable electronic devices are currently under development. In such applications, the fuel cell would provide longer operating life than a conventional battery. The distinct feature of a fuel cell is that it does not require recharging. A liquid, solid, or gaseous fuel canister can take care of charging. With regard to capacity, fuel cells offer higher power density in a smaller space than batteries. Another distinct feature of fuel cells are their versatility and scalability. Fuel cells can be stacked to produce any amount of desired output.

#### VALUE DRIVERS – MICRO-FUEL CELL INDUSTRY





#### **Growing Use of Portable Devices**

The portable device users are expected to be early adopters of fuel cell technology. Portable electronic devices have steadily moved towards higher performance that requires additional power, lower cost, smaller size, and lighter weight batteries. These technology trends impact the existing power source and put considerable strain on rechargeable batteries. The currently used L-Ion and L-Ion Polymer batteries are not able to keep up with the growth in energy required.

Micro fuel cells have the potential to provide extended device runtimes and are expected to be widely utilized to power multifunctional portable applications such as notebook computers and mobile/smart phones. The increasing use of portable devices and their rising needs for efficient and reliable energy source is expected to provide fuel cell manufacturers with a ready market for their products.

#### **Green Technology**

The growing concern regarding increasing emissions of hazardous chemicals has compelled worldwide government organizations to encourage the use of clean technologies to generate energy. The rising enforceability of environmental regulations is making the use of

many technologies difficult. The currently used batteries contain toxic chemicals and can pose serious harm to the environment if not properly recycled. Fuel cells, made of plastic, are easy to recycle and reuse. Furthermore, fuel cells emit zero emissions of harmful gasses. Their omissions include a small amount of water vapor and carbon dioxide, making them extremely environmentally friendly.

#### **Increased Efficiency and Longevity**

Fuel cells, because of their design, are more efficient than the existing sources of power. Methanol fuel cells offer two to three times more run time compared to current L-Ion batteries and can support the increased power demands of additional features used in portable devices. Furthermore, the fuel cells are smaller in size and lighter in weight as compared to the L-Ion batteries. This is expected to act as an important driver for fuel cells, especially in the portable device market.

#### Easy and Inexpensive to recharge

Most devices today use electricity to recharge their batteries. This leads to problems for users who are not able to access chargers or plug points, especially during traveling. Fuel cells on the other hand, can be easily recharged by replacing the cartridge which contains the fuel. The cartridges are estimated to cost \$3 to \$5 and



users are estimated to require around two to three cartridges per month for running their portable devices. This is quite inexpensive when compared to the cost of batteries and chargers combined.

Cartridges make this technology very useful to military organizations also for the use in portable telecom applications. The cartridges are expected to become easily available on the commercialization of the technology.

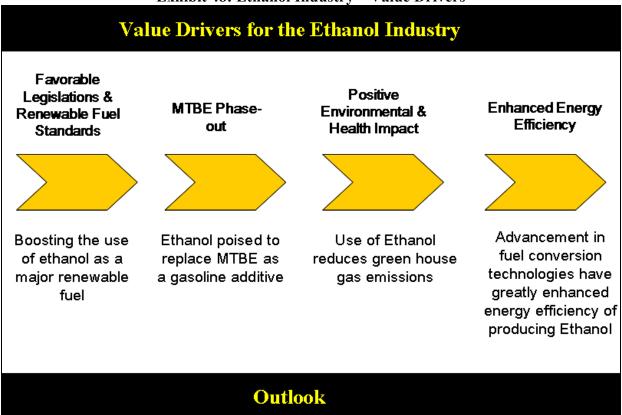
#### **Adaptability**

Micro fuel cells can be designed to provide power for a variety of designs. Not only can the size be changed, but the design can be modified to act as a backup/external power unit to support the existing batteries or as a fully integrated design which can be attached to a device.



# APPENDIX 4: VALUE DRIVERS – ETHANOL INDUSTRY

Exhibit 48: Ethanol Industry – Value Drivers



# Favorable Legislation and the Renewable Fuels Standard

The growing GHG emissions and America's recent resolve to lessen its dependence on foreign fossil fuels gives impetus to the ethanol industry. Furthermore, the prevailing tensions in the Middle Eastern countries have led the government to increase its emphasis on the development and production of renewable fuels, particularly ethanol. This led to the creation of the Renewable Fuels Standard (RFS) in August,

2005 under the Energy Policy Act (EPACT) of 2005. This legislation established the baseline usage of renewable fuels in the country, beginning with 4 billion gallons in 2006 and expanding to 15.2 billion gallon by 2012. Furthermore, the EPACT expanded the tax credit available for small ethanol producers having production of 30 million gallons to 60 million gallons a year.



Several states are enacting legislation requiring use of renewable fuels, to focus on their rural economic, environment, and energy security benefits. The industry has responded quickly to the situation and a number of ethanol plants have developed to help the nation exceed the congressional goal by 2008.

#### MTBE Phase-Out

Phasing out of methyl tertiary butyl ether (MTBE) as a gasoline additive provided an impetus to the ethanol industry. Since 1979, MTBE has been blended with gasoline at low levels in the United States, to replace lead as an octane enhancer, which helps prevent the engine from "knocking". Since 1992, MTBE has been used at higher concentrations in some gasoline to fulfill the oxygenate requirements of the 1990 Clean Air Act Amendments. Oxygen helps gasoline burn more completely, reducing harmful tailpipe emissions from vehicles. Oxygen plays a dual role as an additive, diluting or displacing gasoline components such as aromatics (e.g., benzene) and sulfur and optimizes the oxidation during combustion. Most refiners prefer using MTBE over other oxygenates to comply with the mandate primarily for its blending characteristics and for economic reasons. However, after MTBE was found to be a carcinogen and was found to leak and pollute ground water, California and then

other states banned or are currently phasing out the use of MTBE as a fuel additive. MTBE suppliers are currently embroiled in litigation claiming more than \$30 billion in damages. Ethanol has higher oxygen content and is rapidly replacing MTBE as a fuel additive. Chart 7 shows the growth in use of ethanol replacing MTBE as a gasoline additive.

#### Positive Environmental and Health Impact

Another factor stimulating the demand for ethanol is its positive impact on health and the environment. Ethanol is made from plants such as corn and sugarcane and is, therefore, a renewable source of energy. In contrast, gasoline is in limited supply and causes the depletion of natural resources.

The Clean Air Act of 1990 requires gasoline to be blended with oxygenating agents to reduce the harmful tailpipe emissions. Ethanol contains 35% oxygen and burns cleaner than gasoline. According to Argonne National Laboratory, E10 (gasoline blended with 10% ethanol) reduces greenhouse gas emissions by 12-19% as compared to gasoline. Gasoline blended with 85% ethanol (E85) has the highest oxygen content of any other fuel available, making it burn even more cleanly and completely than any other fuel. Additionally, ethanol is highly biodegradable and thus, is safer to the



environment. Growing environmental concerns over greenhouse gas emissions and global warming are likely to enhance the demand for ethanol.

#### Enhanced Energy Efficiency

Critics claim that ethanol produced from corn has a negative energy balance. They state that more energy is consumed in the production process than the energy generated by the final product. However, recent studies refute their claims and show that many of the assumptions in their studies are flawed. The studies further concluded that ethanol generates 34-38% more energy than it consumes in the entire production process from growing corn to the transportation and distribution of the finished ethanol. Improved farming practices and better corn varieties together with advances in production technology provide a promising outlook for the ethanol industry.



# APPENDIX 5: ETHANOL INDUSTRY – DEMAND, SUPPLY AND PRICING

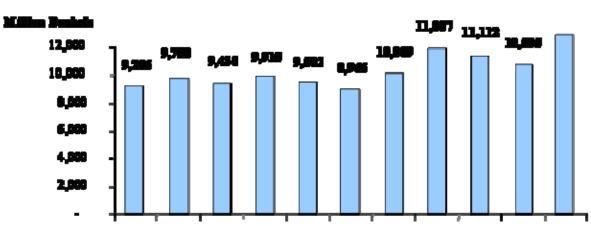
#### Demand

The demand for ethanol has never been higher because the United States Government continues to promote the use of ethanol through various legislative and incentive programs. The Energy Policy Act of 2005 signed by President George W. Bush created an ethanol usage floor for blenders and refiners. It mandated usage levels of 4.7 billion gallons of ethanol in 2007, rising incrementally to 15.2 billion gallons in 2012. With the continued phasing out of MTBE in all states and the rising number of flex-fuel vehicles on United States roads, we expect ethanol demand to grow beyond the current RFS mandated levels.

#### Supply

Ethanol producers may have some idle capacity due to more plants coming into operation than demanded by petroleum companies to meet their gasoline additive needs. Currently, a total of 174 ethanol refineries operate in the United States, producing 6.5 billion gallons a year. Domestic production is expected to increase by nearly 23% as 23 new plants are under construction with four existing plants considering expansion. The United States production shortfall in ethanol reduced as the production deficit was 48,000 bpd in September 2008. This indicates that there is not enough potential for new companies entering the market while existing companies consider The expansion. following tables show the present production of corn in the United States and the percent of corn used for ethanol production. At present, only 17.6% of the total production of corn in the country is being utilized for the production of ethanol, elucidating the availability of abundant corn for use of the ethanol industry in the future.





**Exhibit 49: Trends in Corn Production** 



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Tours

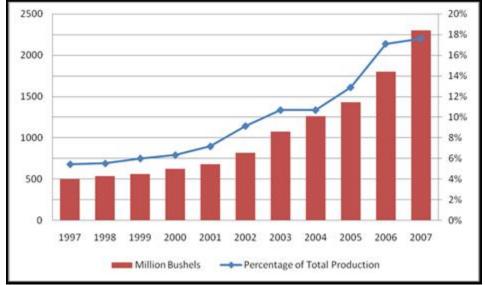
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#### **Pricing**

Rising corn prices have bankrupted certain ethanol company startups, including the bankruptcy of Verasun. Corn prices will have to decline considerably before corn ethanol becomes economically viable in the USA. For this reason, cellulose ethanol is

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the future of the domestic ethanol industry. Historically, ethanol prices followed gasoline prices. Ethanol prices increase with gasoline price hikes and conversely decrease in tandem. (Chart 4 shows how ethanol prices traded historically, with changes in gasoline prices). However, apart from the

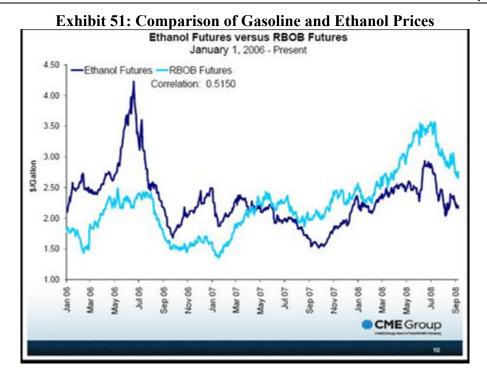


increase in gasoline prices, the recent fall in the price of ethanol has been due mainly to the surge in production and many new refineries coming on-stream. The price of ethanol is dependent primarily on the price of its key inputs such as corn. In 2006, for the first time, corn used for ethanol exceeded the amount of corn exported, with futures prices for corn climbing to \$2.82 for December 2007 futures and \$3.23 for December 2008 future from its 2006 price of \$2.39 a bushel. The current price of corn is around \$4 per bushel. The United States has been the largest producer of corn. Farmers are increasing their corn acreage to meet the growing demand which we speculate will stabilize corn prices in the future. It is not viable today to produce ethanol from corn because of high corn prices and over capacity in the industry compared to market prices. The Renewable Fuels Association has recently put in a request of \$1 billion for financial aid to help struggling ethanol producers so they can finance current operations. In addition, the RFA has also suggested to the incoming administration

that it create a \$50-billion federal loan guarantee program to finance investment in the ethanol producers' expansion.

Ethanol prices rose to a high of nearly \$4 per gallon in 2006. Lately though due to higher production and lower demand due to cheaper crude oil, ethanol prices have gone down to \$1.62 per gallon. The ethanolgasoline differential is currently at \$0.70, still above the historical premium of \$0.40, making it expensive even with government subsidies. Moreover, ethanol as a fuel contains less energy than gasoline, resulting in fewer miles per gallon as compared to gasoline. The demand for ethanol increased primarily due to its use as a gasoline additive. It is likely to stabilize production levels meet the RFS mandates. With the incentives offered by the United States Government, ethanol is likely to be continually used as a gasoline additive. Market expectations for ethanol prices in Jan 2010 have risen to \$1.75/gallon from current spot rates of \$1.62/gallon.







### APPENDIX 6: CELLULOSIC ETHANOL

Cellulosic ethanol is a blend of normal ethanol that can be produced from a great diversity of biomass including waste from urban, agricultural and forestry sources. Over 95% of the ethanol produced in the United States today is manufactured by dry or wet milling processes using starch from corn. These are relatively simple processes – corn grinding, and starch separation, saccharification. fermentation and distillation. Cellulose ethanol requires more advanced pretreatment methods because the sugar carbon components - cellulose and hemicellulose – are much more difficult to hydrolyze economically into fermentable sugars. Apart from the saccharification of the cellulose and the hemicellulose, the remaining cellulose ethanol production is similar to corn-based ethanol (See Picture 17 for cellulosic ethanol production process).

#### **Pretreatment**

Pretreatment refers to the solubilization and separation of one or more of the four major components of biomass – hemicellulose, cellulose, lignin and extractives – to make the remaining solid biomass more accessible to further chemical or biological treatment. Hydrolysis (saccharification) breaks down

the hydrogen bonds in the hemicellulose and cellulose fractions into their sugar components: pentoses and hexoses. These sugars can then be fermented into ethanol.

There are numerous pretreatment methods or combinations of pretreatment methods available. Physical pretreatment breaks down the feedstock size by milling or aqueous/steam processing. The physical pretreatment commonly used by the cornethanol producers is milling, which reduces the size of the corn kernel, opening it up for enzymatic hydrolysis. Methods used for cellulosic materials require much more intense physical pretreatments such as steam explosion.

The most common chemical pretreatment methods used for cellulosic feedstocks are dilute acid, alkaline, organic solvent, ammonia, sulfur dioxide, carbon dioxide or other chemicals to make the biomass more digestible by the enzymes. Biological pretreatments are sometimes used in combination with chemical treatments to solubilize the lignin in order to make cellulose more accessible to hydrolysis and fermentation.



Each type of feedstock, whether softwoods, corn stover or bagasse, requires a particular combination of pretreatment methods to optimize the yields of that feedstock, minimize the degradation of the substrate, and maximize the sugar yield. Pretreatment of cellulosic biomass in a cost-effective manner is a major challenge of cellulose-ethanol technology research and development.

Dyadic International Inc. has an exciting new microbial source of highly efficient hydrolytic enzymes for cellulose production. The system can also be used for other polysaccharides. If successful in production, efficient cellulose manufacturing can be closer than current predictions. We are closely watching the commercialization of Dyadic's science.

### Hydrolysis

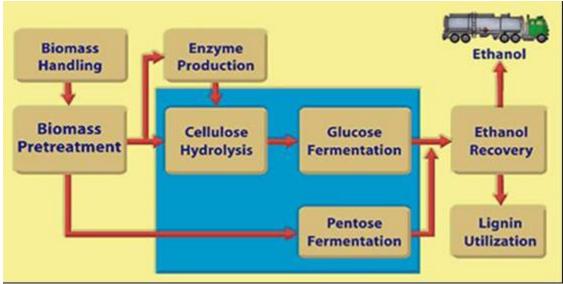
After the pretreatment process, there are two types of processes to hydrolyze the

feedstocks for fermentation into ethanol. The hydrolysis methods most commonly used are acid (dilute and concentrated) and enzymatic.

#### 1. Acid Hydrolysis

There are two acid hydrolysis processes used: dilute acid commonly and concentrated acid. The dilute acid process is conducted under high temperature and pressure, and has a reaction time in the range of seconds or minutes, which facilitates continuous processing. concentrated acid process uses relatively mild temperatures, and the only pressures involved are those created by pumping materials from vessel to vessel. Reaction times are typically much longer than for dilute acid.





**Exhibit 52: Cellulosic Ethanol Production Process** 

Source: Renewable Fuels Association

**Dilute Acid Hydrolysis:** This is the oldest technology for converting cellulose biomass to ethanol. The dilute acid process involves a solution of about 1-percent sulfuric acid concentration in a continuous flow reactor at a high temperature (about 215°C). The sugar conversion efficiency with this method is about 50 percent. The dilute acid process involves two reactions. First, the cellulosic materials are converted to sugar. However, if the reaction continues, these sugars will convert into other chemicals. The conditions that cause the first reaction are also the right conditions for the second to occur. Once the cellulosic molecules are broken down, the reaction proceeds rapidly to convert the sugars into other products - typically furfural. The sugar degradation not only

reduces the sugar yield, but the furfural and other by-products can inhibit the fermentation process.

Because hemicellulose (5-carbon) sugars degrade more rapidly than cellulose (6carbon) sugars, one way to decrease sugar degradation is to implement a two-stage process. The first stage is conducted under mild process conditions to recover the 5carbon sugars while the second stage is conducted under harsher conditions to recover the 6-carbon sugars. Both of these hydrolyzed solutions are then fermented to alcohol. Lime is used to neutralize residual acids before the fermentation stage. Sugar degradation still occurs; therefore, theoretical yields are limited to around 80



gallons of ethanol per ton of dry wood. The residual cellulose and lignin are used as boiler fuel for electricity or steam production.

**Concentrated Acid Hydrolysis:** This method uses concentrated sulfuric followed by a dilution with water to dissolve and hydrolyze or convert the substrate into sugar. This process provides a complete and rapid conversion of cellulose to glucose and hemicellulose to 5-carbon sugars with little degradation. The critical factors needed to make this process economically viable are optimizing sugar recovery and cost effective recovery of the acid for recycling. The concentrated acid process uses a 70-percent sulfuric acid concentration solution at 100°F for 2 to 6 hours in a hemicellulose hydrolysis reactor. The low temperatures and pressures minimize the degradation of sugars. The hydrolyzed material in the reactor is then soaked in water and drained several times to recover the sugars.

The next step is to hydrolyze the cellulose. The solid residue from the first stage is dewatered and soaked in a 30 to 40 percent concentration of sulfuric acid for 1 to 4 hours as a pre-cellulose hydrolysis step. The solution is again dewatered and dried,

percent. After reacting in another vessel for 1 to 4 hours at low temperatures, the contents are separated to recover the sugar and acid. The sugar/acid solution from the second stage is recycled to the first stage to provide the acid for the first stage hydrolysis.

The primary advantage of the concentrated process is the potential for high sugar recovery efficiency, about 90 percent of both hemicellulose and cellulose sugars. The acid and sugar are separated via ion exchange and then acid is re-concentrated via multiple effect evaporators. The low temperatures and pressures employed allow the use of relatively low cost materials such as fiberglass tanks and piping.

#### 2. Enzyme Hydrolysis

Biological (vs. chemical) approaches to cellulose hydrolysis have the potential to improve conversion efficiencies and production economics. There are two technological developments: enzymatic and direct microbial conversion. Enzymatic hydrolysis is much closer to commercial application.

Direct microbial conversion (DMC) is a method of converting cellulosic biomass to



ethanol in which both ethanol and all required enzymes are produced by a single microorganism. The potential advantage of DMC is that a dedicated process step for production of cellulase enzyme is not necessary. Cellulase enzyme production (or purchase) is a significant cost in enzymatic hydrolysis processes under development. DMC is not considered the leading process alternative today because there are no organisms available that both produce cellulase and other enzymes at the required high levels and also produces ethanol at the required high concentrations and yields.

The understanding of enzymatic hydrolysis of cellulose began in the South Pacific during World War II where a fungus that broke down cotton clothing and tents was discovered. This organism, *trichoderma reesei*, was found to produce cellulase enzymes. Since then, generations of cellulases have been developed through genetic modifications of the fungus strain.

For enzymes to work efficiently, they must obtain access to the molecules to be hydrolyzed. This requires some kind of pretreatment process to remove hemicellulose and break down the crystalline structure of the cellulose or

removal of the lignin to expose the cellulose and hemicellulose molecules.

Various physical and chemical pretreatment methods are used to break down feedstock components. Purely physical pretreatments typically not adequate however. Examples of physical methods include high temperature/pressure and milling. chemical method uses a solvent, such as a dilute sulfuric acid. The dilute acid pretreatment may require the slurry to be for detoxified removal materials fermentation poisonous to the microorganisms.

The first application of enzymatic hydrolysis was used in separate hydrolysis fermentation steps. The substrate was pretreated and then subsequently hydrolyzed. applications More recent integrated the saccharification and fermentation steps to improve production economics. Simultaneous saccharification and fermentation (SSF) combined the cellulase enzymes and fermenting microbes in one vessel. This enabled a one-step of process sugar production and fermentation into ethanol. The disadvantage, however, is that the cellulase enzyme and fermentation organism have to operate under



the same conditions, decreasing the sugar and ethanol yields.

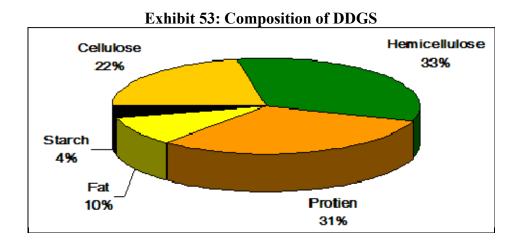
An alternative enzymatic hydrolysis replaces SSF technology with sequential hydrolysis and fermentation (SHF). The separation of hydrolysis and fermentation offers various processing advantages and opportunities. It enables enzymes to operate higher temperatures for increased performance and fermentation organisms to moderate operate temperatures, at optimizing the utilization of sugars.

### Dyadic Process for Conversion of DDGS into Ethanol.

**Dyadic International,** has developed a technology, which using proprietary enzymes, will convert the cellulose and

hemicellulose in distillers grains (DDGS) to fermentable sugars such as glucose, xylose, and arabinose. Dyadic claims that by fermenting these sugars to ethanol, the yields can rise by 10%-20% without growing or importing any additional corn.

DDGS is composed of various sugars and proteins. These sugars can be fermented and converted into ethanol.

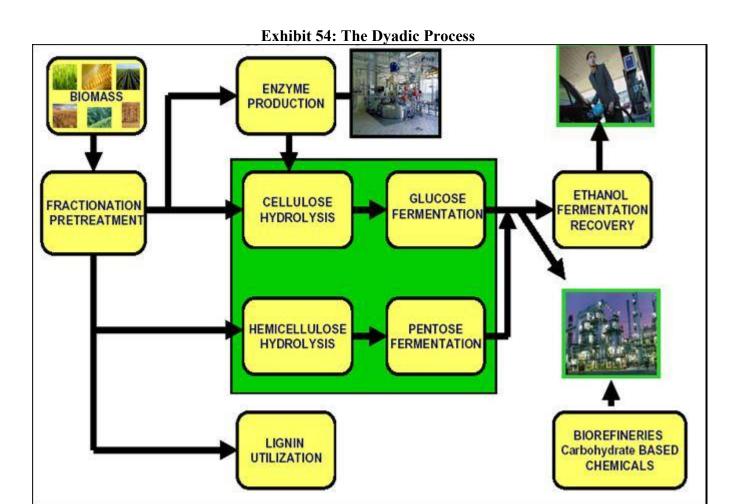


This will lead to a higher protein DDGS and also increase ethanol yields from corn. Dyadic scientists project that by unlocking the sugars in

DDGS, the ethanol industry will be able to produce an additional 810 MMGY of ethanol.



The process is similar to enzyme hydrolysis and can be used on a variety of biomass feedstocks including bagasse, wood pulp residues, stovers, municipal waste, switchgrass etc. This process will add immense value to the existing ethanol plants and lead to a higher utilization of corn.



### **Fermentation**

Near-term fermentation using genetically engineered yeast or bacteria will utilize all five of the major biomass sugars – glucose, xylose, mannose, galactose and arabinose. Mid- to long-term technology will improve the fermentation efficiency of the organism, producing higher

yields in less time, and a heartier organism requiring less detoxification of the hydrolysate.

The National Renewable Energy Laboratory (NREL) recently developed an advanced strain of its patented *Zymomonas mobilis* bacterium that could lead to more efficient fermentation of cellulosic materials. The bacterium is able to



ferment both five-carbon and six-carbon sugars simultaneously, expanding the amount of

biomass material that can be converted into ethanol by up to 40 %.



### **APPENDIX 7: MANAGEMENT TEAM<sup>5</sup>**

#### Dr. Carl Kukkonen

#### **Chief Executive Officer**

Dr. Carl Kukkonen is Chairman, CEO and co-founder of the company. He served as CEO of VIASPACE Technologies LLC, the predecessor company of VIASPACE Inc., from its founding in 1998. VIASPACE Technologies incubated several companies based on technologies developed at the NASA Jet Propulsion Laboratory and patents and software licensed from Caltech.

Prior to founding VIASPACE, Dr. Kukkonen was a Caltech employee and served as Director of the Center for Space Microelectronics Technology (CMST) and Manager of Supercomputing at the NASA Jet Propulsion Laboratory, which is managed by Caltech, in Pasadena, CA. At JPL from 1984 – 1998, he managed several technologies and technical subsidiaries. Dr. Kukkonen established and grew the Center for Space Microelectronics into a 250-person operation with a \$70M annual budget. Dr. Kukkonen was awarded the NASA Exceptional Achievement Medal in 1992.

From 1977 – 1984, Dr. Kukkonen was at the Ford Motor Company, where he was Ford's leading expert on hydrogen as an alternative automotive fuel. As a Principal Research Engineer, he also led a team that developed Fords' first turbocharged intercooled direct injection diesel engine.

Dr. Kukkonen received a BS in physics from the University of California at Davis. He earned a MS and Ph.D. in physics from Cornell University and was a post-doctoral fellow at Purdue.

<sup>&</sup>lt;sup>5</sup> Taken directly from the Company's Website: www.VIASPACE.com



### Stephen J. Muzi

#### **Chief Financial Officer**

Mr. Stephen J. Muzi serves as the company's Chief Financial Officer, Treasurer and Secretary, responsible for all accounting, financial reporting, treasury and budgeting activities. He is also responsible for ensuring that proper internal financial controls exist and that procedures are in place to safeguard company assets. Mr. Muzi joined VIASPACE Technologies LLC as Controller in 2000.

Prior to joining VIASPACE, Mr. Muzi was a Corporate Controller of Southwest Water Company, a NASDAQ company with revenues in excess of \$100 million. In this position, he was responsible for all SEC reporting requirements as well as Board of Director reporting. He managed their line of credit banking relationships, risk management program, internal audit program, and income tax requirements. He also made presentations to investment brokers and analysts on behalf of the company, focusing on outlooks for the future and past financial performance. Mr. Muzi was with Southwest Water Company from 1988 – 2000. From 1985 – 1987 Mr. Muzi was a senior auditor with BDO Seidman, a national CPA firm. Mr. Muzi received his BS degree from Rochester Institute of Technology and an MBA from the State University of New York at Buffalo. He is a Certified Public Accountant.



