GlyEco, Inc.
(OTCQB: GLYE)

August 7, 2013
Target Price: $4.08
Recent Price: $1.21

RESEARCH PROFILE UPDATE
Initial Report Published: March 8, 2013

On August 6, 2013, GlyEco, Inc. announced that it had completed initial technology upgrades and has begun producing Type 1, recycled ethylene glycol. The recycled materials comply with ASTM 1177 EG-1 standards (meaning GLYE's recycled glycol is the same purity level of refinery-grade glycol), and this is currently being tested by third-party labs to verify results.

Due to the initial production of Type 1 recycled glycol, we have lowered our WACC on GLYE's DCF from 25.3% to 23.4%. This has resulted in an increase in our target price to $4.08, up from $3.74 previously.

Market Data

Fiscal Year	December 31
Industry	Chemicals
Market Cap	$48.7M
Price/Earnings (ttm)	N/A
Price/Book (mrq)	7.5x
Price/Sales (ttm)	17.5x
EBITDA (ttm)	($1.7M)
ROE (ttm)	N/A
Institutional Ownership	0.0%
Shares Outstanding	40.3M
Float	19.2M
Avg. Daily Vol. (3 mos.)	23,855

As of August 6, 2013

Income Snapshot

	TTM	YoY Change
Revenue	$2.1M	95.6%
Gross Profit	$0.3M	59.9%
Gross Margin	12.6%	-2.82pts
Operating Income	-$1.8M	N/A
Operating Margin	N/A	N/A
Net Income	-$0.8M	N/A
Net Margin	N/A	N/A

Balance Sheet Snapshot

	1Q13
Cash	$2.0M
Debt	$1.0M

GlyEco is making new inroads in the development and large-scale commercialization of treatment solutions for the multibillion-dollar ethylene glycol waste market.

GlyEco, Inc. ('GlyEco,' 'GLYE,' or the 'Company') is a cleantech innovator formed in 2006 to roll out its proprietary and patent-pending recycling technology, branded GlyEco Technology™, which transforms hazardous waste glycols into profitable green products.

Glycols are an indispensable production component in five industries (automotive, textiles, airline, medical, and HVAC). Demand continues to exceed supply for ethylene glycol, largely because of explosive growth in poly-fiber manufacturing to make plastic beverage bottles. This trend is expected to continue well into the future.

The EPA lists glycol as a hazardous waste and estimates only 12% of used antifreeze is recycled. Statistics for other industries are not reported, and the vast majority of waste glycol is disposed of without documentation – very likely in a way that damages our environment. With GlyEco's patent-pending technology, the majority of this hazardous waste can be cleaned and reused again and again.

Investment Highlights

GLYE developed a proprietary, patent-pending recycling technology that addresses a multibillion-dollar unmet market need. The Company's proprietary GlyEco Technology™ was created through more than a decade of research and development. Unlike traditional glycol recycling technology, which differs in results from provider to provider and has only had success in automotive applications, GlyEco Technology™ produces virgin-equivalent ethylene glycol. This end product result allows GLYE to address four additional substantial market opportunities that have to-date gone unmet (HVAC, textiles, airline, and medical). In an age of increased environmental concerns and corporate social responsibility, GLYE has the only solution to process glycol waste streams into a usable product for this $25 billion market.

GLYE is a first mover in this market with limited competition from established ethylene glycol producers. We believe that GlyEco has the potential to capture substantial market share, as demonstrated by the Company's strategic alliances with waste ethylene glycol handlers to recycle their waste ethylene glycol, preliminary binding agreements signed to acquire processing facilities in the U.S.; varying stages of partnerships and joint development efforts with ethylene waste collectors and polyester companies abroad, namely in the Eurozone; and relationships with the two largest polyester manufacturing companies

located in China and Mexico. The Company has also been making inroads with sources of waste ethylene glycol in Brazil, Argentina, India, Vietnam, Thailand, and the Philippines. In four of the five industries (HVAC, textiles, airline, and medical), a Type I ethylene glycol product is required. Given that there is not another competitor in the marketplace that can create a recycled Type I ethylene glycol product, this gives GLYE a huge first-mover advantage into multiple large industries. Initial technology upgrades for the implementation of Type I glycol recycling have been completed at the Company's Elizabeth, New Jersey facility, resulting in the initial production of Type 1 compliant recycled glycol for commercial use. The retrofit costs for the New Jersey facility are estimated to be about $2 million.

Additionally, GlyEco currently has a business relationship with MEGlobal, a joint venture between Dow Chemicals (DOW) and Kuwait-based PIC. MEGlobal is currently the world's leading ethylene glycol producer. Global production currently stands at approximately 5.5 billion gallons of ethylene glycol annually, increasing at a rate of 0.5 billion gallons per year. By having an existing business relationship with MEGlobal, we believe that GlyEco could tap into a steady source of revenue, gaining a leadership position as the source for quality glycol recycling globally.

The Company's proprietary, patent-pending technology should lead to 30% gross margins for GLYE. Management has indicated that while GlyEco Certified® ethylene glycol can be sold for virgin prices, the cost to recycle waste ethylene glycol is generally not impacted by market price fluctuations. The economic advantage to recycling waste ethylene glycol has been to reduce processing costs, while maintaining high quality and avoiding environmental harm. The Company's GlyEco Technology™ offers a 20%-50% reduction in processing costs over currently utilized methods. This should lead to superior margins for GLYE. The Company expects that their Type I