### APPENDIX 8: RECENT NEWS RELEASES<sup>6</sup>

# DIRECT METHANOL FUEL CELL CORPORATION AND GASHUB TO SUPPORT CLEAN ENERGY TESTBED IN SINGAPORE

PASADENA, CA, FEBRUARY 2, 2009 - VIASPACE Inc. subsidiary Direct Methanol Fuel Cell Corporation (DMFCC) and its partner GasHub Technology Pte. Ltd. of Singapore attended the inauguration of the Clean Energy Testbedding Community (CETC) in Singapore. CETC was established by a Memorandum of Understanding between the Singapore Business Federation and Temasek Polytechnic, and is supported by the Singapore Economic Development Board. CETC aims to foster business and technological cooperation to testbed and pilot fuel cell, solar and other clean energy technologies and applications. GasHub CEO Avier Lim and DMFCC Vice President of Business Development Gary Miller attended the event in Singapore.

Mr. Miller stated, "GasHub and DMFCC have a partnership in developing portable fuel cell technology, and both companies look forward to supporting the new testbed. Singapore is very aggressive towards commercializing fuel cells and we are happy to be working with them."

DMFCC, a subsidiary of VIASPACE Inc., focuses on manufacturing and distribution of disposable methanol fuel cartridges which provide the energy source for notebook computers, mobile phones and other devices that are expected to be powered by direct methanol fuel cells. Major companies such as Toshiba and Samsung are pursuing fuel cell powered electronic devices. DMFCC is a cartridge partner with Samsung.

#### VIASPACE CEO ISSUES STRATEGY UPDATE

PASADENA, CA, January 21, 2009-VIASPACE Inc. (OTCBB: VSPC) CEO, Dr. Carl Kukkonen today provided an overview of the recently acquired profitable subsidiary Inter-Pacific Arts and how it fits into the overall VIASPACE business plans.

<sup>&</sup>lt;sup>6</sup> As taken directly from the Company's website.



Dr. Kukkonen commented, "VIASPACE acquired Inter-Pacific Arts in late 2008. Inter-Pacific has a profitable ongoing business manufacturing and selling quality framed art in the wholesale market. Inter-Pacific also has a worldwide license to a fast growing grass known as China Giant King Grass that is suitable both as a feedstock for cellulosic biofuels and as an animal feed for cows, sheep, pigs, poultry and fish. 1.2 million grass seedlings were planted in late 2008, and land was leased for commercial growth in China."

"Two weeks ago, we completed the independent audit of Inter-Pacific. The results showed \$5.4 million in revenue and \$1.1 million in net profit in 2007, and \$5 million in revenue and \$1 million in net profit for the first nine months of 2008. VIASPACE will include Inter-Pacific revenue and net profits from the date of the acquisition in its future consolidated financial results. Inter-Pacific also has an unaudited cash and cash equivalents of \$3 million as of December 31, 2008."

"We believe that the Inter-Pacific business will grow and continue to be profitable in 2009 and beyond. In the fourth quarter of 2008 and thus far in 2009, VIASPACE has significantly reduced its cash expenditures, sold its yet to be profitable security business, and reduced its debt burdens. The Company expects to be cash flow breakeven in 2009. VIASPACE will be focusing on its alternative energy businesses including grass for animal feed and biofuels as well as its direct methanol fuel cell business, and on the profitable framed art business. We are continuing our collaboration with Samsung on fuel cartridges for their direct methanol fuel cell product development."

"Inter-Pacific manufactures high-quality, custom designed framed art and ships to large US retailers. A key to Inter-Pacific's success in the US framed art market is that all of the art is high quality, and purchased in the US. All intellectual property royalties are properly paid-we have no counterfeit products. The art (including prints) are sent to Inter-Pacific's manufacturing facility in Guangzhou, China for custom matting and framing, and containers of framed art are sent directly to wholesalers, distributors and large retailers. Inter-Pacific has designers who work with the customers to choose the art, matter and frames. Customers appreciate high-quality of the framing and clear plastic corner protectors that do not have to be removed for shelf display. Inter-Pacific also assures customers that it will not sell the same product design to any of its competitors."



# VIASPACE ACQUISITION AUDIT SHOWS \$5.4 MILLION REVENUE AND \$1.1 MILLION NET PROFIT IN 2007

PASADENA, Calif., Jan. 13 /PRNewswire-FirstCall/ -- VIASPACE Inc. announced today that the audit of the combined financial statements of Inter-Pacific Arts Corp. and Affiliate ("Inter-Pacific") for the years ended December 31, 2007 and 2006 has been completed by Goldman Parks Kurland Mohidin LLP. On October 28, 2008, VIASPACE announced that it had acquired Inter-Pacific, a company which has existing profitable operations in the framed art business. Inter-Pacific also holds a worldwide license to grow and sell China Giant King Grass, an ultra-fast-growing hybrid grass suitable as a feedstock for cellulosic biofuels and for use directly as animal feed.

The 2007 audit of Inter-Pacific reported revenues of \$5,462,000 and net profit of \$1,167,000. In addition, a review was completed by the independent auditors for the nine months ending September 30, 2008 and showed Inter-Pacific reported revenues of \$5,066,000 and net profit of \$999,000. The Company filed a Form 8-K/A on January 7, 2009 with the Securities and Exchange Commission. Please visit http://www.viaspace.com/sec\_filings.php for the complete filing and details of the audit and review.

Dr. Carl Kukkonen, CEO of VIASPACE, commented: "The framed art business of Inter-Pacific is profitable and growing as shown by the results of the independent audit. VIASPACE expects to use these profits to further expand and develop the grass business. We previously announced the leasing of 100 acres of land with an option for an additional 1400 acres in Guangdong Province, China, and our current crop of 1.2 million grass seedlings is currently growing near the Inter-Pacific manufacturing facility in Guangzhou. Our initial grass revenues are expected in 2009. Revenues for the next year or two will come from sales of the grass as livestock, poultry and fish feed. In parallel, we are building the capability to grow large amounts of grass for production of non-food crop, cellulosic green biofuels."

#### VIASPACE SELLS NON-CORE SECURITY BUSINESS LINE FOR \$479,000

PASADENA, Calif., Dec. 29 /PRNewswire-FirstCall/ -- VIASPACE Inc. today announced that it has sold its non-core security business line to Knovitech, Inc for \$479,000 in cash and debt forgiveness.



Former VIASPACE COO, Amjad Abdallat will be the new Knovitech CEO, and some VIASPACE employees in the security business unit are expected to transfer to Knovitech.

VIASPACE will continue to focus on its green energy business. VIASPACE will retain the newly acquired Inter-Pacific Arts (IPA) which is a profitable company with a license for a new fast-growing grass suitable for the global \$25 billion biofuel and \$40 billion animal feed markets. VIASPACE previously announced the planting of 1.2 million grass seedlings and the lease of agricultural land in China. VIASPACE will also retain Direct Methanol Fuel Cell Corporation (DMFCC) which produces disposable fuel cartridges for portable electronics expected to be powered by fuel cells. DMFCC is a cartridge supplier to Samsung in Korea and other companies. With this focus; VIASPACE believes that it has a plan to be cash flow breakeven in 2009.

Dr. Carl Kukkonen, CEO of VIASPACE, commented, "Our strategy addresses the near, mid-and long-terms with a combination of current subsidiary profits and large future potential. The ongoing IPA framed art business is growing and profitable. These profits are invested into the grass business which addresses large current markets as an animal feed, as well as very large future markets as a feedstock for nonfood crop, cellulosic, biofuels such as ethanol, methanol and bio-crude. The disposable fuel cartridges produced by Direct Methanol Fuel Cell Corporation will represent a potentially large and recurring revenue stream when the portable electronics OEMs introduce their fuel-cell powered products into the marketplace.

Kukkonen continued, "I strongly believe in the security business we sold to Knovitech. It should have a bright future, but is not yet profitable. The sale has provided VIASPACE \$479,000 in cash and debt forgiveness which allows us to improve our balance sheet and focus on green energy. In this difficult economic environment, we have to be creative and make tough decisions in order to survive and thrive. I believe that the IPA acquisition and our sale of nonprofitable, non-core business lines positions us well for the future."

# VIASPACE PLANTS BIOFUEL & ANIMAL FEED GRASS AND SIGNS LAND LEASE IN CHINA



PASADENA, Calif., Dec. 10 /PRNewswire-FirstCall/ -- VIASPACE Inc. announced today that it has planted 1.2 million seedlings of its proprietary fast-growing China Giant King Grass near the IPA factory in Guangdong province in China. Giant King Grass is a natural hybrid perennial grass which is propagated from seedlings rather than seeds. In tropical and subtropical areas such as Southern China, it can yield four crops per year and up to 156 tons of grass per acre per year.

VIASPACE also signed a 15 year lease on agricultural land in Heyuan city in Guangdong Province, China. The lease was signed last week in a ceremony with government officials. The lease is for 100 acres, with an option for an additional 1400 acres in 2009. VIASPACE plans to plant Giant King Grass seedlings in Heyuan early next year.

China Giant King Grass was originally developed as an animal feed for cows, pigs, sheep, goats, rabbits, turkeys and fish. Animal feed provides an immediate market for the grass which is also being grown as a feedstock for production of cellulosic ethanol, methanol, biocrude and green gasoline. VIASPACE expects to generate \$20 million in revenue in the next two years including the sale of grass for livestock feed and alternative fuels. Agriculture and alternative energy are two of the national priorities of China.

Dr. Carl Kukkonen, CEO of VIASPACE, commented: "VIASPACE is focusing on green energy with its fuel cartridges for fuel cell powered notebook computers and mobile phones, and on China Giant King Grass as a carbon neutral alternative fuel feedstock. A major advantage of the grass is that it has an immediate market as an animal feed. We project that we can generate significant revenue and profit in the next year or two by selling the grass as animal feed. In parallel, we are building capability to grow large amounts of grass for production of nonfood crop cellulosic alternative green fuels."

VIASPACE recently acquired Inter-Pacific Arts Corp., a company with ongoing profitable operations generating unaudited 2007 revenues of approximately \$5 million, net income of \$1.2 million, and \$3 million in cash and equivalents. Inter-Pacific has a worldwide license to grow and sell the ultra-fast-growing hybrid grass in addition to its already profitable consumer products business.



Dr. Kukkonen was interviewed by the Chinese Daily News, the largest Chinese language newspaper outside of China, on the grass business, and the resulting article is available online at News from worldjournal.com <a href="http://www.worldjournal.com/wj-la-news.php?nt\_seq\_id=1812481">http://www.worldjournal.com/wj-la-news.php?nt\_seq\_id=1812481</a>

#### VIASPACE DELIVERS CARTRIDGES TO CMR FUEL CELLS

PASADENA, Calif., Dec. 4 /PRNewswire-FirstCall/ -- VIASPACE Inc., reported today that that its Direct Methanol Fuel Cell Corporation (DMFCC) subsidiary has delivered fuel cartridges, and device side valves to CMR Fuel Cells (LSE-AIM: CMF.L) of the United Kingdom. The cartridges are for CMR's stand-alone, hybrid Direct Methanol Fuel Cell ('DMFC') charger. CMR is a specialist developer of high power density fuel cell stacks and systems for portable electronics applications and is developing a 25W fuel cell power supply unit that is hybridized with a battery.

The cartridge contains the methanol fuel and a valve to ensure that the fuel remains in the cartridge until the cartridge mated with the device side valve which is attached to the fuel cell itself. Both the cartridge and the valves are designed to meet current and emerging IEC standards for safety.

Dr. Kukkonen, CEO of VIASPACE and DMFCC, commented, "DMFCC produces disposable fuel cartridges for fuel cell powered portable electronics and other applications. We are happy to have CMR as a customer. We are proud that we were able to fulfill their purchase order in less than 30 days. DMFCC is also a fuel cartridge partner with Samsung in Korea."

#### **VIASPACE TARGETS \$25 BILLION BIOFUEL MARKET**

PASADENA, Calif., Dec. 2 /PRNewswire-FirstCall/ --- VIASPACE Inc. today announced the Company is cultivating a new fast-growing hybrid grass to be used for production of cellulosic ethanol, methanol, biocrude and green gasoline. VIASPACE is taking a leadership position in the development of feedstock for sustainable biofuels, targeting the growing \$25 billion global biofuels market. The Company is working to develop supply contracts with companies in China and also expand into other worldwide markets. VIASPACE expects to generate \$20 million in revenue in the next two years selling this high-yield grass for alternative fuels as well as livestock feed.



Dr. Carl Kukkonen, CEO of VIASPACE, commented: "Nations worldwide are utilizing biofuels to reduce greenhouse emissions, decrease reliance on fossil fuels and meet rising fuel requirements. For biofuels to be truly effective they must be sustainable, net energy efficient, carbon neutral and generated from sources that don't impact the food supply. Producing biofuels from cellulose-rich biomass like grasses and plant stalks rather than corn or other food grains solves the 'food versus fuel' dilemma affecting corn-based ethanol. VIASPACE's fast-growing perennial grass meets all criteria for a sustainable energy crop and we expect it to play a pivotal role in the bright future for all clean transportation fuels."

The U.S. Department of Energy expects global production of biofuels to more than double by 2030, projecting output will increase from 1.3 million barrels per day in 2010 to 2.7 million. Within the last year the DOE has announced that it will invest \$1 billion in biofuels research and development; \$114 million in small-scale cellulosic refineries, \$405 million in bioenergy centers, and \$385 million in commercial-scale cellulosic refineries. Clean Edge reports in Clean-Energy Trends 2008 that global production and wholesale pricing of biofuels reached \$25.4 billion in 2007 and are projected to reach \$81.1 billion by 2017.

VIASPACE recently acquired Inter-Pacific Arts Corp., a company with ongoing profitable operations generating unaudited 2007 revenues of approximately \$5 million, net income of \$1.2 million, and \$3 million in cash and equivalents. Inter-Pacific has a worldwide license to grow and sell the ultra-fast-growing hybrid grass in addition to its already profitable consumer products business. The VIASPACE subsidiary has initiated commercial farming of the high-yield grass in China where markets for both animal feed and ethanol are growing rapidly. The China Giant King Grass is a natural, non-genetically modified hybrid that can grow up to twelve feet high in sixty days and can produce four crops per year in tropical and subtropical climates. The perennial grass yields seven times the mass output per acre compared to an annual crop such as corn. It is ideal for use as a low-cost, high yield, non-food based biomass for ethanol and other biofuels. China produced 750,000 tons of ethanol last year and is scheduled to boost output to 5,000,000 tons by 2010, according to the Ministry of Agriculture. China's Ministry of Finance reports that in order to protect grain security it will not approve new biofuels projects using food grains. Instead the central government will offer financial support for development of biofuel from agricultural waste and non-grain farm produce.



#### CMR FUEL CELLS ORDERS CARTRIDGES FROM VIASPACE

PASADENA, Calif., Nov. 18 /PRNewswire-FirstCall/ -- VIASPACE Inc., announced today that that its Direct Methanol Fuel Cell Corporation (DMFCC) subsidiary has received an order from CMR Fuel Cells (LSE-AIM: CMF.L) of the United Kingdom for the development of methanol fuel cell cartridges for CMR's stand-alone, hybrid Direct Methanol Fuel Cell ('DMFC') charger. CMR is a specialist developer of high power density fuel cell stacks and systems for portable electronics applications and is developing a 25W fuel cell power supply unit that is hybridized with a battery.

Dr. Kukkonen, CEO of VIASPACE and DMFCC, commented, "CMR is a leading direct methanol fuel-cell developer. We have known them for long time, and are excited to be able to assist their development of a complete fuel cell solution for the consumer electronics market. It is a perfect partnership, CMR are fuel cell experts and we are cartridge experts -- together we can optimize the entire system."

John Halfpenny, CEO of CMR Fuel Cells, stated, "Our customers have very demanding requirements for the cartridge fuelling solution that they need and we believe that DMFCC will help deliver a superior product"

#### VIASPACE SHIPS HUMIDITY SENSOR INSTRUMENT TO TAIWAN CUSTOMER

PASADENA, Calif., Nov. 12 /PRNewswire-FirstCall/ -- VIASPACE Inc., announced today that that its VIASPACE Energy business unit has shipped a HS-1000 VIASENSOR, a state of the art, laser-based humidity detection instrument, to a new customer in Taiwan. The order was placed by VIASPACE Taiwan partner Hephas Energy on behalf of a major Taiwanese government research laboratory for hydrogen fuel cell development applications.

"We are happy to have another VIASENSOR instrument placed in world-class laboratory," reported VIASPACE CEO Dr. Carl Kukkonen. "We are gaining a global presence and worldwide reputation for leadership in humidity measurements. The laser-based VIASENSOR is much faster and easier to use with lower maintenance than the conventional chilled mirror instrument. A leading Japanese automotive manufacturer extensively tested the VIASENSOR against a chilled mirror and a capacitive device in static and dynamic humidity streams. The VIASENSOR won and the automotive manufacturer has



purchased three systems. Our sales force regularly demonstrates the VIASENSOR advantages to potential customers."

The VIASENSOR makes real-time measurements of humidity levels in industrial and automotive gas streams for environmental monitoring and process control. Precise humidity levels are crucial in many industrial and commercial applications including steelmaking, fuel cells, baking and precision automotive exhaust measurements.

The performance of hydrogen fuel cells using a Polymer Electrolyte Membrane (PEM) depends on the moisture level of the membrane. The membrane only conducts protons when it is hydrated or moist. The moisture is provided by water vapor in the incoming air or hydrogen stream. The VIASENSOR HS-1000 provides real-time measurements of the amount of water vapor in these gas streams. It is the only humidity sensor that provides in-situ, continuous and fast-responding dew point measurement.

#### VIASPACE MEETS WITH CUSTOMERS AT LARGEST U.S. FUEL CELL SHOW

PASADENA, Calif., Nov. 5 /PRNewswire-FirstCall/ -- VIASPACE Inc. exhibited its products and met with current and potential customers and business partners at the Fuel Cell Seminar held in Phoenix, AZ October 28-30, 2008. With 1700 attendees, the Fuel Cell Seminar is the largest fuel cell technical meeting and exhibition in the United States.

VIASPACE and its subsidiary Direct Methanol Fuel Cell Corporation (DMFCC) had a prominent booth near the exhibit entrance. The VIASPACE display featured disposable fuel cartridges for portable electronics, the HS-1000 fuel cell humidity sensor, a fuel cell test station by Taiwanese partner Hephas Energy, and molded carbon fuel cell components and a fuel cell backup power system by partner GasHub of Singapore. In many applications, fuel cells will be hybridized with batteries, and VIASPACE showed its lines of lithium ion and lithium polymer batteries, as well as its BA-1000 Battery Electrode Health Analyzer product.

A hit with attendees was a folding electric commuter bicycle produced by 3rd Millennium Energy, and powered by VIASPACE lithium polymer battery. The bike has a range of forty miles and can be easily



folded so it can be carried onto a bus or commuter train, or stored in the trunk of a car. Since the bike is already electric, it is straightforward to adapt it to a fuel cell.

VAISPACE and DMFCC CEO, Dr. Carl Kukkonen stated, "The Fuel Cell Seminar is a great opportunity to meet both new and established customers. Our partners from Tokai Bussan in Japan, Hephas in Taiwan and GasHub in Singapore helped staff the booth, so we could communicate with customers in their native languages. I was also able to meet with our cartridge customers including Samsung, and Japanese cartridge partner Sato Group."

# VIASPACE SUBSIDIARY PROJECTS \$20 MILLION IN REVENUE FROM NEW HYBRID GRASS

PASADENA, Calif., Nov. 3 /PRNewswire-FirstCall/ -- VIASPACE Inc. today announced the Company is focused on commercial farming of its new fast-growing hybrid grass to initially capture a significant share of China's \$40 billion market for animal feed. The high-yield grass is ideal for feeding livestock as well as producing cellulosic biofuels, which is a growing market. The recent significant rising of Chinese consumption of meat and dairy products has created a tremendous growth in demand for livestock feed. VIASPACE is aggressively pursuing this near-term revenue opportunity and expects the high-yield grass business to generate \$20 million in revenue in the next two years, while it develops the biofuels business in the near term.

Dr. Carl Kukkonen, CEO of VIASPACE, commented: "Our recent acquisition of Inter-Pacific, a profitable \$5 million revenue-generating company with a worldwide license to cultivate a high-yield grass for agriculture and sustainable energy, has opened the door to tremendous growth and cash flow for VIASPACE. Our first objective is to gain a significant market share of China's rapidly growing animal feed industry and we are also pursuing opportunities with partners worldwide to distribute this innovative new feedstock and biofuels product."

The Company has begun commercial farming of the ultra-fast-growing grass in China's Quangdong Province, a major manufacturing and agricultural center in southern China. The China Giant King Grass is a natural, non-genetically modified hybrid with many advantages over other grasses and crops used for feed. This perennial species can grow up to twelve feet high in sixty days, produce four crops per



year in tropical and subtropical climates, and yield seven times more mass than corn. In addition to biofuels usage, the crops can be used to feed dairy cows, pigs, chickens, fish and other livestock in its initial processing.

Dr. Kukkonen continued: "While the high-yield grass will soon be used to produce biofuels including sustainable cellulosic ethanol, we have chosen to also focus on the immediate opportunity to grow and sell this product in China's livestock feed market which has a well established customer base, excellent profit margins, and consistent annual growth rate exceeding 15%."

China's animal feed industry is valued at \$40 billion and as population income rises it creates greater demand for meat products, reports Feed International, "Growth Areas in Global Feed Production," January 2008. Also, according to China's National Bureau of Statistics each person now consumes 5% more meat and 10% more milk annually than five years ago. China Daily reports the increasing consumption has created a corresponding spike in demand for feed to produce a growing population of pigs, cows and other livestock. Faced with increasing pressure on domestic supply, China imported approximately \$4 billion in soybeans for food and feed in 2007 just released by the American Soybean Association in September 2008.

As announced last week, VIASPACE has acquired Inter-Pacific Arts Corp., a company with ongoing profitable operations generating unaudited 2007 revenues of approximately \$5 million, net income of \$1.2 million, and \$3 million in cash and equivalents. VIASPACE has the immediate ability to fund the rapid expansion of the high-yield grass business with cash flow from Inter-Pacific's well established and profitable commercial products division.

# VIASPACE COMPLETES ACQUISITION OF INTER-PACIFIC WHICH ADDS \$5 MILLION IN REVENUE

PASADENA, Calif., Oct. 28 /PRNewswire-FirstCall/ -- VIASPACE Inc. today announced the acquisition of a majority interest in Inter-Pacific Arts Corp. (Inter Pacific),a company with ongoing profitable operations generating unaudited 2007 revenues of approximately \$5 million, net income of \$1.2 million, and \$3 million in cash and equivalents. Inter-Pacific has a worldwide license to grow and sell an ultra-fast-growing hybrid grass to be used for production of biofuels and livestock feed in



addition to its already profitable consumer products business. Inter-Pacific has initiated commercial farming of the high-yield grass in China where markets for both sustainable biofuels and animal feed are growing rapidly. VIASPACE intends to accelerate development of the biofuel and feed business, which will become a major revenue driver for the Inter-Pacific subsidiary.

With the acquisition, VIASPACE will gain a license for commercial farming and sale of China Giant King Grass, a new hybrid variety of high-yield grass that will be used as feedstock for biofuels including cellulosic ethanol, methanol, biocrude and green gasoline. The fast-growing perennial grass is also ideal for use as animal feed. It can grow up to twelve feet high in sixty days and yield four crops per year in subtropical climates. The high-yield grass business will enable VIASPACE to penetrate the global biofuels industry which generated \$25.4 billion in 2007. According to Clean-Energy Trends 2008 published by Clean Edge, Inc., biofuels will reach \$81.1 billion by 2017. The new venture will also provide access to the global animal feed market which Feed International reports has grown 14 percent annually for the last ten years.

VIASPACE CEO Dr. Carl Kukkonen states: "Inter-Pacific has begun developing the high-yield grass business in China where alternative energy and agriculture are top national priorities. There is an existing, profitable market for these products that should enable VIASPACE to generate revenue in China and other markets very quickly."

Dr. Kukkonen continued: "The acquisition of Inter-Pacific opens up exciting growth opportunities for VIASPACE and creates multiple new revenue streams. By leveraging the profits from its established, revenue-positive consumer products line to fund rapid expansion of the grass venture we can develop a self-sustaining business with tremendous value for shareholders. With the projected growth in the high-yield grass business combined with the projected profits from the established consumer products line including other VIASPACE business units, we believe that VIASPACE will profitable in 2009."

VIASPACE acquired Inter-Pacific Arts, a company that imports and markets consumer products in the U.S., and pending regulatory approval, Guangzhou Inter-Pacific Arts Corp. of Guangzhou, China which manufactures the products in a company-owned factory. In business since 2003, Inter-Pacific specializes in high quality, copyrighted, framed artwork sold in U.S. retail chain stores. VIASPACE paid for the



acquisition with a combination of stock and debt. The details of the acquisition can be found in the Company's Form 8-K filed October 27, 2008.



# APPENDIX 9: OWNERSHIP, INSIDER, INSTITUTIONAL TRADING INFORMATION

## **Insiders and Institutional Holdings**

Insiders are currently holding 24.1% of shares outstanding

Date	Shares Bought	Shares Sold	Transactions
2008/12	0	0	0
2008/11	0	0	0
2008/10	0	0	0
2008/09	0	0	0
2008/08	0	0	0
2008/07	10,000	0	10,000
2008/06	10,000	0	10,000
2008/05	10,000	0	10,000
2008/04	0	0	0
2008/03	0	0	0
2008/02	0	0	0
2008/01	0	0	0



# **APPENDIX 10: FORECAST TABLES AND CHARTS**

### **BASE CASE**

**Valuation Metrics** 

Price to Cash Flow - Ratio

Price to Free Cash Flow - Ratio

Price to Tangible Book Value - Ratio

Price to Sales

Price to Equity

DASE CASE						
Sales Matrics	2008E	2009E	2010E	2011E	2012E	2013E
SGA / Sales (%)	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
Receivables / Sales (%)	24.1%	23.7%	13.9%	9.7%	6.8%	5.1%
Inventory / Sales (%)	14.7%	14.6%	8.4%	5.6%	2.9%	1.6%
Sales per Dollar of Inventory	6.8	6.8	11.9	17.7	34.6	62.6
Sales per Dollar of Net Plant	648.1%	878.1%	1152.4%	1156.2%	1138.7%	1109.8%
Receivables per day of Sales	88.1	86.6	50.7	35.3	24.8	18.6
<b>Profitability Metrics</b>	2008E	2009E	2010E	2011E	2012E	2013E
Gross Profit Margin	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Pre Tax Profit Margin	-159.5%	9.0%	22.0%	25.8%	28.8%	33.1%
Net Profit Margin	-159.5%	9.0%	22.0%	25.8%	28.8%	33.1%
Payout Ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Coverage	n.a.	-	-	-	-	-
Tax Rate	0%	0%	0%	0%	0%	0%
Performance Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Return on Equity (ROE)	-139.0%	6.5%	23.6%	31.3%	38.0%	44.3%
Return on Assets (ROA)	-34.9%	6.6%	22.2%	30.1%	37.1%	42.9%
Return on Invested Capital (ROI)	-62.8%	11.7%	40.2%	56.1%	70.3%	80.5%
Sales per Employee						
Income per Employee						
<b>Efficiency Metrics</b>	2008E	2009E	2010E	2011E	<b>2012E</b>	<b>2013E</b>
Receivable Turnover	4.1	4.2	7.2	10.3	14.7	19.7
Inventory Turnover	4.3	4.0	5.6	7.1	12.5	20.0
Total Asset Turnover	0.3	0.4	0.6	0.7	0.7	0.7
Days of COGS in Inventory	84.4	91.3	65.7	51.1	29.2	18.3
Per Share Data	2008E	2009E	2010E	2011E	2012E	2013E
Sales per Share	0.01	0.01	0.02	0.03	0.06	0.11
Cash - per Share	0.00	0.00	0.01	0.02	0.04	0.08
Current Assets per Share	0.01	0.01	0.01	0.02	0.05	0.09
Total Assets per Share	0.02	0.02	0.02	0.04	0.06	0.11
Tangible Book Value per Share	(0.01)	(0.00)	0.00	0.01	0.02	0.05
Long Term Debt - per Share	0.01	-	-	-	-	-
Working Capital per Share	0.00	0.00	0.00	0.00	(0.00)	(0.00)
Free Cash Flow per Share	(0.03)	0.00	0.00	0.00	0.01	0.02
Price/ Earnings	2008E	2009E	2010E	2011E	2012E	2013E
Price Earnings Ratio - Closing Price Price to Cash Earnings	(0.9)	14.8	3.1	1.6	0.8	0.4

1.5

(1.1)

(0.3)

(0.3)

1.3

(6.4)

19.9

19.9

1.0

2010E

0.7

5.7

4.4

4.4

2011E

0.4

1.2

2.4

2.4

0.5

2012E

0.2

0.5

1.2

1.2

0.3

0.1

0.2

0.5

0.5

0.2



Income Statement Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Sales	20001	2009L	20101	20111	20121	2013L
Sales	5.5	8.6	16.7	27.6	48.2	88.0
Sequential Sales Growth	3.3	56.1%	94.0%	64.5%	74.9%	82.6%
·		-				
Expenses Cost of Goods Sold (COGS)	3.5	5.1	7.8	11.1	17.4	28.1
` ,	3.5					
COGS Sequential Growth %	62.70/	43.6%	55.1%	41.8%	56.5%	61.8%
COGS as % of Sales	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Gross Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
Gross Operating Profit	2.0	3.6	8.9	16.4	30.8	59.9
Gross Profit Sequential Growth %		78.2%	148.8%	84.5%	87.4%	94.4%
Research & Development (R&D) Expense	-	-	-	-	-	-
R&D Sequential Growth %			2.224	2.00/		
R&D as % of Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Selling, General & Administrative (SG&A) Expense	9.0	2.2	2.6	3.7	5.1	6.9
SG&A Sequential Growth %		-75.7%	20.5%	40.0%	37.0%	36.9%
SG&A as % of Sales	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
EBITDA	(7.0)	1.4	6.3	12.7	25.7	53.0
EBITDA Sequential Growth %		-119.8%	351.4%	103.3%	102.0%	105.7%
EBIT DA Margin %	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Interest Income	2.1	-	-	-	-	=.
Other Income - Net	-	-	-	-	-	-
EBIT	(4.9)	1.3	6.2	12.6	25.5	52.4
EBIT Sequential Growth %		-126.9%	367.0%	103.9%	102.4%	106.0%
EBIT Margin %	-88.9%	15.3%	36.8%	45.6%	52.8%	59.5%
Interest Expense	3.5	-	-	-	-	-
Pretax Income	(8.4)	1.3	6.2	12.6	25.5	52.4
Pre-Tax Income Sequential Growth %		-115.6%	367.0%	103.9%	102.4%	106.0%
Pre-Tax Income Margin	-152.7%	15.3%	36.8%	45.6%	52.8%	59.5%
Income Taxes	0.0	0.0	0.0	0.5	1.5	2.5
Minority Interest	0.4	0.5	2.5	5.0	10.1	20.7
Net Income from Continuing Operations	(8.8)	0.8	3.7	7.1	13.9	29.2
Net Income from Discontinued Operations	- 1	-	-	-	-	-
Net Income from Total Operations	(8.8)	0.8	3.7	7.1	13.9	29.2
Extraordinary Income Losses	-	-	-	-	-	-
Other Gains Losses	-	-	-	-	-	-
Net Income						
Total Net Income	(8.8)	0.8	3.7	7.1	13.9	29.2
Net Income Sequential Growth %	(0.0)	-108.8%	375.8%	93.1%	95.4%	109.9%
Net Income Margin %	-159.5%	9.0%	22.0%	25.8%	28.8%	33.1%
	155.570	5.0 70	22.0 70	23.070	20.0 /0	33.170
Earnings Per Share	(0.04)	0.00	0.00	0.01	0.01	0.00
Basic EPS Total	(0.01)	0.00	0.00	0.01	0.01	0.03
Basic EPS Sequential Growth %	(0.00)	-106.3%	375.8%	93.1%	95.4%	109.9%
Diluted EPS - Total	(0.01)	0.00	0.00	0.01	0.01	0.03
Diluted EPS Sequential Growth %		-106.3%	375.8%	93.1%	95.4%	109.9%
Dividends per Share	-	-	-	-	-	-



<b>Balance Sheet Metrics</b>	2008E	2009E	2010E	2011E	2012E	2013E
Assets						
Cash and Equivalents	0.7	2.5	9.1	22.1	47.0	96.8
Cash & Marketable Securities Sequential Growth %		255.0%	264.8%	143.3%	113.1%	106.0%
Cash & Marketable Sec. as % of Total Assets	3.5%	11.8%	32.1%	52.1%	67.8%	78.4%
Accounts Receivable	1.3	2.0	2.3	2.7	3.3	4.5
Accounts Receivable Sequential Growth %		53.4%	13.7%	14.5%	23.1%	36.5%
Accounts Receivable as % of Total Assets	6.7%	9.7%	8.2%	6.3%	4.7%	3.6%
Other Short Term Receivables	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Inventories	0.8	1.3	1.4	1.6	1.4	1.4
Inventories Sequential Growth %		55.2%	11.7%	10.3%	-10.6%	1.1%
Inventories as % of Total Assets	4.1%	6.0%	5.0%	3.7%	2.0%	1.1%
Prepaid Expenses	2.56	0.66	0.40	0.22	0.25	0.21
Current Deferred Income Taxes	0	0	0	0	0	0
Other Current Assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Current Assets	5.4	6.5	13.2	26.5	51.9	102.9
Net Fixed Assets	0.9	1.0	1.5	2.4	4.2	7.9
Net Fixed Assets Sequential Growth %		15.2%	47.8%	64.0%	77.6%	87.4%
Net Fixed Assets as % of Total Assets	4.3%	4.7%	5.1%	5.6%	6.1%	6.4%
Intangibles	13.8	13.7	13.6	13.4	13.1	12.6
Intangibles Sequential Growth %		-0.5%	-0.7%	-1.2%	-2.2%	-4.2%
Intangibles as % of Total Assets	68.7%	64.8%	48.1%	31.7%	19.0%	10.2%
Non Current Deferred Income Taxes	0	0	0	0	0	0
Other Non Current Assets	0.0	-	-	-	-	-
Total Assets	20.0	21.1	28.3	42.3	69.3	123.4
Liabilities						
Accounts Payable	0.9	1.1	2.0	3.6	6.1	9.9
Accounts Payable Sequential Growth %		24.8%	72.3%	81.5%	71.2%	62.3%
Accounts Payable as % of Total Assets	4.5%	5.4%	6.9%	8.4%	8.8%	8.0%
Notes Payable	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Payable	0.1	-	-	-	-	-
Debt Payable Sequential Growth %	0.2	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Debt Payable as % of Total Assets	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Accrued Expenses	0.2	0.1	0.1	0.3	0.6	0.8
Accrued Liabilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deferred Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Current Deferred Income Taxes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Current Liabilities	0.7	0.2	0.2	0.3	0.6	0.8
Total Current Liabilities	1.9	1.4	2.3	4.2	7.2	11.5
Current Liabilities Sequential Growth %	2.5	-28.2%	65,3%	86.9%	70.9%	59.0%
Current Liabilities as % of Total Assets	9.5%	6.5%	8.0%	10.0%	10.4%	9.3%
Long Term Debt	4.8	-	-	-	-	-
Long Term Debt Sequential Growth %		-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Long Term Debt as % of Total Assets	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred Income Taxes	0	0.070	0.070	0.070	0.070	0.070
Other Non Current Liabilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Liabilities	6.7	1.4	2.3	4.2	7.2	11.5
Total Liabilities Sequential Growth %	0.7	-79.6%	65.3%	86.9%	70.9%	59.0%
Total Liabilities as % of Total Assets	33.4%	6.5%	8.0%	10.0%	10.4%	9.3%
	33.170	0.5 70	0.0 70	10.070	10.170	2.5 70
Minority Interest						
Total Minority Interest	7.0	7.5	10.0	15.0	25.1	45.8
Total Minority Interest Sequential Growth %		7.7%	32.8%	49.9%	67.4%	82.5%
Total Minority Interest as % of Total Assets	34.9%	35.6%	35.4%	35.4%	36.2%	37.1%
Equity						
Total Equity	6.3	11.9	15.6	22.7	36.6	65.8
Total Equity  Total Equity Sequential Growth %	0.5	87.8%	30.9%	45.6%	61.2%	79.7%
Total Equity Sequential Growth %  Total Equity as % of Total Assets	31.7%	56.4%	55.2%	53.7%	52.8%	53.3%
Total Liabilities and Stock Equity	20.0	20.8	27.9	41.9	68.9	123.1
Total Liabilities and Stock Equity	20.0	20.0	27.9	41.9	00.9	123.1
Shareholding/ Employees			-			
Total Common Shares Outstanding	823.0	1,143.0	1,143.0	1,143.0	1,143.0	1,143.0
	823.0					
Shares Outstanding Sequential Growth %		38.9%	0.0%	0.0%	0.0%	0.0%
Treasury Shares	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Basic Weighted Shares Outstanding	823.0	1,143.0	1,143.0	1,143.0	1,143.0	1,143.0
Diluted Weighted Shares Outstanding	823.0	1,143.0 38.9%	1,143.0 0.0%	1,143.0 0.0%	1,143.0 0.0%	1,143.0 0.0%
Diluted Shares Outstanding Sequential Growth %						



Cash Flow Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow from Operations						
Net Income/Loss	(8.8)	0.8	3.7	7.1	13.9	29.2
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Net Change in Working Capital	2.8	(0.2)	(0.7)	(1.7)	(2.5)	(3.1)
Net Cash - Continuing Operations	(6.0)	0.6	3.1	5.6	11.7	26.6
Net Cash - Discontinued Operations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Operating Activities	(6.0)	0.6	3.1	5.6	11.7	26.6
Net Cash - Operations Sequential Growth %		-110.7%	379.7%	83.9%	107.7%	128.0%
Net Cash - Operations as % of Change in Cash	-1185%	61.1%	60.4%	58.1%	58.6%	61.0%
Cash Flow from Investing Activities						
Sale of Property Plant Equipment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Property Plant Equipment	(0.1)	(0.1)	(0.5)	(0.9)	(1.9)	(3.7)
Acquisitions	(13.6)	0.0	0.0	(0.0)	-	-
Purchase of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Investing Changes Net	-	-	-	-	-	-
Cash - Discontinued Investing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Investing Activities	(13.7)	(0.1)	(0.5)	(0.9)	(1.9)	(3.7)
Net Cash - Investing Sequential Growth %		-99.1%	261.5%	97.9%	98.9%	100.0%
Net Cash - Investing as % of Change in Cash	-2730%	-12.5%	-9.3%	-9.6%	-9.3%	-8.5%
Cash Flow from Financing Activities						
Issuance/ Repayment of Debt	-	(4.8)	-	-	-	-
Issuance of Capital Stock	19.8	4.8	-	-	-	-
Dividends Paid	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cash - Discontinued Financing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Financing Activities	20.2	0.5	2.5	5.0	10.1	20.7
Net Cash - Financing Sequential Growth %		-97.3%	361.7%	101.9%	102.3%	104.9%
Net Cash - Financing as % of Change in Cash	4014%	51.3%	48.9%	51.5%	50.7%	47.4%
Effect of Exchange Rate Changes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Change - Cash and Cash Equivalents	0.5	1.0	5.1	9.7	19.9	43.6
Cash at Beginning of Period	0.6	0.7	2.5	9.1	22.1	47.0
Cash at End of Period	0.7	2.5	9.1	22.1	47.0	96.8
Cash Sequential Growth %		255.0%	264.8%	143.3%	113.1%	106.0%



#### Cohen Growth Drivers - 1

Annual Revenues, Margins, Assets, Turns	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
Gross Margin	36%	41%	53%	60%	64%	68%
Operating Margin	-127%	16%	37%	46%	53%	60%
Net Margin - Income Avail. To Shreholders	-159%	9%	22%	26%	29%	33%
EPS - Diluted	(0.01)	0.00	0.00	0.01	0.01	0.03
EBITDA	(7.0)	1.4	6.3	12.7	25.7	53.0
Free Cash Flow	(26.2)	0.58	2.59	4.70	9.84	22.94
Cash	0.7	2.5	9.1	22.1	47.0	96.8
Working Capital	2.8	2.6	1.9	0.2	(2.3)	(5.4)
Long Term Debt (Outstanding to Chang)	4.8	-	-	-	-	-
Total Debt	4.8	-	-	-	-	-
Total Assets	20.0	21.1	28.3	42.3	69.3	123.4
DSO	44.9	54.8	32.9	23.7	17.9	14.6
Inventory Turns	84.4	91.3	65.7	51.1	29.2	18.3
Fixed Asset Turns	56.3	41.6	31.7	31.6	32.1	32.9
Cash Cycle	0.7	1.1	8.0	0.5	0.4	0.4

Percentage Change in Annual Revenues, Ma	2008E	2009E	2010E	2011E	2012E	2013E
Revenues		56.1%	94.0%	64.5%	74.9%	82.6%
Gross Margin		14.1%	28.3%	12.2%	7.1%	6.4%
Operating Margin		-112.7%	132.7%	23.6%	15.5%	12.6%
Net Margin		-105.6%	145.3%	17.4%	11.7%	14.9%
EPS - Diluted		-106.3%	375.8%	93.1%	95.4%	109.9%
EBITDA		-119.8%	351.4%	103.3%	102.0%	105.7%
Free Cash Flow		-102.2%	349.8%	81.4%	109.4%	133.3%
Cash		255.0%	264.8%	143.3%	113.1%	106.0%
Working Capital		-7.3%	-27.8%	-87.8%	-1096.2%	135.4%
Long Term Debt		-100.0%	n.a.	n.a.	n.a.	n.a.
Total Debt		-100.0%	n.a.	n.a.	n.a.	n.a.
Total Assets		5.5%	33.7%	49.8%	63.8%	78.1%
DSO		22.0%	-40.0%	-27.8%	-24.6%	-18.4%
Inventory Turns		8.1%	-28.0%	-22.2%	-42.9%	-37.5%
Fixed Asset Turns		-26.2%	-23.8%	-0.3%	1.5%	2.6%
Cash Cycle		52.6%	-32.5%	-34.5%	-23.0%	-8.1%



Cohen Growth Drivers - 2

Cohen Growth Drivers - 2						
	2008E	2009E	2010E	2011E	2012E	2013E
Growth Drivers						
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
Cost of Revenues	3.5	5.1	7.8	11.1	17.4	28.1
Gross Profit	2.0	3.6	8.9	16.4	30.8	59.9
Operating Income	(7.0)	1.4	6.3	12.7	25.7	53.0
Net Income	(8.8)	8.0	3.7	7.1	13.9	29.2
Profitability						
Return on Equity	-139.0%	6.5%	23.6%	31.3%	38.0%	44.3%
Return on Assets	-34.9%	6.6%	22.2%	30.1%	37.1%	42.9%
Asset Turnover	6.5	8.8	11.5	11.6	11.4	11.1
Profit Margin	-159%	9%	22%	26%	29%	33%
Return on Invested Capital Capital Efficiency	-62.5%	11.7%	40.2%	56.1%	70.3%	80.5%
PPE / Revenue	15.4%	11.4%	8.7%	8.6%	8.8%	9.0%
Intangible Assets/Revenue	245.3%	156.3%	80.0%	48.0%	26.8%	14.1%
WC / Revenue	50.8%	30.2%	11.2%	0.8%	-4.7%	-6.1%
Operating Ratios						
Gross Profit Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
EBITDA Margin	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
EBIT Margin	-127.7%	15.3%	36.8%	45.6%	52.8%	59.5%
Cost of Services/Revenues	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
SG&A Expenses/Revenues	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
Liquidity						
Working Capital	2.8	2.6	1.9	0.2	(2.3)	(5.4)
Current Ratio	2.8	4.7	5.9	6.3	7.2	9.0
Quick Ratio	2.4	3.8	5.2	5.9	7.0	8.9
D ebt						
Total Debt	4.8	-	-	-	-	-
Debt Ratio	0.4	-	-	-	-	-
Debt to Equity	8.0	-	-	-	-	-



**Cohen Liquidity Matrix** 

- Inquianty manny	2008E	2009E	2010E	2011E	2012E	2013E
Liquidity Matrix						
Current Ratio	2.8	4.7	5.9	6.3	7.2	9.0
Quick Ratio	2.4	3.8	5.2	5.9	7.0	8.9
Cash Ratio	0.4	1.8	4.0	5.2	6.5	8.5
   Working Capital Matrix						
Working Capital	2.8	2.6	1.9	0.2	(2.3)	(5.4)
Cash Flow from Operations to Current Liabilities						
Working Capital Provided by Net Income	(8.8)	8.0	3.8	7.3	14.2	29.7
Leverage Ratios						
Gearing Ratio	8.0	-	-	-	-	-
Financial Leverage Ratio	8.0	-	-	-	-	-
Debt to Assets	0.2	-	-	-	-	-
Interest Coverage Ratio	(2.0)	-	-	-	-	-
Equity Multiplier	3.2	1.8	1.8	1.9	1.9	1.9
Capital Structure Ratio	0.4	-	-	-	-	-

Cohen NCFO Analysis

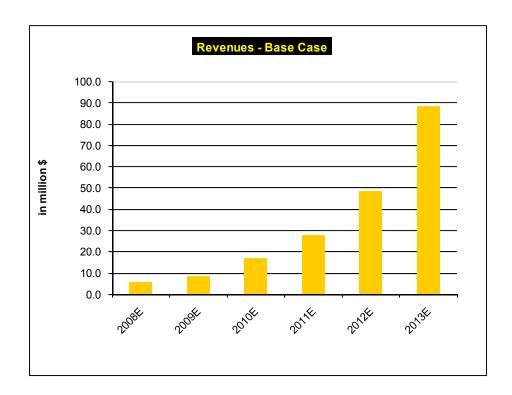
Conen Noi O Analysis						
Cohen Net Cash Flow from Operations	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	8.6	16.7	27.6	48.2	88.0
plus decrease (-increase) in AR	(0.7)	(0.6)	(0.2)	(0.3)	(0.6)	(1.2)
Gross Cash Collections from Operations	4.9	8.0	16.5	27.3	47.6	86.9
Operating Expenses						
Cost of Goods Sold	3.5	5.1	7.8	11.1	17.4	28.1
General an Administrative Expenses	9.0	2.2	2.6	3.7	5.1	6.9
R&D Expenses	-	-	-	-	-	-
Total Operating Expenses	12.5	7.2	10.5	14.8	22.5	35.1
Working Capital Changes						
Decrease (Increase) in Inventories	(8.0)	(0.4)	(0.1)	(0.1)	0.2	(0.0)
Decrease (Increase) in Short Term Investmer	-	-	-	-	-	-
Decrease (Increase) in Other Current Assets	(3.2)	1.8	0.2	0.1	(0.1)	0.0
Increase (Decrease) in Accounts Payable	0.9	0.2	8.0	1.6	2.5	3.8
Increase (Decrease) in Notes Payable	-	-	-	-	-	-
Increase (Decrease) in STD	-	-	-	-	-	-
Increase (Decrease) in Accrued Expenses	0.2	(0.2)	0.0	0.2	0.2	0.2
Increase (Decrease) in Other Current Liab	0.7	(0.5)	0.0	0.1	0.2	0.2
Total Changes in Working Capital	(2.2)	0.9	0.9	1.9	3.1	4.2
Total Cash Outflows for Op (Op Exp+Chg W	10.3	8.1	11.4	16.7	25.5	39.3
Net Cash Flow from Operations (NCFO)	(5.5)	(0.1)	5.1	10.5	22.1	47.6

Cohen NCFO Analysis	2008E	2009E	2010E	2011E	<b>2012E</b>	2013E
NCFO / Diluted Share	(0.01)	(0.00)	0.00	0.01	0.02	0.04
Diluted EPS	(0.01)	0.00	0.00	0.01	0.01	0.03

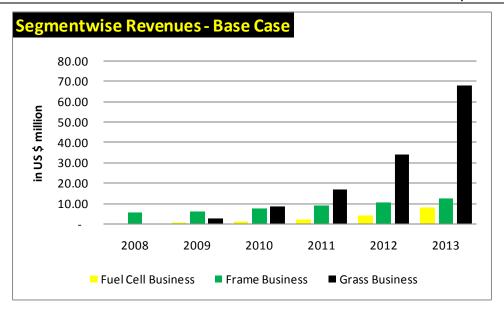
Cohen NCFO Coverage Ratios	2008E	2009E	2010E	2011E	2012E	2013E
Interest Coverage (NCFO/Int Exp)	(1.6)	-	-	-	-	-

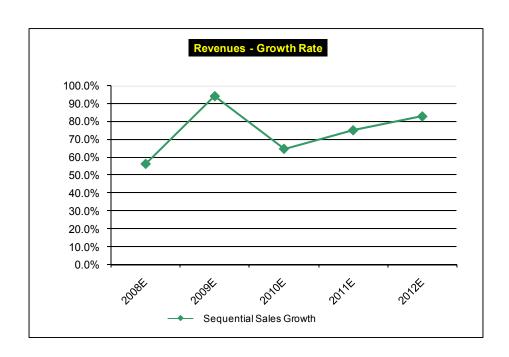


<b>Cohen Free Cash Flows</b>	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow = ni+depr+amort	(8.8)	0.8	3.8	7.3	14.2	29.7
Net Cash Flow (CF-Div)	(8.8)	8.0	3.8	7.3	14.2	29.7
Exchange rate effects	2.1	-	-	-	-	-
Working Capital Change		5.4	5.2	5.4	11.6	25.5
Free Cash Flow	(26.2)	0.6	2.6	4.7	9.8	22.9
Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Net Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Free Cash Flow/Assets	(1.3)	0.0	0.1	0.1	0.1	0.2
Net Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
Free Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
NCFO Per Share	(0.0)	(0.0)	0.0	0.0	0.0	0.0
Diluted EPS, Before Extraordinary Items	(0.0)	0.0	0.0	0.0	0.0	0.0

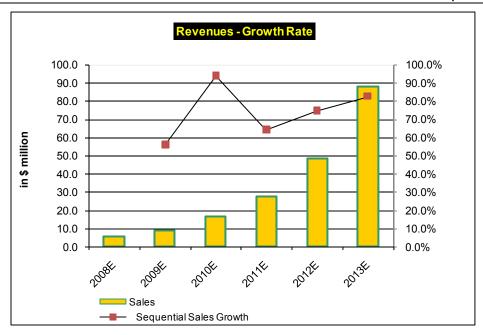


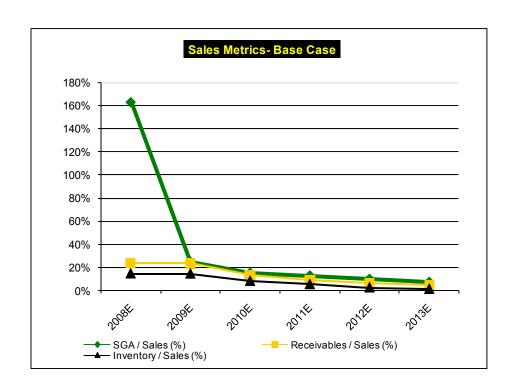




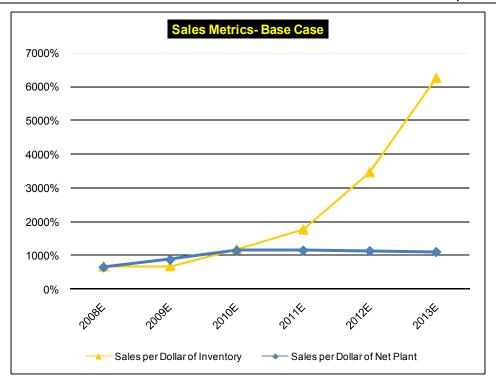


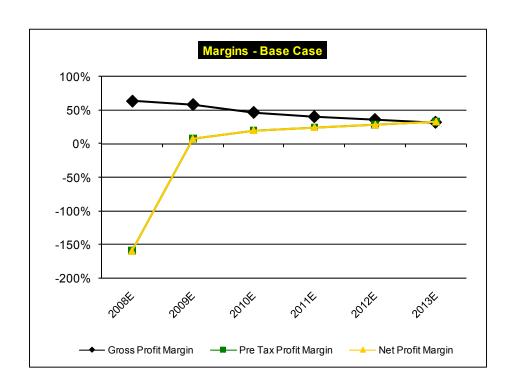




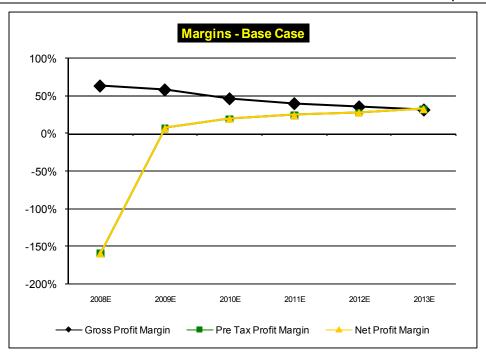


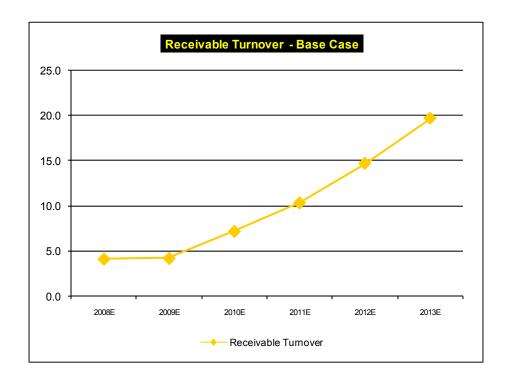




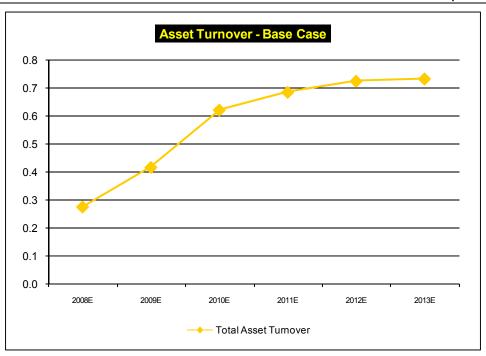


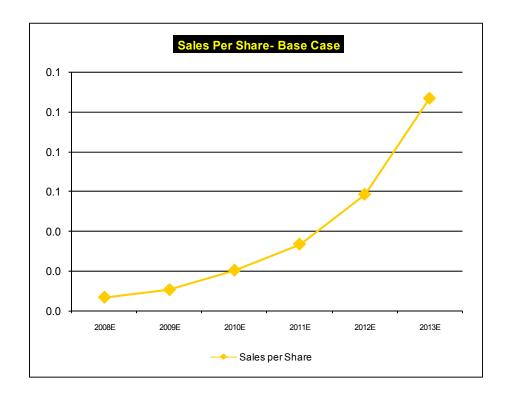




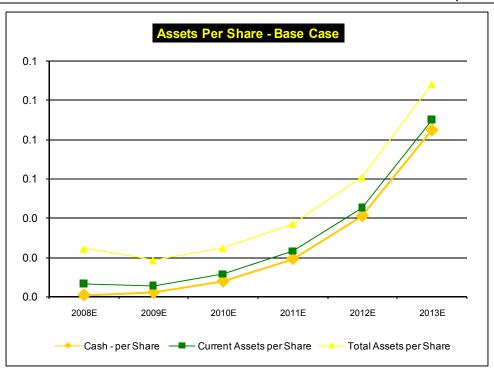


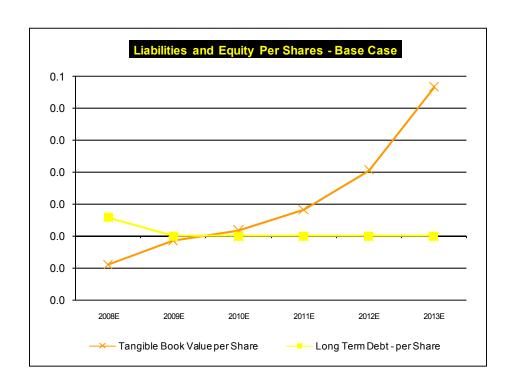




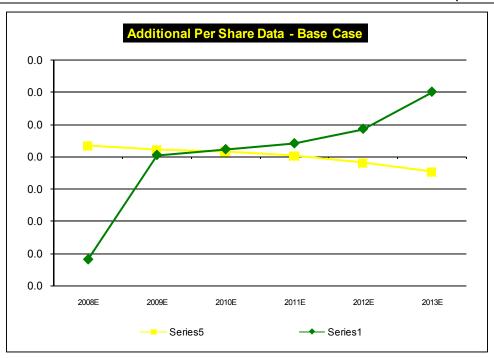






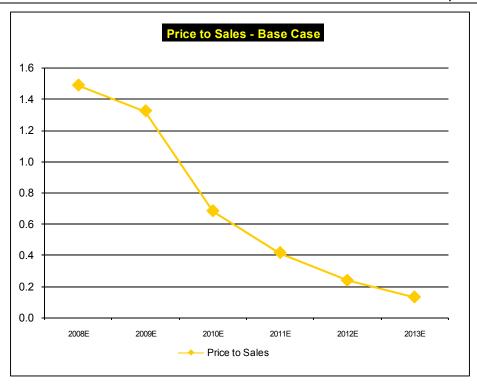


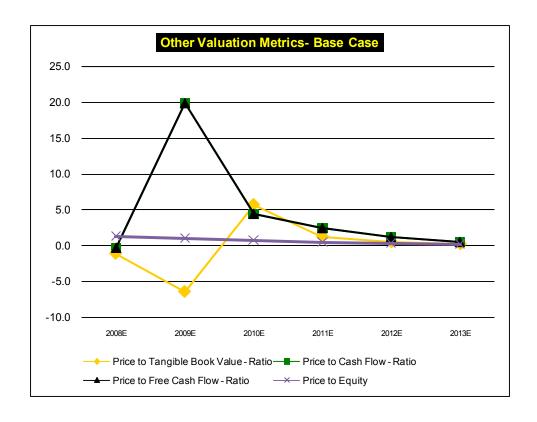




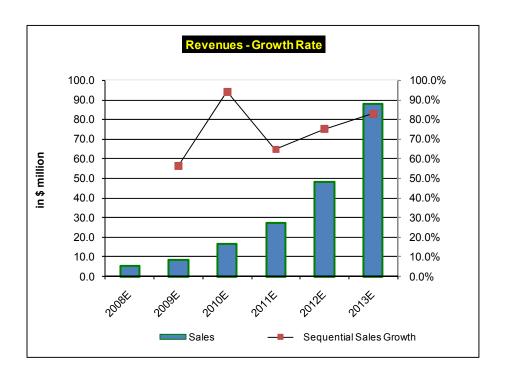


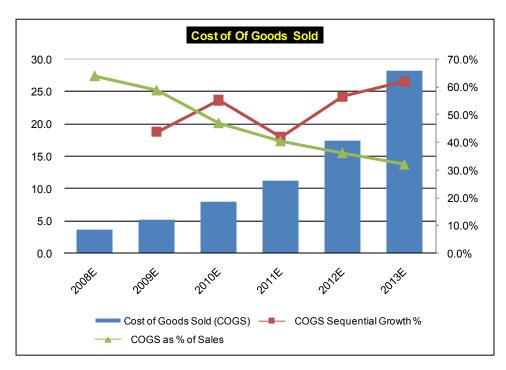




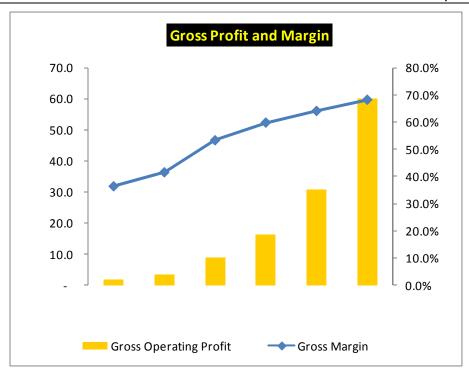


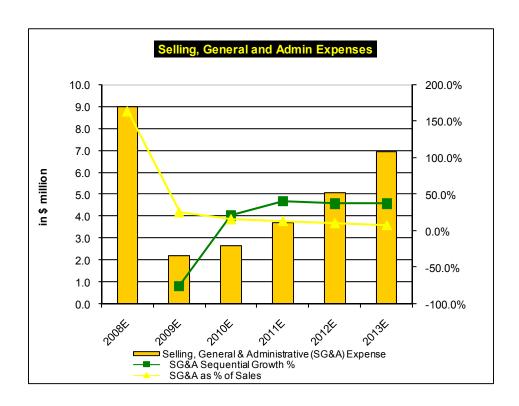




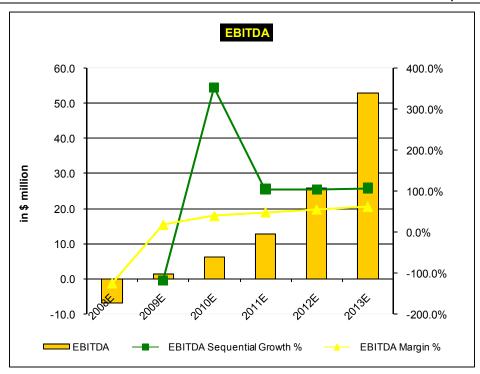


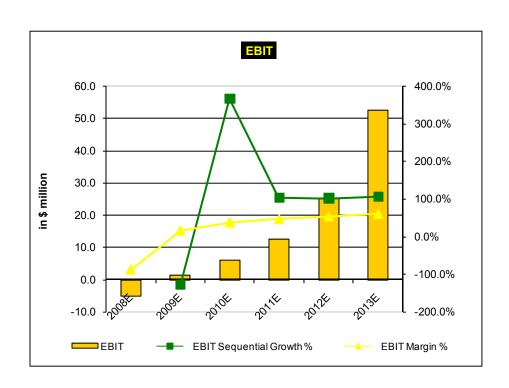




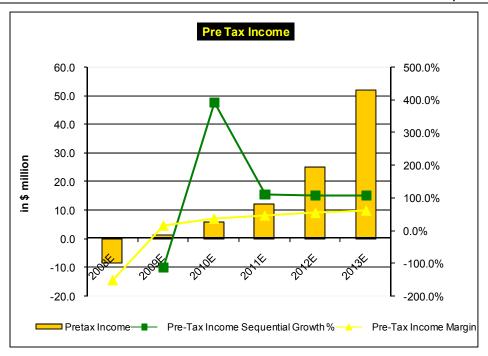


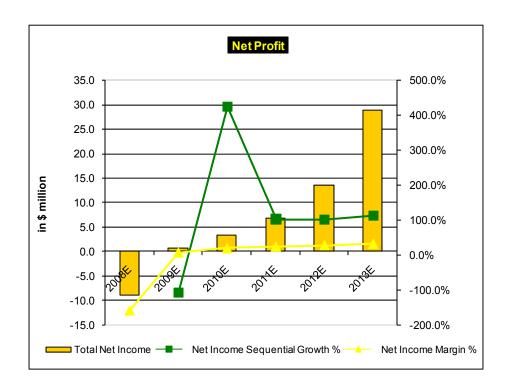




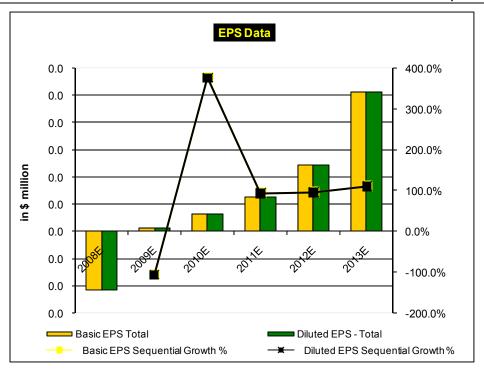


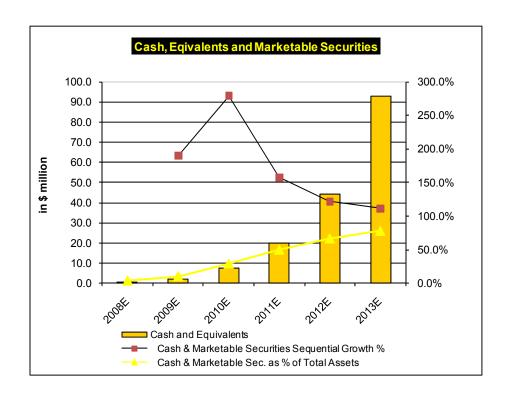




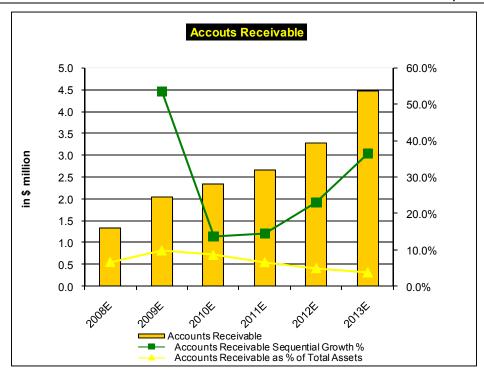


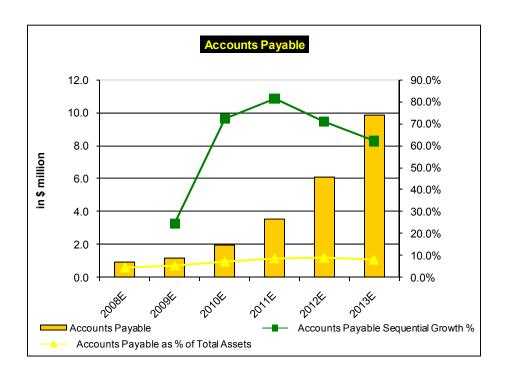




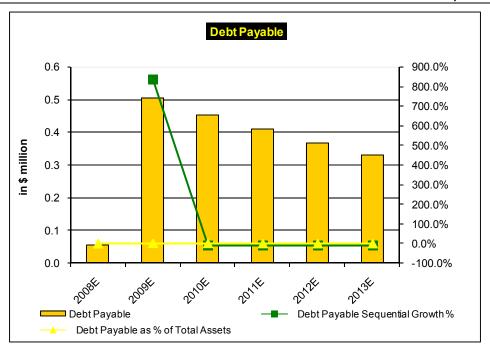


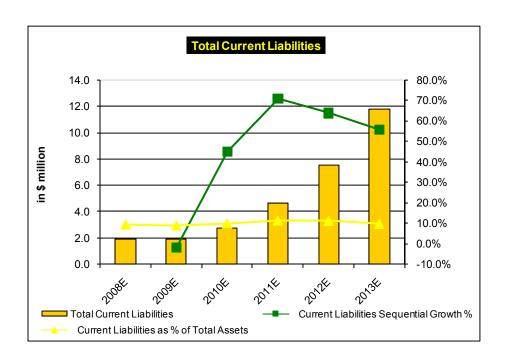




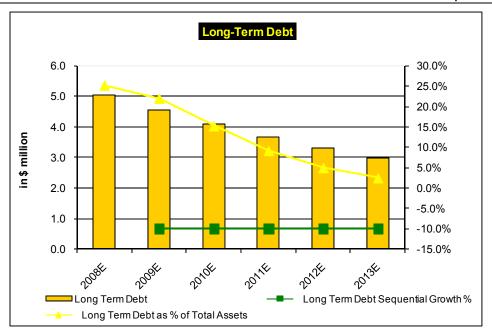


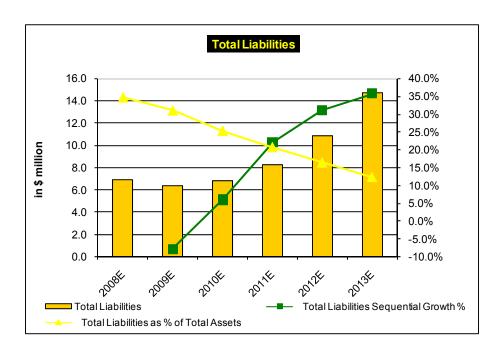




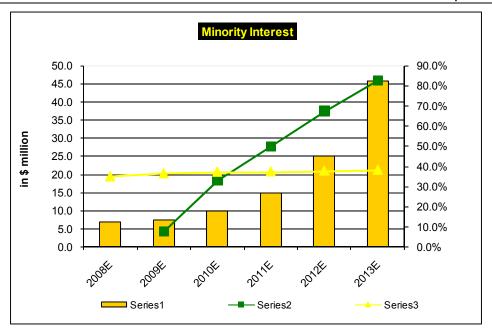


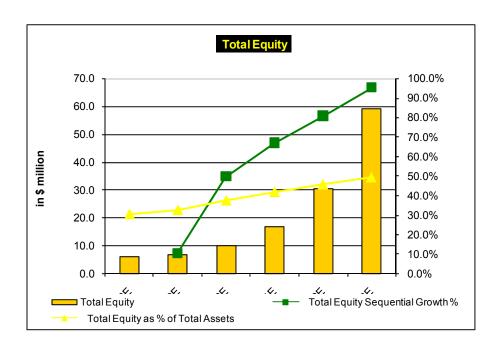




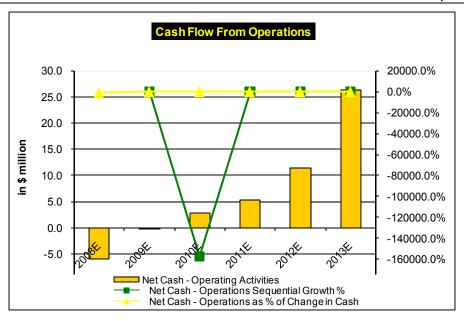


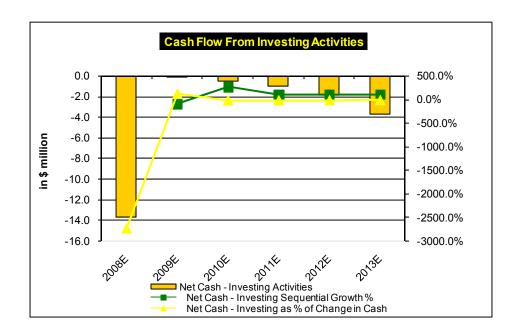




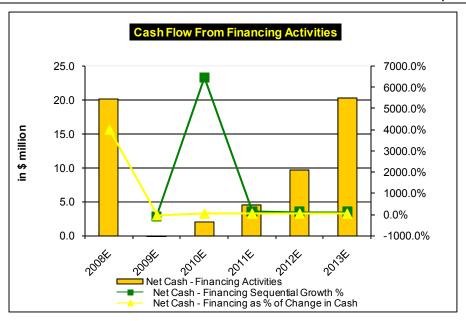


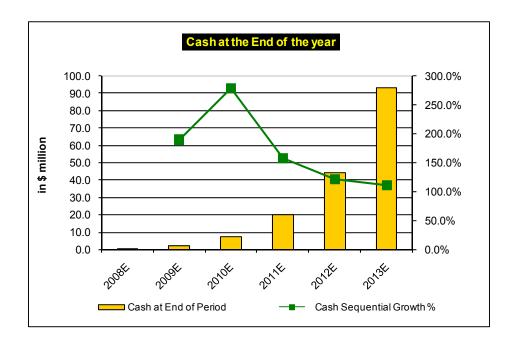














<b>OPTIMISTIC CASE</b>						
Sales Matrics	2008E	2009E	2010E	2011E	2012E	2013E
SGA / Sales (%)	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
Receivables / Sales (%)	24.1%	22.9%	13.5%	9.3%	6.6%	5.0%
Inventory / Sales (%)	14.7%	14.6%	8.4%	5.6%	2.9%	1.6%
Sales per Dollar of Inventory	6.8	6.8	11.9	17.7	34.6	62.6
Sales per Dollar of Net Plant	648.1%	928.1%	1134.9%	1093.1%	943.3%	956.7%
Receivables per day of Sales	88.1	83.7	49.1	34.1	24.1	18.2
Profitability Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Gross Profit Margin	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Pre Tax Profit Margin	-159.5%	9.0%	22.0%	26.0%	29.0%	33.0%
Net Profit Margin	-159.5%	9.0%	22.0%	26.0%	29.0%	33.0%
Payout Ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Coverage	n.a.	-	-	-	-	-
Tax Rate	0%	0%	0%	0%	0%	0%
Doufour on an Mohuice	2008E	2009E	2010E	2011E	2012E	2013E
Performance Metrics Return on Equity (ROE)	-139.0%	7.1%	25.2%	33.3%	39.4%	44.6%
	-34.9%	7.1%		31.7%		
Return on Assets (ROA) Return on Invested Capital (ROI)	-34.9% -62.8%	12.7%	23.6% 43.0%	59.3%	38.2% 72.6%	43.2% 81.2%
	-02.0%	12.7%	43.0%	59.5%	72.0%	01.2%
Sales per Employee Income per Employee						
Theorie per Employee						
<b>Efficiency Metrics</b>	2008E	2009E	2010E	2011E	2012E	2013E
Receivable Turnover	4.1	4.4	7.4	10.7	15.2	20.1
Inventory Turnover	4.3	4.0	5.6	7.1	12.5	20.0
Total Asset Turnover	0.3	0.4	0.6	0.7	0.7	0.7
Days of COGS in Inventory	84.4	91.3	65.7	51.1	29.2	18.3
Per Share Data	2008E	2009E	2010E	2011E	2012E	2013E
Sales per Share	0.01	0.01	0.02	0.04	0.07	0.12
Cash - per Share	0.00	0.00	0.01	0.02	0.05	0.11
Current Assets per Share	0.01	0.01	0.01	0.03	0.06	0.11
Total Assets per Share	0.02	0.02	0.03	0.05	0.08	0.14
Tangible Book Value per Share	(0.01)	(0.00)	0.00	0.01	0.03	0.06
Long Term Debt - per Share	0.01	-	-	-	-	-
Working Capital per Share	0.00	0.00	0.00	0.00	(0.00)	(0.01)
Free Cash Flow per Share	(0.01)	0.00	0.01	0.01	0.03	0.06
Price/ Earnings	2008E	2009E	2010E	2011E	2012E	2013E
Price Earnings Ratio - Closing Price	(0.9)	11.5	2.4	1.2	0.6	0.3
Price to Cash Earnings	(0.9)	10.6	2.4	1.2	0.6	0.3

Price/ Earnings	2008E	2009E	2010E	2011E	2012E	2013E
Price Earnings Ratio - Closing Price	(0.9)	11.5	2.4	1.2	0.6	0.3
Price to Cash Earnings	(0.9)	10.6	2.4	1.2	0.6	0.3

Valuation Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Price to Sales	1.5	1.0	0.5	0.3	0.2	0.1
Price to Tangible Book Value - Ratio	(1.1)	(5.8)	4.0	0.9	0.4	0.2
Price to Cash Flow - Ratio	(1.2)	6.4	1.4	0.7	0.3	0.2
Price to Free Cash Flow - Ratio	(1.2)	6.4	1.4	0.7	0.3	0.2
Price to Equity	1.3	8.0	0.6	0.4	0.2	0.1



Income Statement Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Sales	20081	2009L	2010L	2011L	2012L	2013L
Sales	5.5	9.5	18.4	30.9	54.0	96.9
Sequential Sales Growth	3.5	71.7%	94.0%	67.5%	74.9%	79.4%
·		7 1.7 70	3 1.0 70	07.570	7 1.3 70	7 3. 170
Expenses						
Cost of Goods Sold (COGS)	3.5	5.6	8.6	12.4	19.5	31.0
COGS Sequential Growth %	10 70	57.9%	55.1%	44.4%	56.5%	58.9%
COGS as % of Sales	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Gross Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
Gross Operating Profit	2.0	3.9	9.8	18.4	34.5	65.9
Gross Profit Sequential Growth %		96.0%	148.8%	87.9%	87.4%	90.9%
Research & Development (R&D) Expense	-	-	-	-	-	-
R&D Sequential Growth %						
R&D as % of Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Selling, General & Administrative (SG&A) Expense	9.0	2.4	2.9	4.1	5.7	7.6
SG&A Sequential Growth %		-73.2%	20.5%	42.6%	37.0%	34.5%
SG&A as % of Sales	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
EBITDA	(7.0)	1.5	6.9	14.3	28.8	58.3
EBITDA Sequential Growth %	100.001	-121.8%	351.4%	107.0%	102.0%	102.1%
EBIT DA Margin %	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.4	0.7
Interest Income	2.1	-	-	-	-	-
Other Income - Net	-	-	-	-	-	-
EBIT	(4.9)	1.5	6.8	14.1	28.4	57.6
EBIT Sequential Growth %		-129.6%	365.6%	107.5%	102.0%	102.4%
EBIT Margin %	-88.9%	15.3%	36.8%	45.6%	52.7%	59.4%
Interest Expense	3.5	-	-	-	-	-
Pretax Income	(8.4)	1.5	6.8	14.1	28.4	57.6
Pre-Tax Income Sequential Growth %		-117.3%	365.6%	107.5%	102.0%	102.4%
Pre-Tax Income Margin	-152.7%	15.3%	36.8%	45.6%	52.7%	59.4%
Income Taxes	0.0	0.0	0.0	0.5	1.5	2.8
Minority Interest	0.4	0.6	2.7	5.6	11.3	22.8
Net Income from Continuing Operations	(8.8)	0.9	4.1	8.0	15.7	32.0
Net Income from Discontinued Operations	-	-	-	-	-	-
Net Income from Total Operations	(8.8)	0.9	4.1	8.0	15.7	32.0
Extraordinary Income Losses	-	-	-	-	-	-
Other Gains Losses	-	-	-	-	-	-
Net Income						
Total Net Income	(8.8)	0.9	4.1	8.0	15.7	32.0
Net Income Sequential Growth %		-109.7%	372.9%	97.8%	95.6%	104.2%
Net Income Margin %	-159.5%	9.0%	22.0%	26.0%	29.0%	33.0%
Earnings Per Share	+			<del></del>		
Basic EPS Total	(0.01)	0.00	0.00	0.01	0.02	0.03
Basic EPS Sequential Growth %	<del>                                     </del>	-108.1%	372.9%	97.8%	95.6%	104.2%
Diluted EPS - Total	(0.01)	0.00	0.00	0.01	0.02	0.03
Diluted EPS Sequential Growth %	1 1	-108.1%	372.9%	97.8%	95.6%	104.2%
Dividends per Share	-	-	-	-	-	-
<u>'</u>						



				Conen macpenaent ne			
Balance Sheet Metrics	2008E	2009E	2010E	2011E	2012E	2013E	
Assets							
Cash and Equivalents	0.7	2.4	9.6	24.0	51.3	105.7	
Cash & Marketable Securities Sequential Growth %	2.50/	242.7%	298.4%	151.1%	113.8%	106.1%	
Cash & Marketable Sec. as % of Total Assets Accounts Receivable	3.5%	11.2%	32.7%	53.2%	68.0%	78.5%	
Accounts Receivable Sequential Growth %	1.3	2.2 63.1%	2.5 13.8%	2.9 16.2%	3.6 23.7%	4.8 35.5%	
Accounts Receivable sequential drowth // Accounts Receivable as % of Total Assets	6.7%	10.2%	8.5%	6.4%	4.7%	3.6%	
Other Short Term Receivables	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Inventories	0.8	1.4	1.6	1.7	1.6	1.5	
Inventories Sequential Growth %		70.7%	11.7%	12.3%	-10.6%	-0.7%	
Inventories as % of Total Assets	4.1%	6.5%	5.3%	3.9%	2.1%	1.1%	
Prepaid Expenses	2.56	0.72	0.44	0.25	0.28	0.23	
Current Deferred Income Taxes	0	0	0	0	0	0	
Other Current Assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Total Current Assets	5.4	6.7	14.0	28.9	56.7	112.3	
Net Fixed Assets	0.9	1.0	1.6	2.8	5.7	10.1	
Net Fixed Assets Sequential Growth %		19.9%	58.6%	73.9%	102.7%	76.9%	
Net Fixed Assets as % of Total Assets	4.3%	4.8%	5.6%	6.3%	7.6%	7.5%	
Intangibles	13.8	13.7	13.6	13.4	13.0	12.3	
Intangibles Sequential Growth %	60 70/	-0.5%	-0.8%	-1.4%	-3.0%	-5.4%	
Intangibles as % of Total Assets	68.7%	64.0%	46.5%	29.7%	17.2%	9.1%	
Non Current Deferred Income Taxes	0	0	0	0	0	0	
Other Non Current Assets	0.0	- 21.4	- 20.2	- 45.1	- 75.4	1247	
Total Assets	20.0	21.4	29.2	45.1	75.4	134.7	
Lia bilities	1						
Accounts Payable	0.9	1.3	2.2	4.0	6.8	10.9	
Accounts Payable Sequential Growth %	0.5	37.3%	72,3%	84.8%	71.2%	59.4%	
Accounts Payable as % of Total Assets	4.5%	5.8%	7.4%	8.8%	9.0%	8.1%	
Notes Payable	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Debt Payable	0.1	-	-	-	-	-	
Debt Payable Sequential Growth %		-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Debt Payable as % of Total Assets	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Accrued Expenses	0.2	0.1	0.1	0.4	0.6	0.9	
Accrued Liabilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deferred Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Current Deferred Income Taxes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Other Current Liabilities	0.7	0.2	0.2	0.4	0.6	0.9	
Total Current Liabilities	1.9	1.5	2.5	4.7	8.1	12.6	
Current Liabilities Sequential Growth %		-21.0%	65.3%	90.3%	70.9%	56.2%	
Current Liabilities as % of Total Assets	9.5%	7.0%	8.5%	10.5%	10.7%	9.4%	
Long Term Debt	4.8	-	- "DT//01	- "DT\//OI	- "D7!/0!	- "DT//OI	
Long Term Debt Sequential Growth %	24.00/	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Long Term Debt as % of Total Assets	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Deferred Income Taxes Other Non Current Liabilities	1		0	n 2	0	0	
Total Liabilities	n.a. 6.7	n.a. 1.5	n.a. 2.5	n.a. 4.7	n.a. 8.1	n.a. 12.6	
Total Liabilities Sequential Growth %	0.7	-77.6%	65.3%	90.3%	70.9%	56.2%	
Total Liabilities as % of Total Assets	33.4%	7.0%	8.5%	10.5%	10.7%	9.4%	
	33.176	71070	0.5 70	10.5 /0	10.7 70	31 170	
Minority Interest				.= -			
Total Minority Interest	7.0	7.6	10.3	15.9	27.2	50.0	
Total Minority Interest Sequential Growth %	24.00/	8.4%	35.9%	54.3%	71.2%	83.7%	
Total Minority Interest as % of Total Assets	34.9%	35.4%	35.3%	35.3%	36.1%	37.1%	
Equity							
Total Equity	6.3	12.0	16.1	24.1	39.7	71.7	
Total Equity Sequential Growth %		89.1%	33.8%	49.9%	65.1%	80.5%	
Total Equity as % of Total Assets	31.7%	56.1%	54.9%	53.4%	52.7%	53.3%	
Total Liabilities and Stock Equity	20.0	21.1	28.8	44.7	75.0	134.3	
0							
Shareholding/ Employees	000.0	202.2	000.0	000.0	202.2	000.0	
Total Common Shares Outstanding	823.0	983.0	983.0	983.0	983.0	983.0	
Shares Outstanding Sequential Growth %		19.4%	0.0%	0.0%	0.0%	0.0%	
Treasury Shares	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Basic Weighted Shares Outstanding	823.0	983.0	983.0	983.0	983.0	983.0	
Diluted Weighted Shares Outstanding	823.0	983.0	983.0	983.0	983.0	983.0	
Diluted Shares Outstanding Sequential Growth %		19.4%	0.0%	0.0%	0.0%	0.0%	
Number of Employees	1		-				
Number of Part Time Employees	l l						



Cash Flow Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow from Operations						
Net Income/Loss	(8.8)	0.9	4.1	8.0	15.7	32.0
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.4	0.7
Net Change in Working Capital	2.8	(0.0)	(0.8)	(1.8)	(2.8)	(3.3)
Net Cash - Continuing Operations	(6.0)	0.9	3.4	6.4	13.3	29.4
Net Cash - Discontinued Operations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Operating Activities	(6.0)	0.9	3.4	6.4	13.3	29.4
Net Cash - Operations Sequential Growth %		-115.3%	269.9%	89.7%	108.0%	121.6%
Net Cash - Operations as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cash Flow from Investing Activities						
Sale of Property Plant Equipment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Property Plant Equipment	(0.1)	(0.2)	(0.6)	(1.2)	(2.9)	(4.4)
Acquisitions	(13.6)	-	-	-	-	-
Purchase of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Investing Changes Net	-	-	-	-	-	-
Cash - Discontinued Investing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Investing Activities	(13.7)	(0.2)	(0.6)	(1.2)	(2.9)	(4.4)
Net Cash - Investing Sequential Growth %		-98.8%	252.9%	100.0%	141.7%	51.7%
Net Cash - Investing as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cash Flow from Financing Activities						
Issuance/ Repayment of Debt	-	(4.8)	-	-	-	-
Issuance of Capital Stock	19.8	4.8	-	-	-	-
Dividends Paid	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cash - Discontinued Financing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Financing Activities	0.4	0.6	2.7	5.6	11.3	22.8
Net Cash - Financing Sequential Growth %		61.7%	361.7%	105.6%	102.3%	101.3%
Net Cash - Financing as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Effect of Exchange Rate Changes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Change - Cash and Cash Equivalents	-	-	=	-	-	-
Cash at Beginning of Period	0.5	1.3	5.5	10.8	21.7	47.8
Cash at End of Period	0.6	0.7	2.4	9.6	24.0	51.3
Cash Sequential Growth %		16.7%	242.7%	298.4%	151.1%	113.8%



#### Cohen Growth Drivers - 1

Annual Revenues, Margins, Assets, Turns	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	9.5	18.4	30.9	54.0	96.9
Gross Margin	36%	41%	53%	60%	64%	68%
Operating Margin	-127%	16%	37%	46%	53%	60%
Net Margin - Income Avail. To Shreholders	-159%	9%	22%	26%	29%	33%
EPS - Diluted	(0.01)	0.00	0.00	0.01	0.02	0.03
EBITDA	(7.0)	1.5	6.9	14.3	28.8	58.3
Free Cash Flow	(26.2)	4.4	4.5	9.0	16.4	32.3
Cash	0.7	2.4	9.6	24.0	51.3	105.7
Working Capital	2.8	2.8	2.0	0.2	(2.7)	(6.0)
Long Term Debt	4.8	-	-	-	-	-
Total Debt	4.8	-	-	-	-	-
Total Assets	20.0	21.4	29.2	45.1	75.4	134.7
DSO	44.9	54.8	32.9	23.7	17.9	14.6
Inventory Turns	84.4	91.3	65.7	51.1	29.2	18.3
Fixed Asset Turns	56.3	39.3	32.2	33.4	38.7	38.2
Cash Cycle	0.7	1.1	0.8	0.5	0.4	0.4

Percentage Change in Annual Revenues, Ma	2008E	2009E	2010E	2011E	2012E	2013E
Revenues		71.7%	94.0%	67.5%	74.9%	79.4%
Gross Margin		14.1%	28.3%	12.2%	7.1%	6.4%
Operating Margin		-112.7%	132.7%	23.6%	15.5%	12.6%
Net Margin		-105.7%	143.8%	18.1%	11.8%	13.8%
EPS - Diluted		-108.1%	372.9%	97.8%	95.6%	104.2%
EBITDA		-121.8%	351.4%	107.0%	102.0%	102.1%
Free Cash Flow		-116.7%	2.4%	101.8%	81.2%	97.5%
Cash		242.7%	298.4%	151.1%	113.8%	106.1%
Working Capital		-0.7%	-28.8%	-92.4%	-1861.1%	125.2%
Long Term Debt		-100.0%	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Total Debt		-100.0%	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Total Assets		6.8%	36.5%	54.2%	67.3%	78.7%
DSO		22.0%	-40.0%	-27.8%	-24.6%	-18.4%
Inventory Turns		8.1%	-28.0%	-22.2%	-42.9%	-37.5%
Fixed Asset Turns		-30.2%	-18.2%	3.8%	15.9%	-1.4%
Cash Cycle		52.6%	-32.5%	-34.5%	-23.0%	-8.1%



Cohen Growth Drivers - 2						
	2008E	2009E	2010E	2011E	2012E	2013E
Growth Drivers						
Revenues	5.5	9.5	18.4	30.9	54.0	96.9
Cost of Revenues	3.5	5.6	8.6	12.4	19.5	31.0
Gross Profit	2.0	3.9	9.8	18.4	34.5	65.9
Operating Income	(7.0)	1.5	6.9	14.3	28.8	58.3
Net Income	(8.8)	0.9	4.1	8.0	15.7	32.0
Profitability						
Return on Equity	-139.0%	7.1%	25.2%	33.3%	39.4%	44.6%
Return on Assets	-34.9%	7.1%	23.6%	31.7%	38.2%	43.2%
Asset Turnover	6.5	9.3	11.3	10.9	9.4	9.6
Profit Margin	-159%	9%	22%	26%	29%	33%
Return on Invested Capital Capital Efficiency	-62.5%	12.7%	43.0%	59.3%	72.6%	81.2%
PPE / Revenue	15.4%	10.8%	8.8%	9.1%	10.6%	10.5%
Intangible Assets/Revenue	245.3%	142.1%	72.6%	42.7%	23.7%	12.5%
WC / Revenue	50.8%	29.4%	10.8%	0.5%	-4.9%	-6.2%
Operating Ratios						
Gross Profit Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
EBITDA Margin	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
EBIT Margin	-127.7%	15.3%	36.8%	45.6%	52.7%	59.4%
Cost of Services/Revenues	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
SG&A Expenses/Revenues	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
L iqu idity						
Working Capital	2.8	2.8	2.0	0.2	(2.7)	(6.0)
Current Ratio	2.8	4.5	5.7	6.1	7.0	8.9
Quick Ratio	2.4	3.5	5.0	5.7	6.8	8.8
Debt						
Total Debt	4.8	-	-	-	-	-
Debt Ratio	0.4	-	-	-	-	-
Debt to Equity	0.8	-	-	-	-	-



**Cohen Liquidity Matrix** 

Total Elquidity matrix	2008E	2009E	2010E	2011E	2012E	2013E
Liquidity Matrix						
Current Ratio	2.8	4.5	5.7	6.1	7.0	8.9
Quick Ratio	2.4	3.5	5.0	5.7	6.8	8.8
Cash Ratio	0.4	1.6	3.9	5.1	6.4	8.4
Working Capital Matrix						
Working Capital	2.8	2.8	2.0	0.2	(2.7)	(6.0)
Cash Flow from Operations to Current Liabilities						
Working Capital Provided by Net Income	(8.8)	0.9	4.2	8.2	16.1	32.7
Leverage Ratios						
Gearing Ratio	0.8	-	-	-	-	-
Financial Leverage Ratio	0.8	-	-	-	-	-
Debt to Assets	0.2	-	-	-	-	-
Interest Coverage Ratio	(2.0)	#DIV/0!	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Equity Multiplier	3.2	1.8	1.8	1.9	1.9	1.9
Capital Structure Ratio	0.4	-	-	-	-	-

Cohen NCFO Analysis

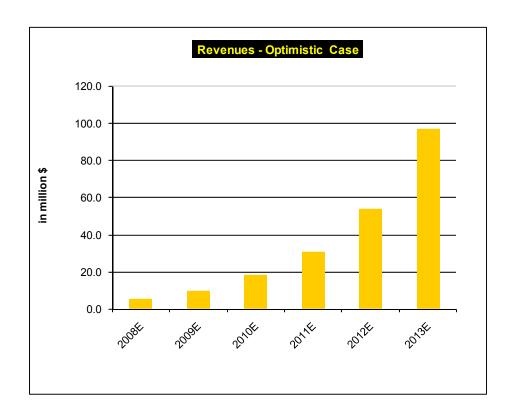
Conen NCFO Analysis						
Cohen Net Cash Flow from Operations	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	9.5	18.4	30.9	54.0	96.9
plus decrease (-increase) in AR	(0.7)	(0.7)	(0.2)	(0.3)	(0.6)	(1.2)
Gross Cash Collections from Operations	4.9	8.8	18.2	30.5	53.4	95.6
Operating Expenses						
Cost of Goods Sold	3.5	5.6	8.6	12.4	19.5	31.0
General an Administrative Expenses	9.0	2.4	2.9	4.1	5.7	7.6
R&D Expenses	-	-	-	-	-	-
Total Operating Expenses	12.5	8.0	11.5	16.6	25.2	38.6
Working Capital Changes						
Decrease (Increase) in Inventories	(8.0)	(0.6)	(0.2)	(0.2)	0.2	0.0
Decrease (Increase) in Short Term Investmer	-	-	-	-	-	-
Decrease (Increase) in Other Current Assets	(3.2)	1.7	0.2	0.1	(0.1)	0.0
Increase (Decrease) in Accounts Payable	0.9	0.3	0.9	1.8	2.8	4.0
Increase (Decrease) in Notes Payable	-	-	-	-	-	-
Increase (Decrease) in STD	-	-	-	-	-	-
Increase (Decrease) in Accrued Expenses	0.2	(0.2)	0.1	0.3	0.3	0.3
Increase (Decrease) in Other Current Liab	0.7	(0.5)	0.0	0.2	0.3	0.2
Total Changes in Working Capital	(2.2)	8.0	1.0	2.2	3.5	4.6
Total Cash Outflows for Op (Op Exp+Chg W	10.3	8.8	12.6	18.8	28.6	43.1
Net Cash Flow from Operations (NCFO)	(5.5)	(0.0)	5.6	11.7	24.7	52.5

Cohen NCFO Analysis	2008E	2009E	2010E	2011E	2012E	2013E
NCFO / Diluted Share	(0.01)	(0.00)	0.01	0.01	0.03	0.05
Diluted EPS	(0.01)	0.00	0.00	0.01	0.02	0.03

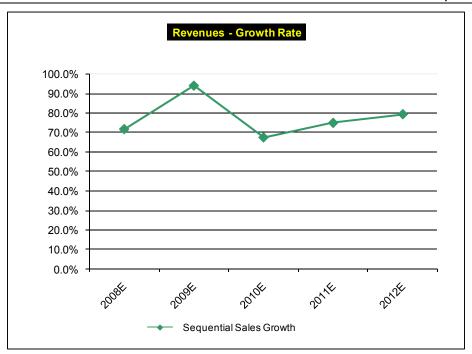
Cohen NCFO Coverage Ratios	2008E	2009E	2010E	2011E	2012E	2013E
Interest Coverage (NCFO/Int Exp)	(1.6)	#DIV/0!	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!

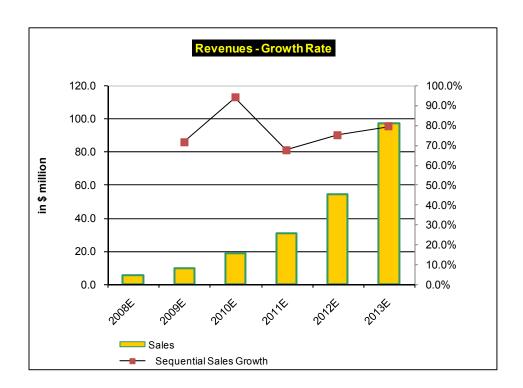


Cohen Free Cash Flows	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow = ni+depr+amort	(8.8)	0.9	4.2	8.2	16.1	32.7
Net Cash Flow (CF-Div)	(8.8)	0.9	4.2	8.2	16.1	32.7
Exchange rate effects	2.1	-	-	-	-	-
Working Capital Change		5.5	5.7	6.1	13.0	27.7
Free Cash Flow	(26.2)	4.4	4.5	9.0	16.4	32.3
Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Net Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Free Cash Flow/Assets	(1.3)	0.2	0.2	0.2	0.2	0.2
Net Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
Free Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
NCFO Per Share	(0.0)	(0.0)	0.0	0.0	0.0	0.1
Diluted EPS, Before Extraordinary Items	(0.0)	0.0	0.0	0.0	0.0	0.0

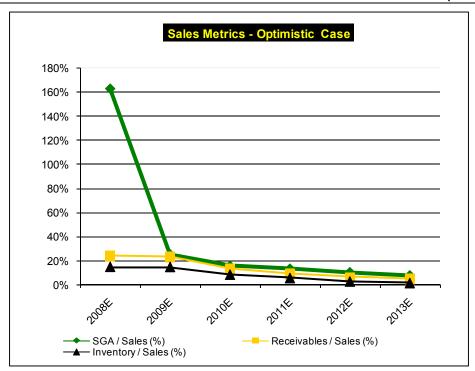


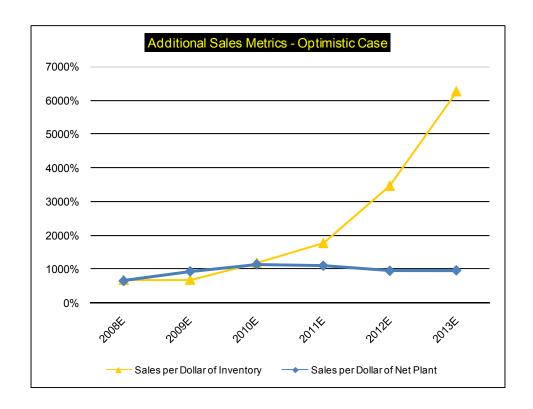




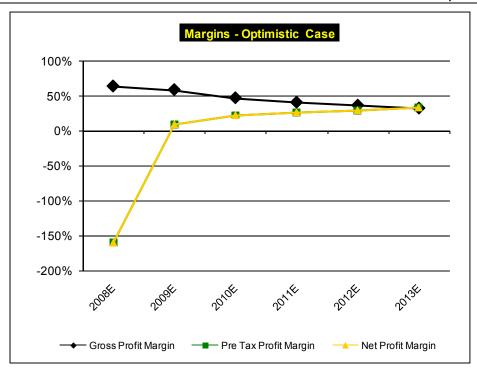


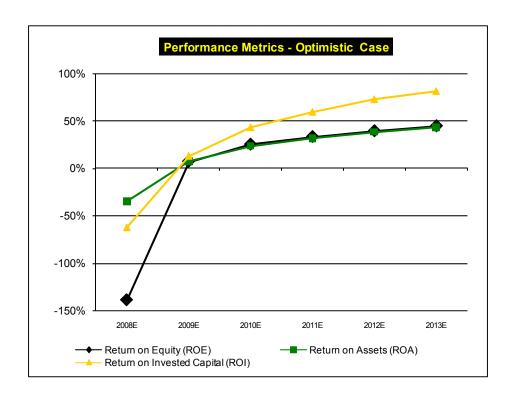




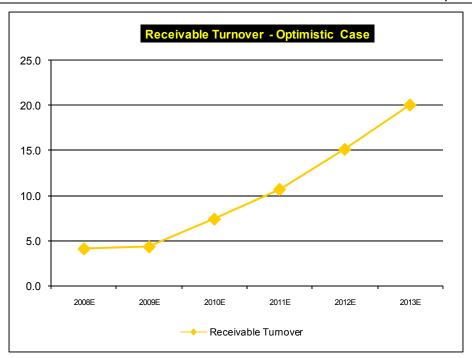


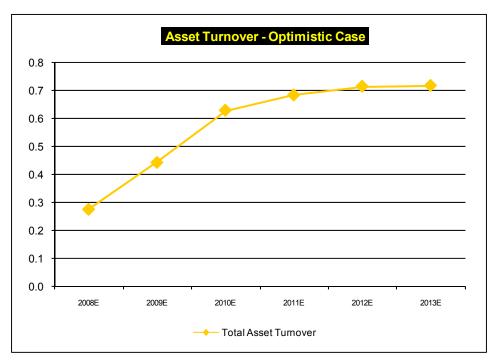




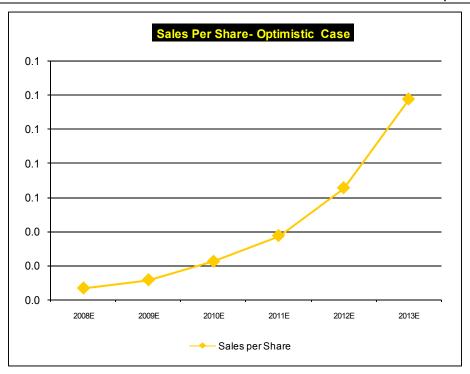


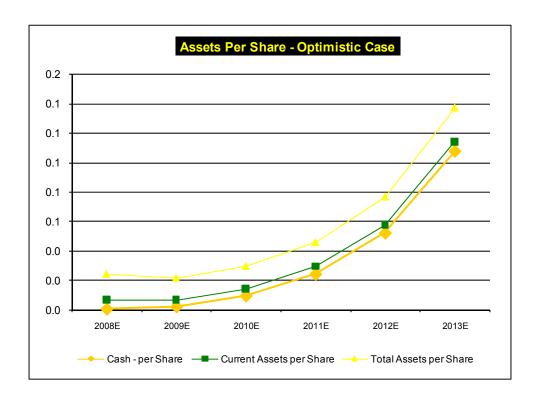




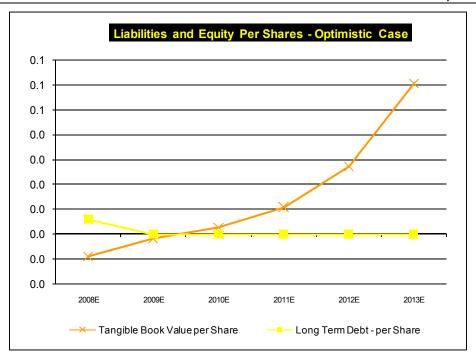


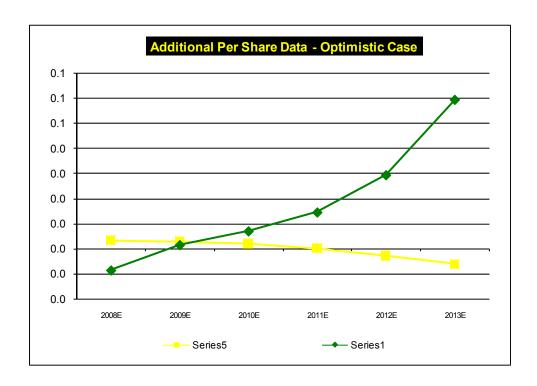






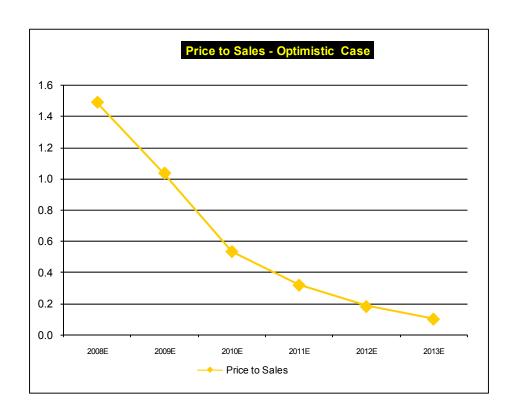




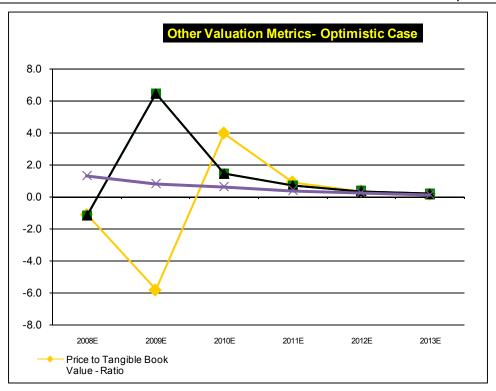


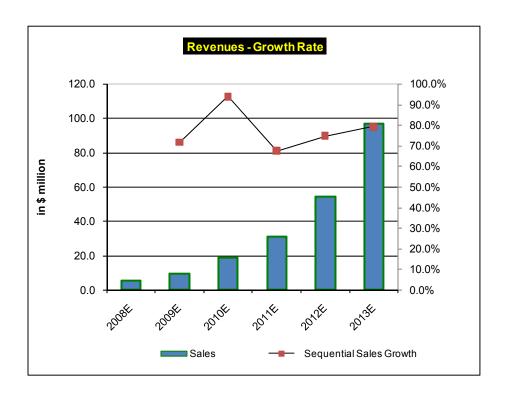




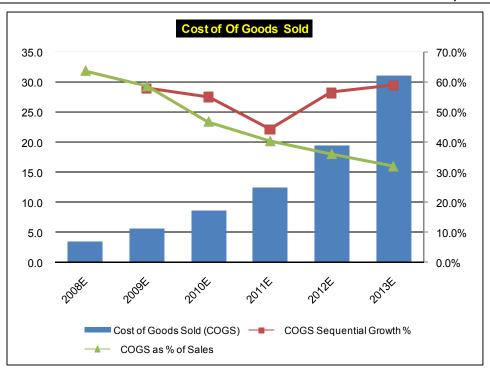


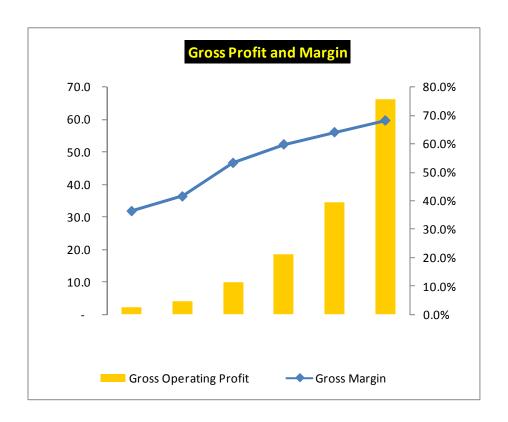




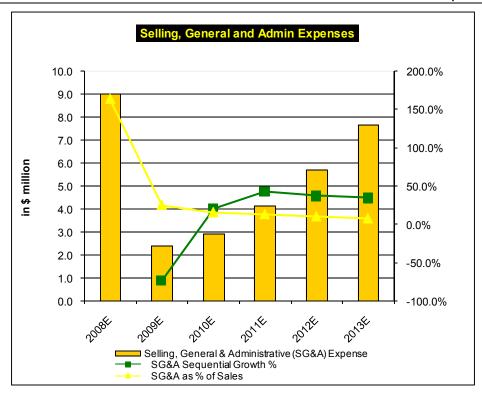


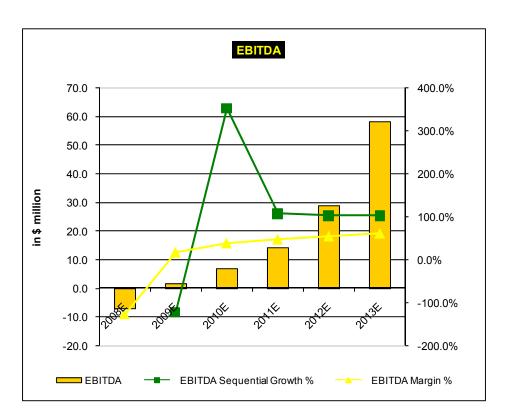




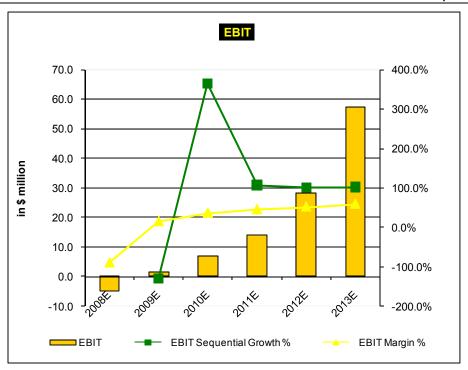


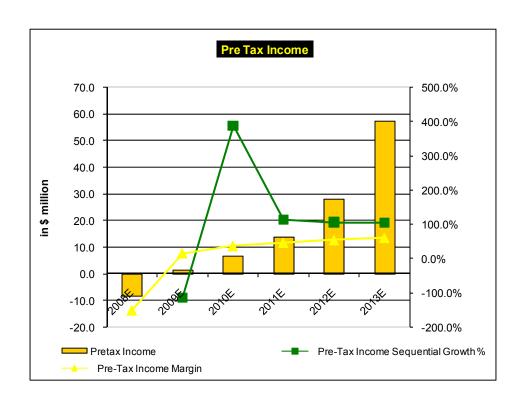




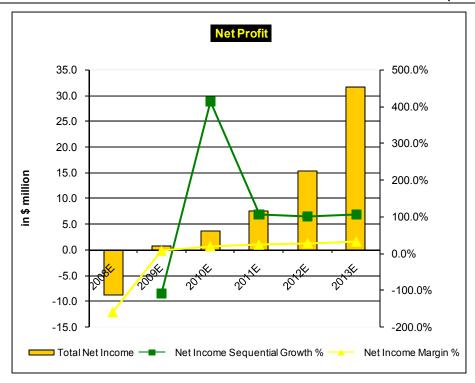


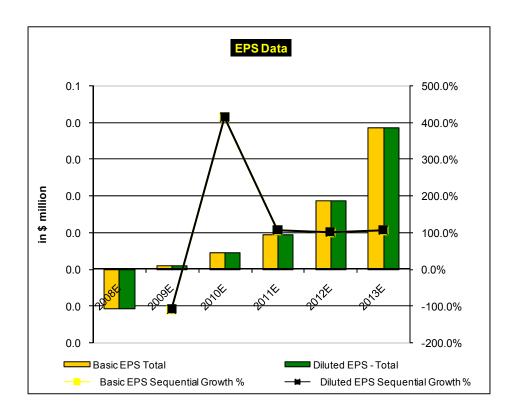




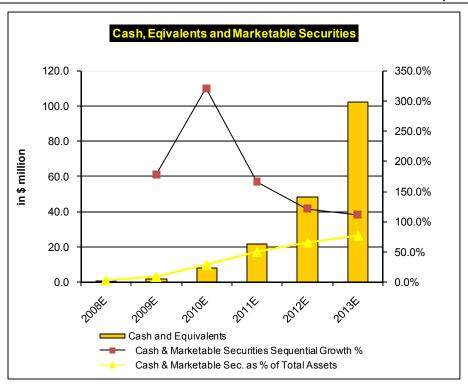


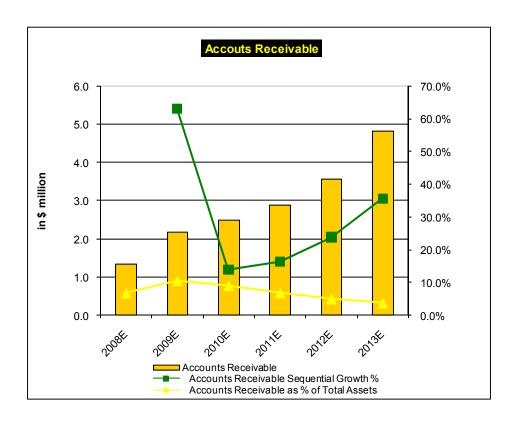




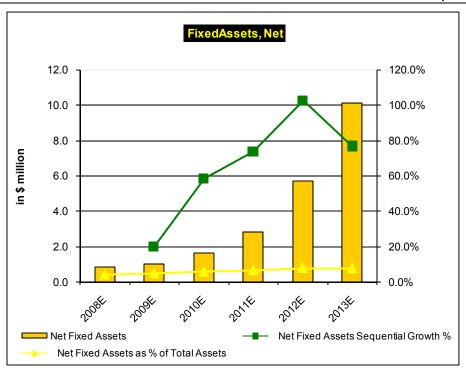


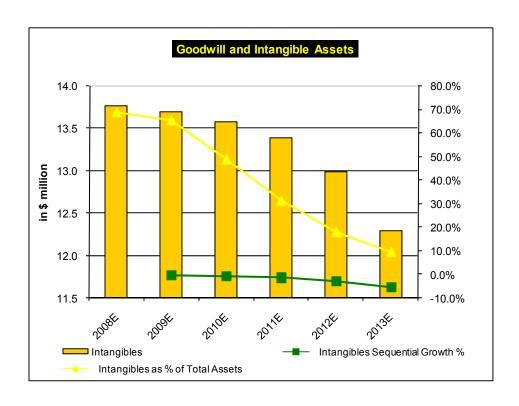




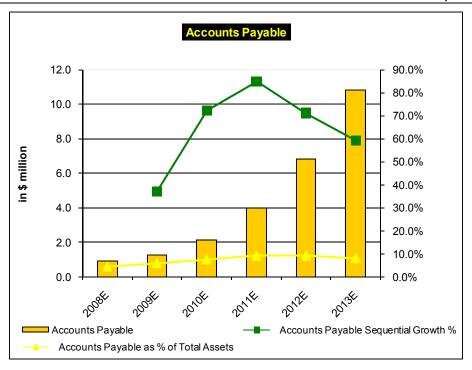


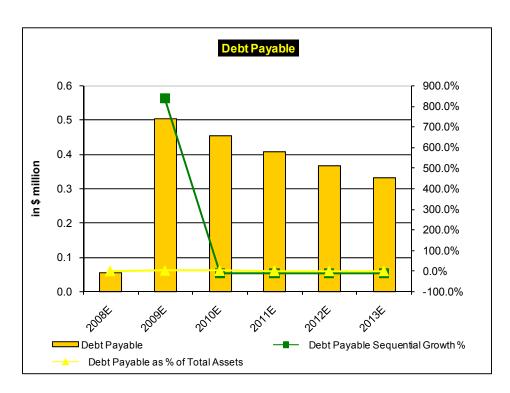




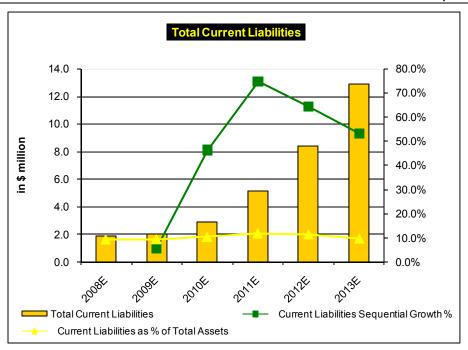


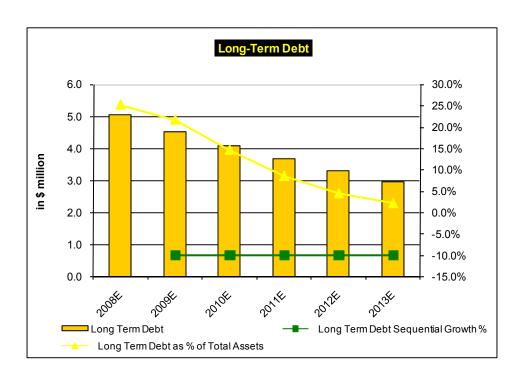




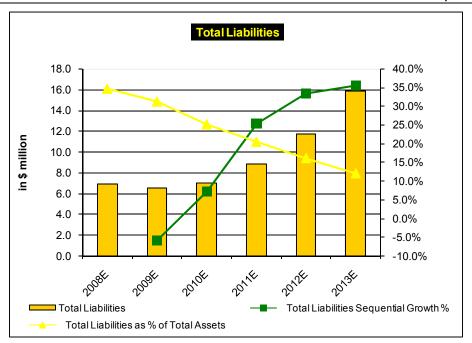


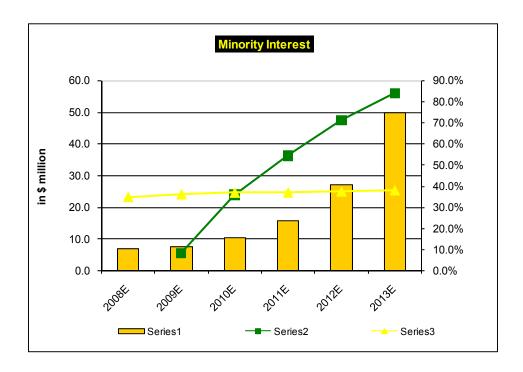




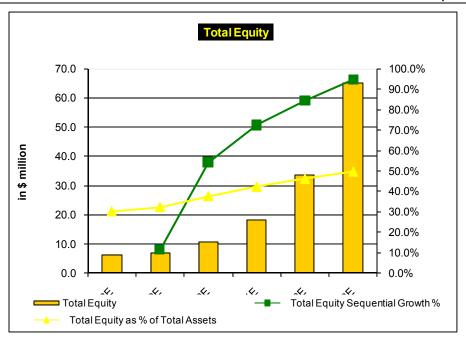


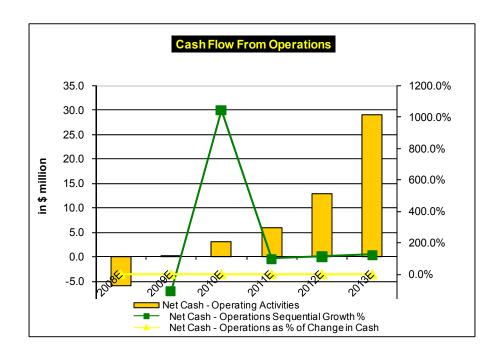




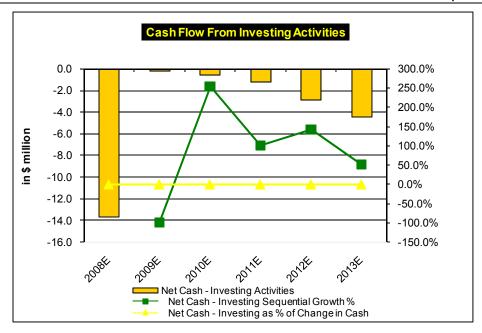


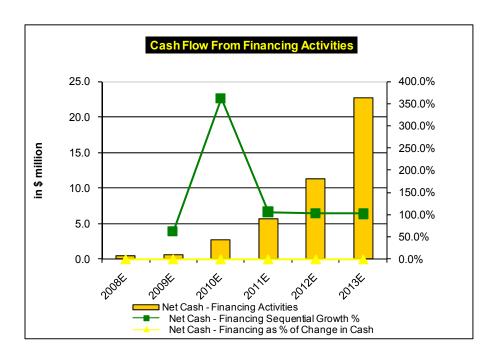




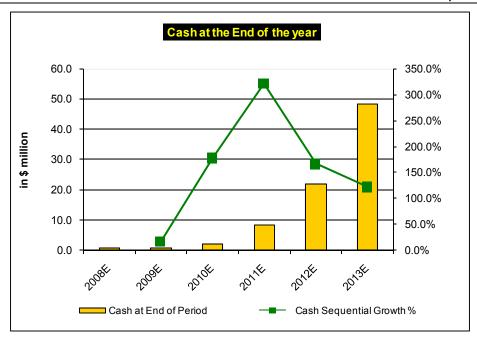














## **PESSIMISTIC CASE**

	2005	2000	22425	20445	20425	204.25
Sales Matrics	2008E	2009E	2010E	<b>2011E</b>	2012E	<b>2013E</b>
SGA / Sales (%)	162.9%	25.4% 25.3%	15.8%	13.4%	10.5%	7.9%
Receivables / Sales (%)	24.1%		14.7%	10.1%	7.0%	5.2%
Inventory / Sales (%)	14.7%	14.6%	8.4% 11.9	5.6% 17.7	2.9% 34.6	1.6%
Sales per Dollar of Inventory		6.8				62.6
Sales per Dollar of Net Plant	648.1%	769.8%	1064.3% 53.7	1076.2% 36.9	1125.9%	1191.0%
Receivables per day of Sales	88.1	92.2	55.7	30.9	25.6	19.0
Profitability Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Gross Profit Margin	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Pre Tax Profit Margin	-159.5%	8.8%	21.9%	25.5%	28.5%	33.2%
Net Profit Margin	-159.5%	8.8%	21.9%	25.5%	28.5%	33.2%
Payout Ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Coverage	n.a.	-	-	-	-	-
Tax Rate	0%	0%	0%	0%	0%	0%
	•	•	•	•		'
Performance Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Return on Equity (ROE)	-139.0%	5.5%	21.1%	29.3%	36.9%	44.0%
Return on Assets (ROA)	-34.9%	5.7%	20.1%	28.6%	36.5%	42.5%
Return on Invested Capital (ROI)	-62.8%	10.0%	36.1%	53.0%	69.2%	79.7%
Sales per Employee						
Income per Employee						
Efficiency Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Receivable Turnover	4.1	4.0	6.8	9.9	14.3	19.2
Inventory Turnover	4.3	4.0	5.6	7.1	12.5	20.0
Total Asset Turnover	0.3	0.4	0.5	0.6	0.7	0.7
Days of COGS in Inventory	84.4	91.3	65.7	51.1	29.2	18.3
Per Share Data	2008E	2009E	2010E	2011E	2012E	2013E
Sales per Share	0.01	0.01	0.02	0.03	0.05	0.10
Cash - per Share	0.00	0.00	0.02	0.03	0.03	0.10
Current Assets per Share	0.01	0.00	0.01	0.02	0.04	0.07
Total Assets per Share	0.02	0.02	0.01	0.02	0.05	0.09
Tangible Book Value per Share	(0.01)	(0.00)	0.00	0.01	0.02	0.04
Long Term Debt - per Share	0.01	-	-	-	-	-
Working Capital per Share	0.00	0.00	0.00	0.00	(0.00)	(0.00)
Free Cash Flow per Share	(0.01)	0.00	0.00	0.01	0.02	0.04
·	, ,,	<u> </u>				
Price/ Earnings	2008E	2009E	2010E	2011E	2012E	2013E
Price Earnings Ratio - Closing Price	(0.9)	20.1	4.1	2.1	1.1	0.5
Price to Cash Earnings	(0.9)	18.2	4.0	2.1	1.0	0.5
Valuation Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Price to Sales	1.5	1.8	0.9	0.5	0.3	0.2
		(( 0)	9.7	1.7	0.6	0.3
Price to Tangible Book Value - Ratio	(1.1)	(6.8)				
Price to Tangible Book Value - Ratio Price to Cash Flow - Ratio	(1.2)	11.0	2.4	1.2	0.6	0.3
Price to Tangible Book Value - Ratio						



Income Statement Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Sales	2006E	2009E	2010E	2011E	2012E	2013E
Sales	5.5	7.3	14.4	24.2	43.4	79.2
Sequential Sales Growth	5.5	32.7%	96.3%	68.4%	78.9%	82.6%
Sequential Sales Glowth		32.7 70	90.5 70	00.470	70.970	02.070
Expenses						
Cost of Goods Sold (COGS)	3.5	4.3	6.7	9.8	15.7	25.3
COGS Sequential Growth %		22.0%	56.9%	45.1%	60.0%	61.8%
COGS as % of Sales	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
Gross Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
Gross Operating Profit	2.0	3.0	7.7	14.5	27.7	53.9
Gross Profit Sequential Growth %		51.4%	151.8%	88.8%	91.7%	94.4%
Research & Development (R&D) Expense	-	-	-	-	-	-
R&D Sequential Growth %						
R&D as % of Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Selling, General & Administrative (SG&A) Expense	9.0	1.9	2.3	3.3	4.6	6.2
SG&A Sequential Growth %		-79.3%	21.9%	43.3%	40.1%	36.9%
SG&A as % of Sales	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
EBITDA	(7.0)	1.2	5.4	11.2	23.2	47.7
EBIT DA Sequential Growth %		-116.9%	356.7%	108.0%	106.6%	105.7%
EBIT DA Margin %	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
Depreciation and Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Interest Income	2.1	-	-	-	-	-
Other Income - Net	-	-	-	-	-	-
EBIT	(4.9)	1.1	5.3	11.1	22.9	47.2
EBIT Sequential Growth %		-122.7%	375.3%	108.7%	107.1%	106.1%
EBIT Margin %	-88.9%	15.2%	36.8%	45.6%	52.8%	59.6%
Interest Expense	3.5	-	-	-	-	-
Pretax Income	(8.4)	1.1	5.3	11.1	22.9	47.2
Pre-Tax Income Sequential Growth %		-113.2%	375.3%	108.7%	107.1%	106.1%
Pre-Tax Income Margin	-152.7%	15.2%	36.8%	45.6%	52.8%	59.6%
Income Taxes	0.0	0.0	0.0	0.5	1.5	2.3
Minority Interest	0.4	0.5	2.1	4.4	9.1	18.6
Net Income from Continuing Operations	(8.8)	0.6	3.2	6.2	12.4	26.3
Net Income from Discontinued Operations	-	-	-	-	-	-
Net Income from Total Operations	(8.8)	0.6	3.2	6.2	12.4	26.3
Extraordinary Income Losses	-	-	-	-	-	-
Other Gains Losses	-	-	-	-	-	-
Net Income						
Total Net Income	(8.8)	0.6	3.2	6.2	12.4	26.3
Net Income Sequential Growth %	(0.0)	-107.4%	387.4%	96.0%	99.6%	112.7%
Net Income Margin %	-159.5%	8.8%	21.9%	25.5%	28.5%	33.2%
3	133.370	3.0 70	_1.5 /0	23.3 /0	20.5 70	33.270
Earnings Per Share	(2.2.0)				2.2.	
Basic EPS Total	(0.01)	0.00	0.00	0.00	0.01	0.02
Basic EPS Sequential Growth %	(2.2.1)	-104.6%	387.4%	96.0%	99.6%	112.7%
Diluted EPS - Total	(0.01)	0.00	0.00	0.00	0.01	0.02
Diluted EPS Sequential Growth %		-104.6%	387.4%	96.0%	99.6%	112.7%
Dividends per Share	-	-	-	-	-	-



					ппасрене	
Balance Sheet Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Assets						
Cash and Equivalents	0.7	2.6	8.2	19.5	41.9	87.2
Cash & Marketable Securities Sequential Growth %		269.2%	218.4%	136.9%	114.8%	108.3%
Cash & Marketable Sec. as % of Total Assets	3.5%	12.5%	30.6%	49.7%	66.0%	77.8%
Accounts Receivable	1.3	1.9	2.1	2.5	3.0	4.1
Accounts Receivable Sequential Growth %		38.9%	14.2%	15.7%	24.2%	35.5%
Accounts Receivable as % of Total Assets	6.7%	8.9%	7.9%	6.2%	4.8%	3.7%
Other Short Term Receivables	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Inventories	0.8	1.1	1.2	1.4	1.3	1.3
Inventories Sequential Growth %		31.9%	13.0%	12.8%	-8.5%	1.1%
Inventories as % of Total Assets	4.1%	5.2%	4.5%	3.5%	2.0%	1.1%
Prepaid Expenses	2.56	0.56	0.34	0.20	0.23	0.19
Current Deferred Income Taxes	0	0	0	0	0	0
Other Current Assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Current Assets	5.4	6.1	11.9	23.5	46.4	92.8
Net Fixed Assets	0.9	1.0	1.4	2.3	3.9	6.7
Net Fixed Assets Sequential Growth %		11.7%	42.0%	66.5%	71.0%	72.7%
Net Fixed Assets as % of Total Assets	4.3%	4.6%	5.0%	5.7%	6.1%	5.9%
Intangibles	13.8	13.7	13.6	13.4	13.2	12.7
Intangibles Sequential Growth %		-0.5%	-0.7%	-1.1%	-2.0%	-3.5%
Intangibles as % of Total Assets	68.7%	66.1%	50.7%	34.3%	20.8%	11.3%
Non Current Deferred Income Taxes	0	0	0	0	0	0
Other Non Current Assets	0.0	-	-	-	-	-
Total Assets	20.0	20.7	26.9	39.2	63.4	112.2
Liabilities						
Accounts Payable	0.9	1.0	1.7	3.1	5.5	8.9
Accounts Payable Sequential Growth %		6.1%	74.4%	85.7%	75.0%	62.3%
Accounts Payable as % of Total Assets	4.5%	4.7%	6.3%	8.0%	8.6%	7.9%
Notes Payable	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Payable	0.1	-	-	-	-	-
Debt Payable Sequential Growth %		-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Debt Payable as % of Total Assets	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Accrued Expenses	0.2	0.1	0.1	0.3	0.5	0.7
Accrued Liabilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deferred Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Current Deferred Income Taxes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Current Liabilities	0.7	0.1	0.2	0.3	0.5	0.7
Total Current Liabilities	1.9	1.2	1.9	3.7	6.5	10.3
Current Liabilities Sequential Growth %		-39.0%	67.2%	91.2%	74.8%	59.0%
Current Liabilities as % of Total Assets	9,5%	5.6%	7.2%	9.5%	10.2%	9.2%
Long Term Debt	4.8	-	-	-	-	-
Long Term Debt Sequential Growth %		-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Long Term Debt as % of Total Assets	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred Income Taxes	0	0.070	0.070	0.070	0.070	0.070
Other Non Current Liabilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Liabilities	6.7	1.2	1.9	3.7	6.5	10.3
Total Liabilities Sequential Growth %	0.7	-82.7%	67.2%	91.2%	74.8%	59.0%
Total Liabilities as % of Total Assets	33.4%	5.6%	7.2%	9.5%	10.2%	9.2%
	33.770	3.0 /0	7.2 /0	9.5 70	10.2 /0	9.270
Minority Interest						
Total Minority Interest	7.0	7.4	9.6	14.0	23.1	41.7
Total Minority Interest Sequential Growth %		6.5%	28.6%	45.9%	65.1%	80.8%
Total Minority Interest as % of Total Assets	34.9%	35.9%	35.7%	35.6%	36.4%	37.2%
Equity	<del>                                     </del>		T		—— <del>—</del>	
Total Equity	6.3	11.8	15.0	21.1	33.5	59.8
Total Equity Sequential Growth %	0.3	85.9%	26.8%	41.4%	58.5%	78.5%
Total Equity Sequential Glowth %  Total Equity as % of Total Assets	31.7%	56.9%	55.7%	53.9%	52.8%	53.3%
Total Liabilities and Stock Equity	20.0	20.4	26.5	38.8	63.1	111.8
Total Eabilities and Stock Equity	20.0	20.7	20.3	30.0	05.1	111.0
Shareholding/ Employees	+	<del>   </del>	-			
Total Common Shares Outstanding	922.0	1 303 0	1 202 0	1 303 0	1 303 0	1,303.0
Shares Outstanding Sequential Growth %	823.0	1,303.0 58.3%	1,303.0 0.0%	1,303.0 0.0%	1,303.0 0.0%	0.0%
• .					-	
Treasury Shares	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Basic Weighted Shares Outstanding	823.0	1,303.0	1,303.0	1,303.0	1,303.0	1,303.0
Diluted Weighted Shares Outstanding	823.0	1,303.0	1,303.0	1,303.0	1,303.0	1,303.0
Diluted Shares Outstanding Sequential Growth %		58.3%	0.0%	0.0%	0.0%	0.0%
Number of Employees			-			
Number of Part Time Employees						



Cash Flow Metrics	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow from Operations						
Net Income/Loss	(8.8)	0.6	3.2	6.2	12.4	26.3
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.3	0.5
Net Change in Working Capital	2.8	(0.5)	(0.6)	(1.4)	(2.3)	(2.8)
Net Cash - Continuing Operations	(6.0)	0.2	2.7	4.9	10.4	24.0
Net Cash - Discontinued Operations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Operating Activities	(6.0)	0.2	2.7	4.9	10.4	24.0
Net Cash - Operations Sequential Growth %		-103.9%	1045.2%	85.2%	110.6%	131.4%
Net Cash - Operations as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cash Flow from Investing Activities						
Sale of Property Plant Equipment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sale of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Property Plant Equipment	(0.1)	(0.1)	(0.4)	(0.9)	(1.6)	(2.8)
Acquisitions	(13.6)	(0.0)	-	-	-	-
Purchase of Long Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Purchase of Short Term Investments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Investing Changes Net	-	-	-	-	-	-
Cash - Discontinued Investing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Investing Activities	(13.7)	(0.1)	(0.4)	(0.9)	(1.6)	(2.8)
Net Cash - Investing Sequential Growth %		-99.3%	300.0%	125.0%	77.8%	75.0%
Net Cash - Investing as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cash Flow from Financing Activities						
Issuance/ Repayment of Debt	-	(4.8)	-	-	-	-
Issuance of Capital Stock	19.8	4.8	-	-	-	-
Dividends Paid	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cash - Discontinued Financing Activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Cash - Financing Activities	0.4	0.5	2.1	4.4	9.1	18.6
Net Cash - Financing Sequential Growth %		25.0%	367.1%	106.6%	106.9%	104.9%
Net Cash - Financing as % of Change in Cash	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Effect of Exchange Rate Changes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net Change - Cash and Cash Equivalents	-	-	-	-	-	-
Cash at Beginning of Period	0.5	0.6	4.4	8.4	17.9	39.8
Cash at End of Period	0.6	0.7	2.6	8.2	19.5	41.9
Cash Sequential Growth %		16.7%	269.2%	218.4%	136.9%	114.8%



## Cohen Growth Drivers - 1

Annual Revenues, Margins, Assets, Turns	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	7.3	14.4	24.2	43.4	79.2
Gross Margin	36%	41%	53%	60%	64%	68%
Operating Margin	-127%	16%	37%	46%	53%	60%
Net Margin - Income Avail. To Shreholders	-159%	9%	22%	26%	28%	33%
EPS - Diluted	(0.01)	0.00	0.00	0.00	0.01	0.02
EBITDA	(7.0)	1.2	5.4	11.2	23.2	47.7
Free Cash Flow	(26.2)	4.7	3.5	7.0	13.6	27.2
Cash	0.7	2.6	8.2	19.5	41.9	87.2
Working Capital	2.8	2.3	1.7	0.3	(2.0)	(4.7)
Long Term Debt	4.8	-	-	-	-	-
Total Debt	4.8	-	-	-	-	-
Total Assets	20.0	20.7	26.9	39.2	63.4	112.2
DSO	44.9	54.8	32.9	23.7	17.9	14.6
Inventory Turns	84.4	91.3	65.7	51.1	29.2	18.3
Fixed Asset Turns	56.3	47.4	34.3	33.9	32.4	30.6
Cash Cycle	0.7	1.1	0.8	0.5	0.4	0.4

Percentage Change in Annual Revenues, Ma	2008E	2009E	2010E	2011E	2012E	2013E
Revenues		32.7%	96.3%	68.4%	78.9%	82.6%
Gross Margin		14.1%	28.3%	12.2%	7.1%	6.4%
Operating Margin		-112.7%	132.7%	23.6%	15.5%	12.6%
Net Margin		-105.5%	148.3%	16.4%	11.6%	16.4%
EPS - Diluted		-104.6%	387.4%	96.0%	99.6%	112.7%
EBITDA		-116.9%	356.7%	108.0%	106.6%	105.7%
Free Cash Flow		-117.9%	-24.5%	98.5%	92.9%	100.5%
Cash		269.2%	218.4%	136.9%	114.8%	108.3%
Working Capital		-17.2%	-25.6%	-82.3%	-739.6%	141.6%
Long Term Debt		-100.0%	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Total Debt		-100.0%	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Total Assets		3.4%	29.6%	46.0%	61.8%	76.8%
DSO		22.0%	-40.0%	-27.8%	-24.6%	-18.4%
Inventory Turns		8.1%	-28.0%	-22.2%	-42.9%	-37.5%
Fixed Asset Turns		-15.8%	-27.7%	-1.1%	-4.4%	-5.5%
Cash Cycle		52.6%	-32.5%	-34.5%	-23.0%	-8.1%



Cohen Growth Drivers - 2						
	2008E	2009E	2010E	2011E	2012E	2013E
Growth Drivers						
Revenues	5.5	7.3	14.4	24.2	43.4	79.2
Cost of Revenues	3.5	4.3	6.7	9.8	15.7	25.3
Gross Profit	2.0	3.0	7.7	14.5	27.7	53.9
Operating Income	(7.0)	1.2	5.4	11.2	23.2	47.7
Net Income	(8.8)	0.6	3.2	6.2	12.4	26.3
Profitability						
Return on Equity	-139.0%	5.5%	21.1%	29.3%	36.9%	44.0%
Return on Assets	-34.9%	5.7%	20.1%	28.6%	36.5%	42.5%
Asset Turnover	6.5	7.7	10.6	10.8	11.3	11.9
Profit Margin	-159%	9%	22%	26%	28%	33%
Return on Invested Capital Capital Efficiency	-62.5%	10.0%	36.1%	53.0%	69.2%	79.7%
PPE / Revenue	15.4%	13.0%	9.4%	9.3%	8.9%	8.4%
Intangible Assets/Revenue	245.3%	183.9%	93.1%	54.6%	29.9%	15.8%
WC / Revenue	50.8%	31.7%	12.0%	1.3%	-4.5%	-6.0%
Operating Ratios						
Gross Profit Margin	36.3%	41.5%	53.2%	59.7%	63.9%	68.0%
EBITDA Margin	-126.6%	16.1%	37.4%	46.2%	53.4%	60.2%
EBIT Margin	-127.7%	15.2%	36.8%	45.6%	52.8%	59.6%
Cost of Services/Revenues	63.7%	58.5%	46.8%	40.3%	36.1%	32.0%
SG&A Expenses/Revenues	162.9%	25.4%	15.8%	13.4%	10.5%	7.9%
L iqu idity						
Working Capital	2.8	2.3	1.7	0.3	(2.0)	(4.7)
Current Ratio	2.8	5.2	6.1	6.3	7.2	9.0
Quick Ratio	2.4	4.3	5.5	6.0	7.0	8.9
Debt						
Total Debt	4.8	-	-	-	-	-
Debt Ratio	0.4	-	-	-	-	-
Debt to Equity	0.8	-	-	-	-	-



**Cohen Liquidity Matrix** 

. ,	2008E	2009E	2010E	2011E	2012E	2013E
Liquidity Matrix						
Current Ratio	2.8	5.2	6.1	6.3	7.2	9.0
Quick Ratio	2.4	4.3	5.5	6.0	7.0	8.9
Cash Ratio	0.4	2.2	4.2	5.3	6.5	8.5
Working Capital Matrix						
Working Capital	2.8	2.3	1.7	0.3	(2.0)	(4.7)
Cash Flow from Operations to Current Liabilities						
Working Capital Provided by Net Income	(8.8)	0.7	3.3	6.3	12.6	26.8
Leverage Ratios						
Gearing Ratio	0.8	-	-	-	-	-
Financial Leverage Ratio	0.8	-	-	-	-	-
Debt to Assets	0.2	-	-	-	-	-
Interest Coverage Ratio	(2.0)	#DIV/0!	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!
Equity Multiplier	3.2	1.8	1.8	1.9	1.9	1.9
Capital Structure Ratio	0.4	-	-	-	-	-

Cohen NCFO Analysis

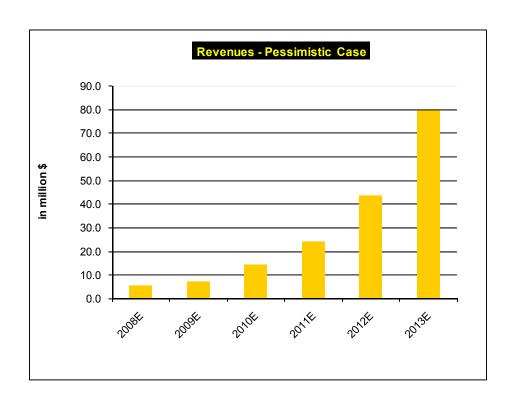
Collett NCI O Allarysis						
Cohen Net Cash Flow from Operations	2008E	2009E	2010E	2011E	2012E	2013E
Revenues	5.5	7.3	14.4	24.2	43.4	79.2
plus decrease (-increase) in AR	(0.7)	(0.4)	(0.2)	(0.3)	(0.5)	(1.0)
Gross Cash Collections from Operations	4.9	6.9	14.2	24.0	42.8	78.2
Operating Expenses						
Cost of Goods Sold	3.5	4.3	6.7	9.8	15.7	25.3
General an Administrative Expenses	9.0	1.9	2.3	3.3	4.6	6.2
R&D Expenses	-	-	-	-	-	-
Total Operating Expenses	12.5	6.2	9.0	13.0	20.2	31.6
Working Capital Changes						
Decrease (Increase) in Inventories	(8.0)	(0.3)	(0.1)	(0.2)	0.1	(0.0)
Decrease (Increase) in Short Term Investmer	-	-	-	-	-	-
Decrease (Increase) in Other Current Assets	(3.2)	1.9	0.2	0.1	(0.1)	0.0
Increase (Decrease) in Accounts Payable	0.9	0.1	0.7	1.4	2.3	3.4
Increase (Decrease) in Notes Payable	-	-	-	-	-	-
Increase (Decrease) in STD	-	-	-	-	-	-
Increase (Decrease) in Accrued Expenses	0.2	(0.2)	0.0	0.2	0.2	0.2
Increase (Decrease) in Other Current Liab	0.7	(0.5)	0.0	0.1	0.2	0.2
Total Changes in Working Capital	(2.2)	1.0	8.0	1.7	2.8	3.8
Total Cash Outflows for Op (Op Exp+Chg W	10.3	7.1	9.8	14.7	23.0	35.4
Net Cash Flow from Operations (NCFO)	(5.5)	(0.2)	4.4	9.2	19.8	42.8

Cohen NCFO Analysis	2008E	2009E	2010E	2011E	2012E	2013E
NCFO / Diluted Share	(0.01)	(0.00)	0.00	0.01	0.02	0.03
Diluted EPS	(0.01)	0.00	0.00	0.00	0.01	0.02

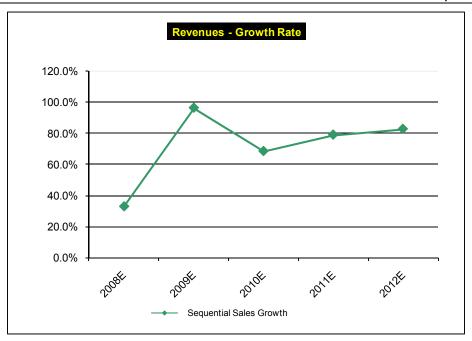
Cohen NCFO Coverage Ratios	2008E	2009E	2010E	2011E	2012E	2013E
Interest Coverage (NCFO/Int Exp)	(1.6)	#DIV/0!	#DIV/0!	#DIV/0!	#D IV/0!	#DIV/0!

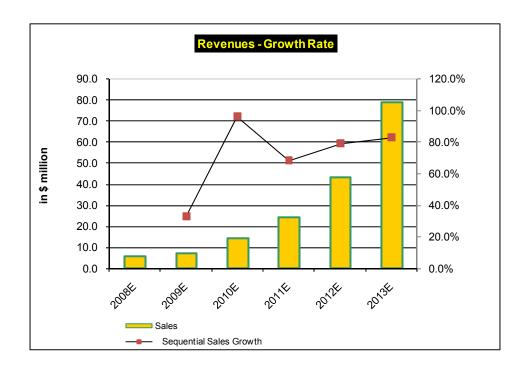


Cohen Free Cash Flows	2008E	2009E	2010E	2011E	2012E	2013E
Cash Flow = ni+depr+amort	(8.8)	0.7	3.3	6.3	12.6	26.8
Net Cash Flow (CF-Div)	(8.8)	0.7	3.3	6.3	12.6	26.8
Exchange rate effects	2.1	-	-	-	-	-
Working Capital Change		5.3	4.6	4.8	10.6	23.0
Free Cash Flow	(26.2)	4.7	3.5	7.0	13.6	27.2
Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Net Cash Flow/Assets	(0.4)	0.0	0.1	0.2	0.2	0.2
Free Cash Flow/Assets	(1.3)	0.2	0.1	0.2	0.2	0.2
Net Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
Free Cash Flow Per Share	(0.0)	0.0	0.0	0.0	0.0	0.0
NCFO Per Share	(0.0)	(0.0)	0.0	0.0	0.0	0.0
Diluted EPS, Before Extraordinary Items	(0.0)	0.0	0.0	0.0	0.0	0.0

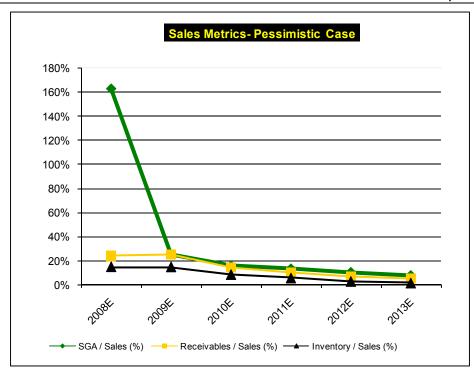


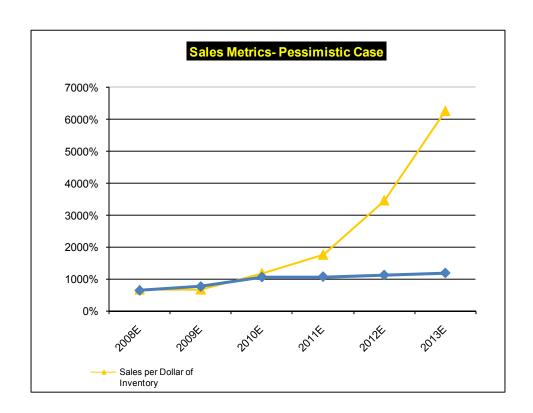




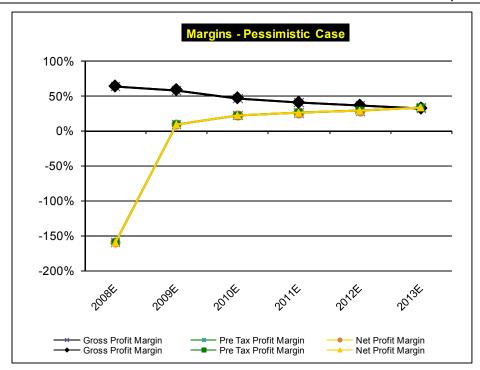


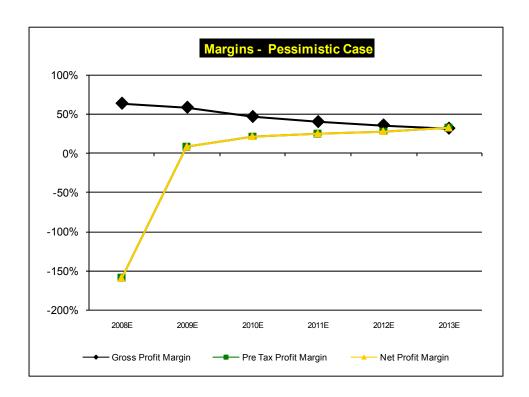




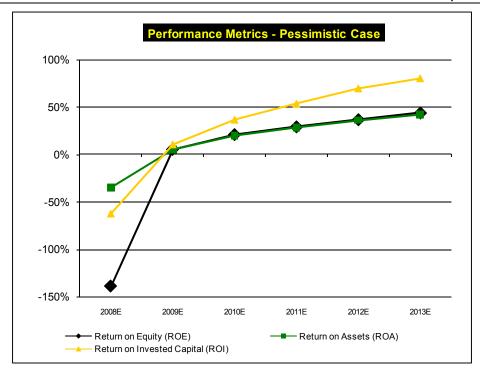


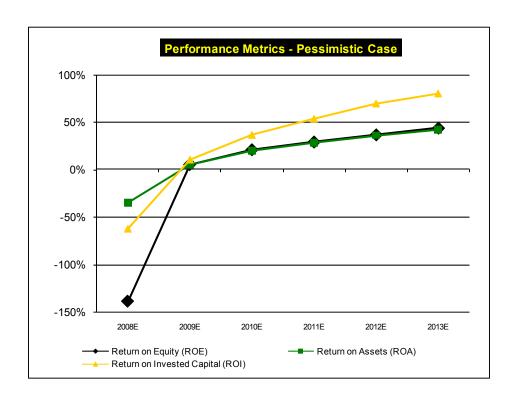




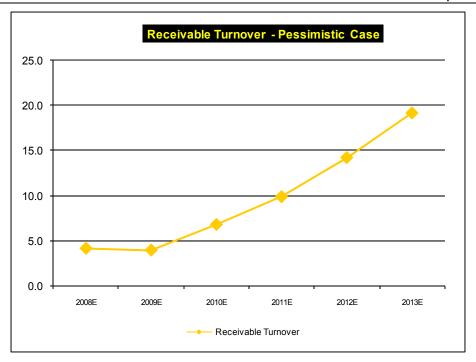


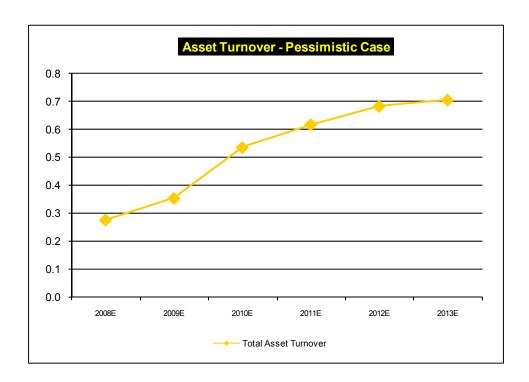




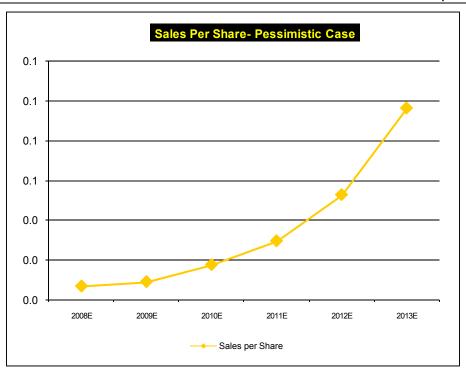


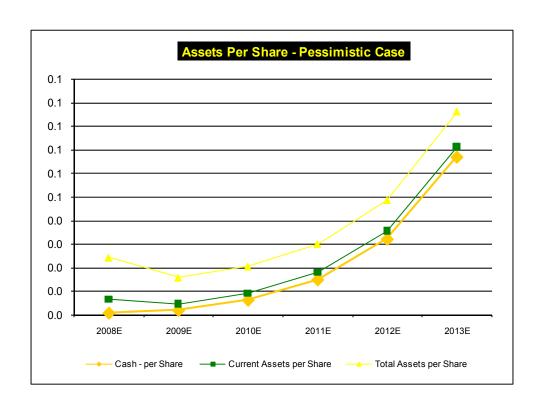




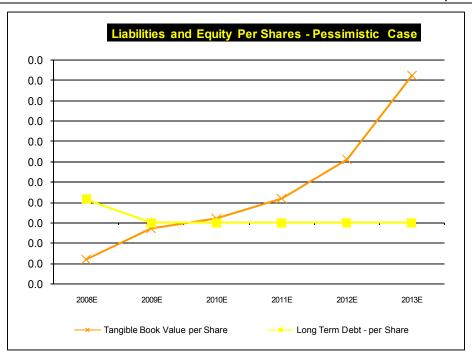


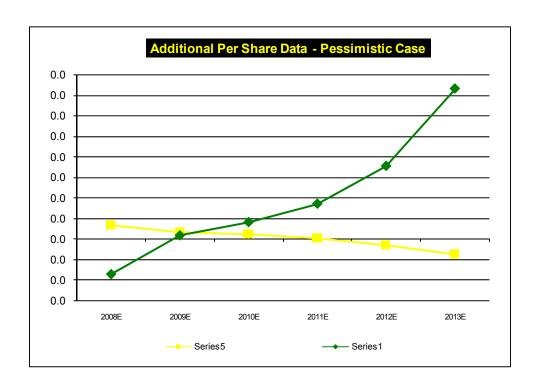




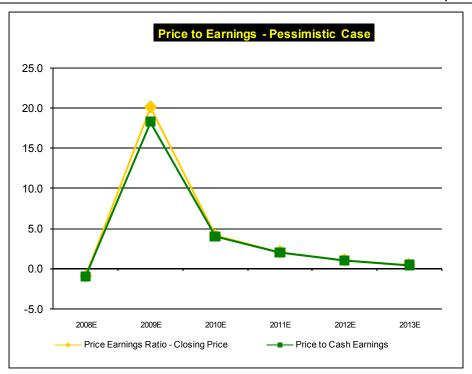


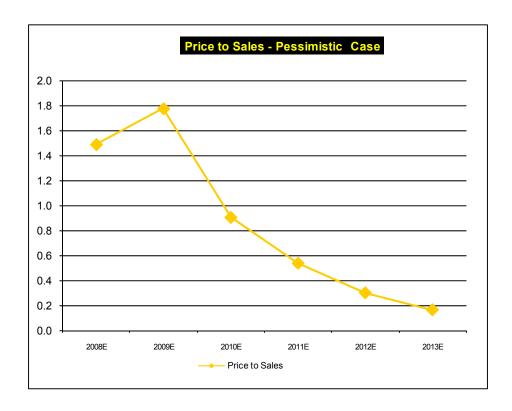




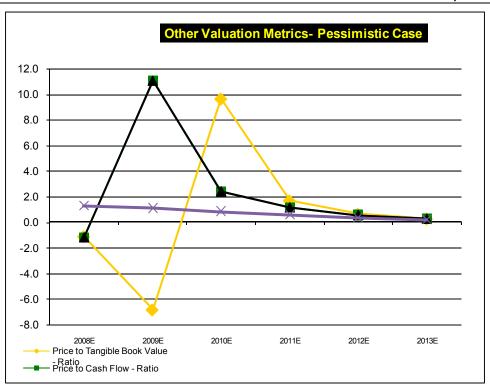


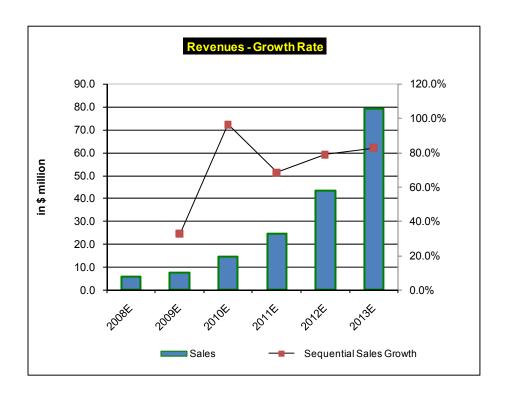




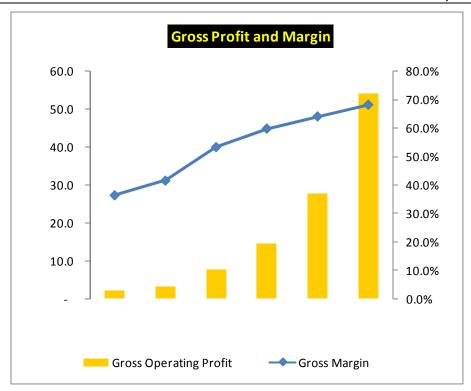


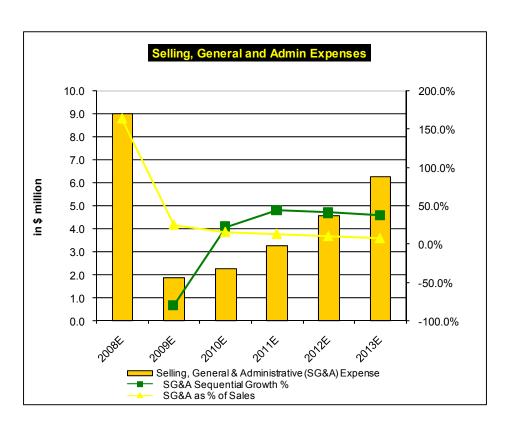




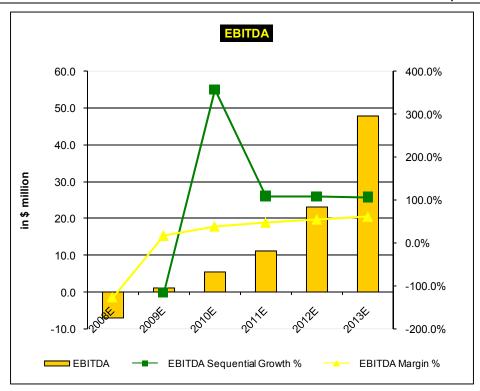


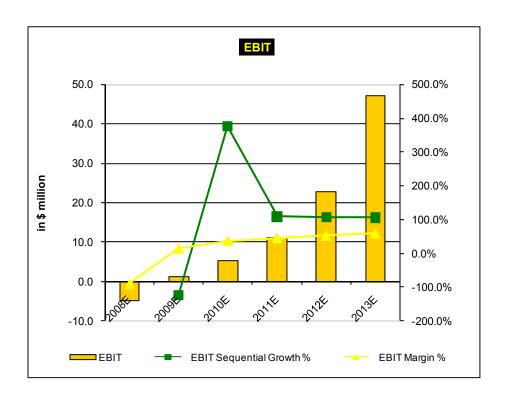




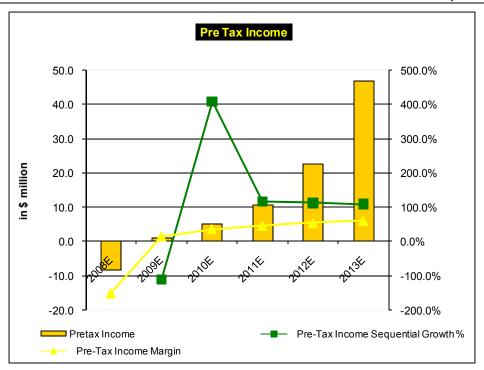


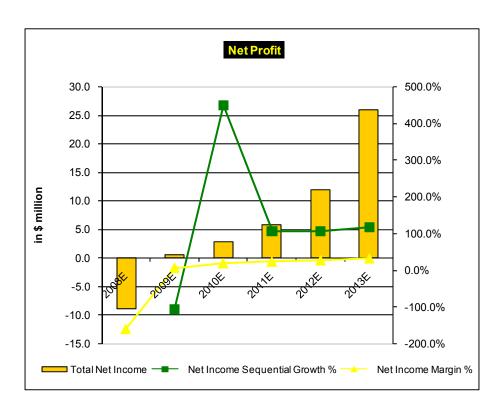




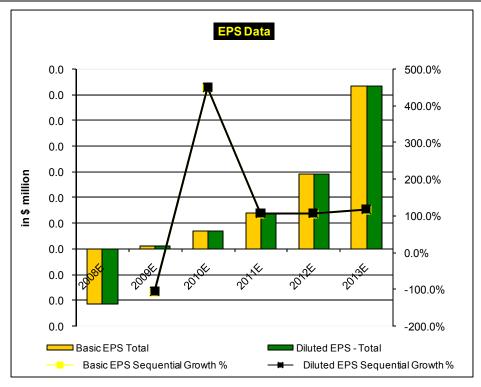


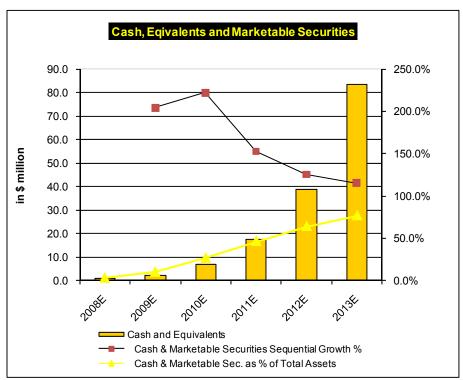




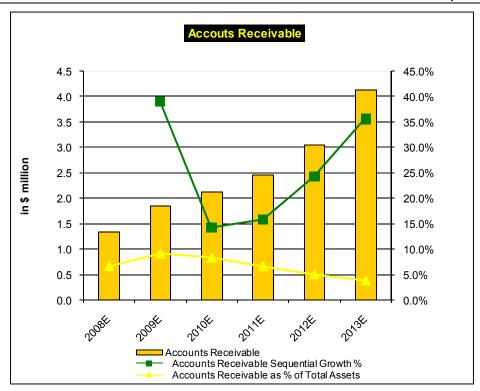


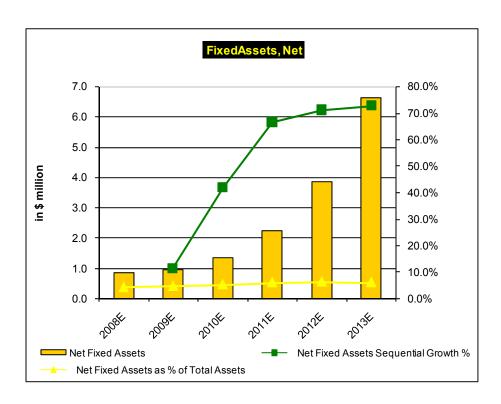




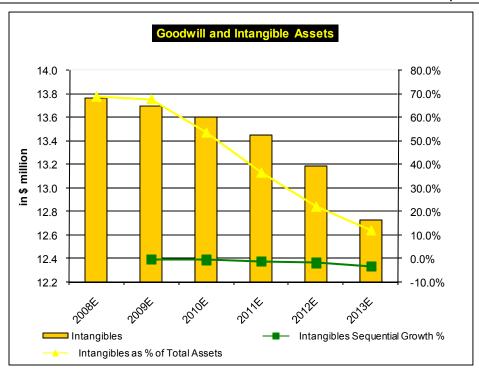


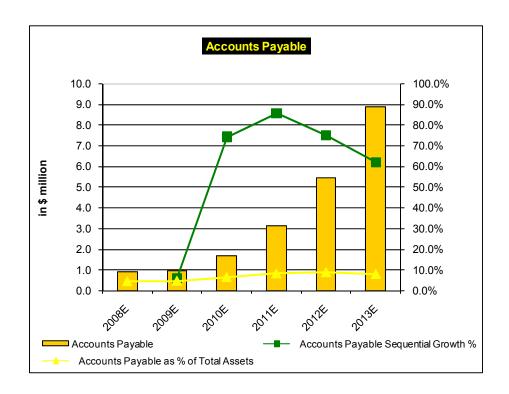




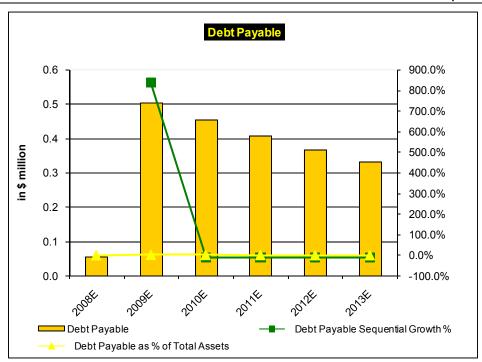


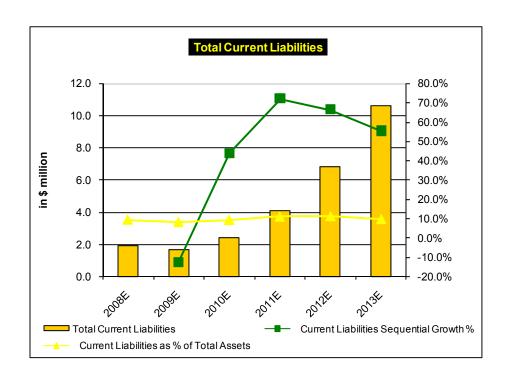




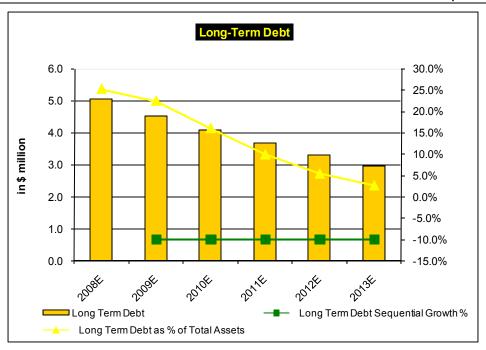


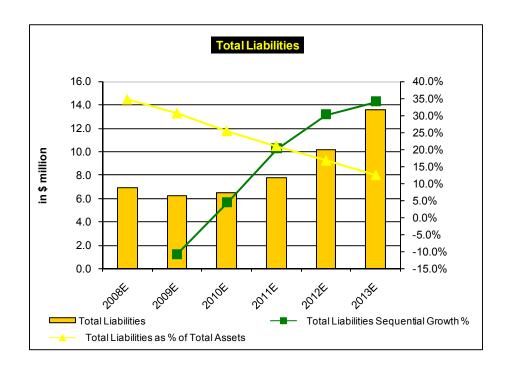




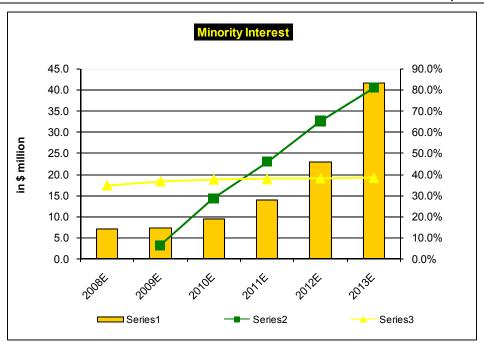


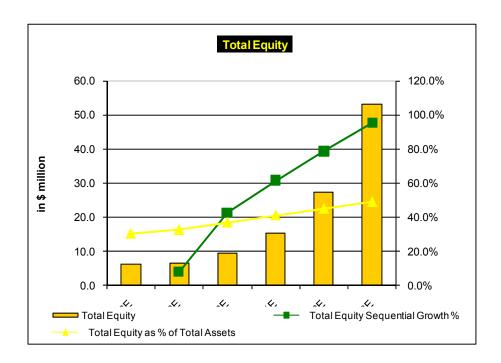




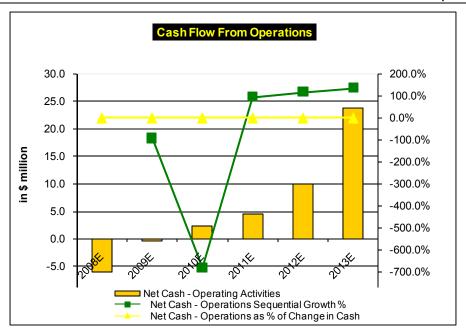


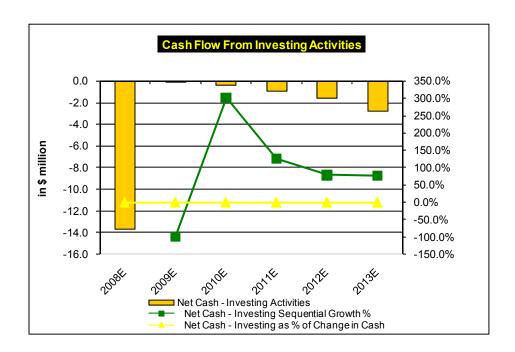




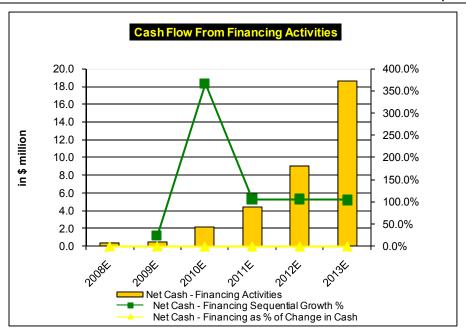


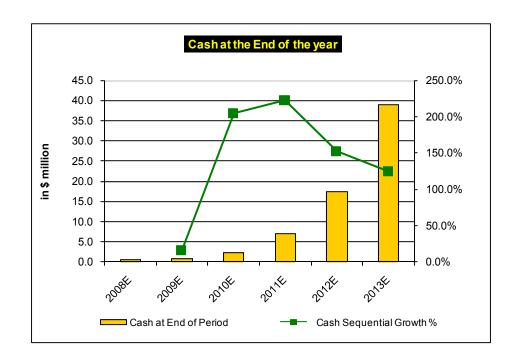














# APPENDIX 11: DISCOUNTED CASH FLOW EXPLANATION

Discounted Cash Flow Analysis (DCF) values a company today, based on projections of how much cash will be generated from a company in the future. A DCF analysis assumes that a company is worth all of the cash that it can make available to investors in the future. It is called a "discounted" cash flow because cash in the future is worth less than cash today, and therefore must be discounted to today.

For example, suppose someone asked an investor to choose between receiving \$100

today and receiving \$100 in a year. Chances are the investor will take the money today, knowing that he can invest that \$100 now and have more than \$100 in a year's time. In simple terms, the amount that the investor would have in one year is worth \$100 dollars today - or the discounted value is \$100. We make the same calculation for all the cash expected to be generated by a company in the future to get a valid measure of the company's value today. As seen in the table below, the present Value of \$100 reduces as the number of years forecasted increase.

Table 2: Present value of \$100

Amount	<b>Discount Rate</b>	Year	PV
(\$)	(r)	(n)	(Amt/(1+r)^n
100	10%	1	90.91
100	10%	2	82.64
100	10%	3	75.13
100	10%	4	68.30
100	10%	5	62.09
100	10%	6	56.45
100	10%	7	51.32
100	10%	8	46.65
100	10%	9	42.41
100	10%	10	38.55



We use a Discounted Cash Flow Analysis (DCF) to forecast future cash flows to determine a fair value range for a given stock price.

We normally forecast cash flows during a fiveyear period from the Income Statement, which requires additional forecasting inputs. We focus on the Present Value of Future Cash Flows to compute a target price. The **Cash Flow Statement** is as an accounting statement that shows the amount of cash generated and used by a company in a given period, calculated by adding non-cash charges (such as depreciation) to net income after taxes. Cash flow can be attributed to a specific project, or to a business as a whole.

Free Cash Flow (FCF) represents the cash that a company is able to generate after spending the money required to maintain/expand its asset base. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. Without cash, it is difficult to develop new products, make acquisitions, pay dividends and reduce debt.

**Free Cash Flows Computation** 

Net Cash From Operations	xx
Less/add: (increase)/decrease in working capital	xx
Less: Capital Expenditure	(xx)
Free Cash Flows	xx

The table below demonstrates how we calculate FCF for a company.

Table 3: Free Cash Flow Calculation of XYZ Company

Figures in \$'000 unless specified	Y 0	Y+1	Y+2	Y+3	Y+4	Y+5
Net Cash from Operations	2.07	20.37	55.42	129.01	241.43	397.98
CAPEX	(24.00)	(77.00)	(169.40)	(372.68)	(614.92)	(901.89)
Net Debt Additions	19.20	61.60	134.90	278.94	430.34	585.99
Free Cash Flows Equity	(2.73)	4.97	20.93	35.28	56.84	82.08



The theory behind the DCF model is that investors are willing to pay for a stream of future cash flows. Future cash flows are discounted with a present value formulation to determine a fair stock price today, given what we know and how we forecast the future.

Present Value (PV) is the value in today's dollars assigned to an amount of money in the

future, based on our estimate of rate-of-return over the long-term. In this analysis, rate-of-return is calculated based on annual compounding. A given amount of money is always more valuable sooner than later since this enables one to take advantage of investment opportunities. Because of this, present values are less than corresponding future values.

Value of Firm = 
$$\sum_{t=1}^{t=n} \frac{CF \text{ to } Firm_t}{(1+WACC)^t}$$

Our key input is the rate used to discount future cash flows to their present values. Most firms have a well-defined policy regarding their capital structure. Therefore, the Weighted Average Cost of Capital (WACC) (after tax) is appropriate for use with all projects. Present value is additive. The present value of a quantity of cash flows is the sum of each one's present value.

There are three main steps to calculating a DCF

 First, we calculate the stream of cash flows in the five-year forecast period. Then we discount these cash flows back to the beginning of

- the first forecasted fiscal year. The method we use to discount back to the present is the **Present Value**Method where we discount the free cash flows of the company by the WACC.
- 2. The second step is to determine the company's value at the end of the forecast period. This is the **Terminal Value**. The Terminal Value is then discounted back to the beginning of the first forecasted fiscal year. The method we use to discount back to the present is the **Perpetuity Growth Model**. The Perpetuity Growth Model accounts



for the value of free cash flows that continues into perpetuity in the future, growing at an assumed constant rate. To determine the present value of the terminal value, one must discount the Terminal Value by a factor equal to the number of years included in the initial projection period. If N is the fifth and final year in this period, then the Terminal Value is divided by  $(1 + r)^5$ .

 The final step is adding these two to determine a fair value today based on what we know about the future.

An important decision in using Present Value models is deciding what cash flow or earnings stream will be forecasted and eventually discounted to compute an evaluation. We forecast Free Cash Flow which requires more input than simply using EBITDA (Earnings before Interest, Tax, Depreciation and Amortization).

A simpler method for discounting cash flow forecasts is using EBITDA (not a GAAP reporting required item). EBITDA can be defined as gross cash flow. This method of discounting is appropriate when EBITDA forms

the basis of evaluation for the company. This method works well with small companies that have yet to post positive earnings. For all other companies, it is a good idea to examine at how the valuation methodology is applied.

DCF is a more involved forecasting method because it calculates the forecasted Free Cash Flow. The method requires forecasting of items such as the Operating Margins, tax rates, capital expenditures and changes in working capital. In addition, Debt is not subtracted from the discounted Free Cash Flow since Free Cash Flow is, by definition, net of the debt payments.

For the most part, free cash flow is a trustworthy measure that cuts through much of the arbitrary "guesstimates" involved in reported earnings. Regardless of whether a cash outlay is counted as an expense or turned into an asset on the balance sheet, free cash flow tracks the money left over for investors.

DCF analysis treats a company as a business rather than as a ticker symbol and a stock price. It requires us to think through all the factors that will affect the company's performance. DCF analysis really gives the investor an appreciation for what drives stock values.



Five years of forecasting in the Income Statement must be forecasted for the complete 5 year forecast timeframe. We analyze prior year's data to aid in making better forecasts.

#### **Terminal Value**

Since we cannot estimate cash flows forever, we generally impose closure in discounted cash flow valuation by stopping our estimates of cash flows five years (Y+5) in the future and then computing a terminal value that reflects the value of the firm at that point.

Value of a Firm = 
$$\sum_{t=1}^{t=n} \frac{CF_t}{(1+k_c)^t} + \frac{Terminal Value_n}{(1+k_c)^n}$$

The Terminal Value is the forecasted value of the stream of cash flows the company will have at the end of the forecast period. We base this on the company's prospects at that time. We assume that the cash flow in year five (Y+5) will continue at a stable growth for five more years. Since this is too far in the future to accurately forecast, we do not attempt to forecast the individual line items that compute cash flow. We use the **Long Term Sustainable**Growth Rate as the primary determinant of the Terminal Value.

$$Terminal Value_{t} = \frac{Cash Flow_{t+l}}{r - g_{stable}}$$

Therefore, our DCF computes a value for the company in year five. We have found that calculating the terminal value using the stable growth method provides more accuracy because of the multiple or sum of years method we employ.

The Terminal Multiple is an important component of equity valuation. This is the value one expects will be the growth rate at the end of the forecast time period, Y+5. Since it is difficult to accurately forecast this, it is common to use the Long Term Growth Rate as the proxy for the Y+5 growth rate. As analysts, we can experiment with Terminal Multiples that are



appropriate for the company in which we are analyzing. We normally forecast a long term growth rate in the middle of this range. Our output graphs then describe the range of target prices based on a range of assumed growth rates. When studying the target price output, one quickly sees the target price sensitivity to the terminal multiple. Our sensitivity index is defined as "A technique for determining the outcome of a decision if a key variable (discount rate) differs from projected one." This makes empirical sense. When the perception of growth prospects changes for a company, the stock typically reacts strongly. These graphs objectively quantify such a strong potential reaction to the upside or downside.

We use the **Gordon Growth Model** to determine Terminal Value.

This method assumes that the company is a perpetual entity and will continue to generate positive cash flows throughout its life. However, on reaching maturity, the growth rate of the company slows down. Hence, we assume that the company will grow at a average constant rate for the rest of its life. The terminal value is calculated using the following formula

Terminal Value = <u>Final Projected Year Cash Flow \* (1+Long-Term Cash Flow Growth Rate)</u>
(Discount Rate – Long-Term Cash Flow Growth Rate)

The formula simplifies the practical problem of projecting cash flows far into the future. However, it rests on the significant assumption that the cash flow of the last projected year will stabilize and continue at the same rate forever. This is an average of the future growth rates, not a single rate expected to occur every year into perpetuity. Some growth will be higher or

lower, but the expectation is that future growth will average the long-term growth assumption. This formula uses the final year's projected cash flows (Y+5), and multiplies it by a long-term nominal growth rate. This is further discounted by the difference between the discount rate used for Present value calculation (WACC) and the assumed long term growth rate.



Table 4. Der Analysis with Terminal Growth Rates									
Figures in \$'000 unless specified	Y-0	Y-1	Y-2	Y-3	Y-4	Y-5	Terminal Value		ue
Net Cash from Operations	2	20	55	129	241	398			
CAPEX	(24)	(77)	(169)	(373)	(615)	(902)	Range of 1	erminal Gr	owth Rate
Net Debt Additions	19	62	135	279	430	586	3%	4%	5%
Free Cash Flows Equity	(3)	5	21	35	57	82	592	630	672
PV	(3)	4	13	18	23	28	71	76	81

**Table 4: DCF Analysis With Terminal Growth Rates** 

#### **Discount Rate**

The Discount rate is an important determinant in using PV calculations for equity valuation. We display the assumed discount rates used in the valuation output tables and charts. We can use two different discount rates; one for the five year forecast period and another for the terminal value. Normally we use the same discount rate throughout the valuation model.

To better understand the discount rate, let us compare the Present Valuation formulation to financing a house. The interest rate on the mortgage is analogous to the discount rate, whereas the monthly mortgage payments are analogous to the cash flows. The PV of the Cash Flows is analogous to the face value of the mortgage. To analyze a company we first forecast the cash flows (mortgage payments) with the income statement. To determine the current value of these future cash flows, (face value of the mortgage), we use a discount rate

(interest rate). In setting up a mortgage payment, the interest rate is the starting point to compute the mortgage payment. For a stock valuation, we forecast the future cash flows and need to apply an appropriate discount rate to equate a current value.

There are methods to calculate Discount Rates

# Cost Of Equity Or The Required Rate Of Return For Equity Holders

Unlike debt, which the company must pay at a set rate of interest, equity does not have a concrete price that the company must pay. However, that does not mean that there is no cost of equity. Equity shareholders expect to obtain a certain return on their equity investment in a company. From the company's perspective, the equity holders' required rate of return is a cost, because if the company does not deliver this expected return, shareholders will



simply sell their shares, causing the price to drop.

Therefore, the cost of equity is what it costs the company to maintain a share price that is

satisfactory (at least in theory) to investors. The most commonly accepted method for calculating cost of equity comes from the Nobel Prize-winning capital asset pricing model (CAPM), where:

Cost of Equity (Re) = Rf +  $\beta$ (Rm-Rf)

Rf - Risk-Free Rate - This is the rate obtained from investing in securities considered free from credit risk, such as government bonds from developed countries. The interest rate of 10-year U.S. Treasury bills or the long-term bond rate is used frequently as a proxy for the risk-free rate. If the Risk Free Rate is assumed to be higher in a DCF calculation, the projected share price will be lower, all other metrics being assumed as equal.

ß - Beta— The Beta measures how much a company's share price moves against the market as a whole. A Beta of one, for example, indicates that the company moves in line with the market. If the Beta is in excess of one, the stock price is more volatile than the market's movement; less than one means the share is more stable. Occasionally, a company may have a negative Beta (e.g. a gold mining company), which means the share price moves in the

opposite direction to the broader market. If the Beta is assumed to be higher in a DCF calculation, the projected share price will be lower, all other metrics being assumed as equal.

(Rm - Rf) = Equity Market Risk Premium - The equity market risk premium (EMRP) represents the returns investors expect, over and above the risk-free rate, to compensate them for taking extra risk by investing in the stock market. In other words, it is the difference between the risk-free rate and the market rate. It is a highly contentious figure. Many analysts argue that this metric rises due to the concept that holding shares has become a riskier proposition. If the Equity Market Risk Premium is assumed to be higher in a DCF calculation, the projected share price will be lower, all other metrics being assumed as equal.



#### Weighted Average Cost of Capital (WACC)

The WACC is the weighted average of the cost of equity and the cost of debt based on the percentage of debt and equity in the company's capital structure. The percentage of debt is represented by **Debt/Value**, a ratio comparing

the company's debt to the company's **Total Value** (equity + debt). The percentage of equity is represented by **Equity/Value**, a ratio comparing the company's equity to the company's total value. We calculate the WACC by using the following formula:

A company's WACC is a function of the mix between debt and equity and the cost of that debt and equity. On one hand, in the past few years, falling interest rates have reduced the WACC of companies. On the other hand, corporate disasters such as those at Enron and WorldCom have increased the perceived risk of equity investments.

An appropriate discount rate is computed quantitatively using historical rates to assume and to equate the time value of money of future flows. For a stock, we compute a rate adjusted for the shares outstanding to compute a stock price. It is important for the analyst to be comfortable with the discount rate used. Important parameters to consider are

- 1) Is the cost of equity greater than the cost of debt?
- 2) Is the equity risk premium today different from the long term average?
- 3) Is the historically based Beta indicative of the future volatility in the stock price?
- 4) Does the discount rate accurately reflect the required rate of return for the stock?



**Table 5: Example of WACC Method** 

WACC	TICC MICHOU
Cost of Equity	
Risk free rate	5.25%
Risk premium	7%
Beta	1.0
Cost of Equity [A]	12.25%
Weight of Equity [B]	80%
_	
Cost of Debt	
Cost of Debt [C]	7.87%
Weight of Debt [D]	20%
WACC {(A*B)+(C*D)}	11.37%

#### What If Analyses

As analysts, we can change the quarterly estimated data for future quarters depending on a company's prospects. A company may have revenue targets or margin guidance that can be used. If management is adopting a different growth strategy, changes to capital expenditures and working capital may be appropriate. We can change the discount rate to analyze the sensitivity to it.

Any changes in margins, revenues, tax rate, depreciation, including tax rate, CAPEX and working capital inputs will be reflected in the our valuation charts. This occurs because our analysis is sensitive to changes in any of these parameters. Such changes in our inputs allow us to select an appropriate range of terminal multiples.



**Table 6: Sensitivity Analysis with Discount Rate** 

Range of Discount Rates	PV of Free Cash Flows						
	Y-0	Y-1	Y-2	Y-3	Y-4	Y-5	<b>Terminal Value</b>
20%	(2.57)	3.90	13.68	19.22	25.81	31.06	102.17
22%	(2.55)	3.82	13.17	18.19	24.03	28.44	86.13
24%	(2.54)	3.73	12.68	17.23	22.40	26.08	72.82
26%	(2.53)	3.66	12.21	16.34	20.90	23.95	61.72

**Table 7: Sensitivity Analysis with Growth Rate** 

Discount Rate	23%	23%	23%	23%	23%
Terminal Growth	3%	4%	5%	6%	7%
Shares O/S	24.69	24.69	24.69	24.69	24.69
Sum PV of FCFE	210.31	214.84	219.88	225.52	231.88
Add: Cash	21.81	21.81	21.81	21.81	21.81
Equity Value	232.12	236.65	241.69	247.33	253.69
Value Per Share (in \$)	9.40	9.59	9.79	10.02	10.28



#### Optimistic Case, Base Case, Pessimistic Case

As analysts, we form our own estimates about the company's financials based on certain information provided by the management and our own understanding of the company's business model. We generally create three scenarios, the Optimistic Case Scenario, the Base Case Scenario, and the Pessimistic Case Scenario.

The Optimistic Case is a bullish outlook of the company's value while the Pessimistic case is a conservative view. The Base case scenario illustrates our expectation of the Company's value under normal circumstances.

This analysis allows us to create a wide range of forecasts and compare implied target prices. We always need to adjust our forecasts as a company grows.

For the Optimistic Case, Revenues and Margins may be stronger, along with the same or higher CAPEX and Depreciation. For the Pessimistic Case, Revenues and Margins will normally be weaker, Debt may increase, CAPEX and Depreciation may decline.

If we wish to make changes to the Base Case, we can go back to the forecasting of the Income Statement.



### **Net Cash Flow from Operations (NCFO)**

#### **Top-Down Cash Flow**

Net Cash Flow from Operations (NCFO) analyzes the flow of cash through the enterprise, using income statement and balance sheet data items to reconstruct how cash is generated and used. We start with revenues, adjusting for the change in receivables to determine Gross Cash Collections. Cost of goods sold, net of depreciation SG&A and expenses, aggregated to determine Total Operating Expenses. We then look at the changes in the working capital accounts that represent operating activity, to determine how much cash was used or generated while managing operations (current assets and liabilities). Receivables are excluded here since they have already been used in calculating gross cash collections, and cash is excluded here since cash is our resultant. Change in working capital accounts is calculated as an expense item such that a negative value is a generation of cash. We derive the NCFO by adding the working capital cash requirements/generation operating expenses and then subtracting from Gross Cash Collections.

Since the NCFO is the actual cash generated from the core business, it is a very good

barometer of the health of the business. It is a report card on how well it is managed. NCFO interest coverage and NCFO interest and capital expenditure coverage indicates how well interest payments and capital expenditures can be covered by ongoing business operations. One negative value after a string of positive values does not necessarily mean that debt or lines of credit need to be used. Prior cash balances may cover outflows. Trends and values are important. The reasons for a change in the trend may be apparent from examining the line items in our NCFO calculations, especially in working capital accounts.

#### **Traditional Bottom-Up Cash Flow**

The financial community primarily uses the traditional method for calculating cash flow. Beginning with net income, non-cash charges are added back. This typically includes depreciation, amortization and changes in deferred charges. Trends and values are important when analyzing net cash flow and free cash flow. We define net cash flow as the amounts of cash being received and spent by a business during a defined period of time. It includes cash flows from different streams such



as operating activities, investing activities and financing activities.

- Operational cash flows: Cash received or expended as a result of the companies core business activities.
- Investment cash flows: Cash received or expended by making capital expenditures (i.e. the purchase of new

- machinery), the making of investments or acquisitions.
- Financing cash flows: Cash received or expended as a result of financial activities such as receiving or paying loans, issuing stock, and paying dividends.



Table 8: Comparing NCFO to Traditional Bottom up Cash Flow

### Bottom-Up Cash Flow

#### Operating Activities, Cash Flows Provided By or Used In

Net Income

Adjustments To Net Income

Depreciation

Changes in Account Receivables

Changes In Liabilities

Changes In Inventories

Changes In Other Operating Activities

**Total Cash Flow From Operating Activities** 

#### Investing Activities, Cash Flows Provided By or Used In

Capital Expenditures

Investments

Other Cashflows from Investing Activities

**Total Cash Flows From Investing Activities** 

#### Financing Activities, Cash Flows Provided By or Used In

Dividends Paid

Treasury stock acquired Paid

Issuance of long-term debt

Payments and redemptions of long-term debt

Change in deposits

Contractholder fund deposits

Contractholder fund withdrawals

# Cash flows from financing activities of continuing operations

Effect of exchange rate changes on cash and cash equivalents

Change in cash and due from banks

#### Net Cash Flows From Operations

Revenues

plus decrease (-increase) in AR

**Gross Cash Collections from Operations** 

#### **Operating Expenses**

COGS, less Depreciation & Amort

SGA

R&D

**Total Operating Expenses** 

#### Working Capital Changes

Increase in Inventories

Increase in Notes Receivable

Increase in Deferred Charges

Increase in Other Current Assets

Decrease (inc) in Accounts Payable

Decrease (inc) in Notes Payable

Decrease (inc) in Current LTD

Decrease (inc) in Current Cap Leases

Decrease (inc) in Accrued Expenses

Decrease (inc) in Income Tax Payable

Decrease (inc) in Other Current Liab

#### Total Changes in Working Capital

Total Cash Outflows for Op (Op Exp+Chg WC)

Net Cash Flow from Operations (NCFO)

#### STATEMENT OF CHANGES IN CASH Cash from Operating Activities

Net Income (\$mil)

Depreciation (\$mil)

Cash from Discontinued Oper (\$mil)

Net Other Adjustments (\$mil)

Net Ch in Oper Assets and Liabilities

Net Cash from Oper Activities \$mil



#### Free Cash Flow to Assets

A very useful analysis is to compare the free cash flow back to the asset base that generates the cash. The value of this ratio is related to the type of business.

A trend analysis is a very good indicator of whether the company is creating value or not. When FCF/Assets are Increasing, management is receiving higher returns for every dollar invested. If this metric is decreasing, the company is receiving lower returns on their investments. Quarterly data can fluctuate and be seasonal, so the trend of the LTM data series is more important. When a company is going through a peak or trough in its business cycle, the trend of the quarterly data is typically volatile. Such inflection points are a sign of

change. A change in the LTM data is more descriptive of changing fortunes, but it can also fluctuate towards the end of a business cycle change (trough of peak). If a company's assets do not generate adequate free cash flow over time, that company might very well be a short sale candidate or at worst, a bankruptcy candidate. This would indicate that the company might be in the wrong business.

We find that the trend in the FCF/A is highly correlated to the movement in the stock price for many different companies over time. That is, when Increasing, the stock will tend to rise and vice versa. This presumes the stock price is not ahead of itself. Another caveat is that the FCA/A needs to be consistently positive (negative) over an extended period of time as related to share prices.



## **Glossary of Terms**

- 1. Net Cash from Operations(NCFO): The NCFO method traces the flow of cash through the company in the manner that cash actually is generated and used
- 2. *CAPEX*: Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment. This type of outlay is made by companies to maintain or Increase the scope of their operation. These expenditures can Inc.lude everything from repairing a roof to building a brand new factory. These expenses are deducted from the cash flows while calculating the DCF
- 3. *Working Capital:* A measure of both a company's efficiency and its short-term financial health. It is calculated by subtracting current liabilities from current assets. Positive working capital means that the company is able to pay off its short-term liabilities. Negative working capital means that a company currently is unable to meet its short-term liabilities with its current assets (cash, accounts receivable, inventory).
- 4. **DCF:** A valuation method used to estimate the attractiveness of an investment opportunity. Discounted cash flow (DCF) analysis uses future free cash flow projections and discounts them (most often using the weighted average cost of capital) to arrive at a present value, which is used to evaluate the potential for investment.
- 5. *FCF*: A measure of financial performance calculated as operating cash flow, minus capital expenditures. Free Cash Flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain/expand its asset base. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value.
- 6. *Terminal Value*: The value of an investment at the end of a period, taking into account a specified discount rate.



- 7. *WACC:* A calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All capital sources common stock, preferred stock, bonds and any other long-term debt are Inc.luded in a WACC calculation. This is generally used to discount the cash flows in a DCF calculation.
- 8. **Discount Rate:** Discounting is the process of finding the present value of an amount of cash at some future date. The rate (usually WACC) used in determining the present value of future cash flows is known as the discount rate.
- 9. **Present Value:** The amount that a future sum of money is worth today given a specified rate of return.
- 10. **Sensitivity Analysis:** A technique for determining the outcome of a decision if a key prediction turns out to be wrong.
- 11. *Optimistic Case, Base Case, and Pessimistic Case:* The Optimistic Case is a bullish outlook of the company's value while the Pessimistic case is a conservative view. The Base Case Scenario illustrates our expectation of the Company's value under normal circumstances.



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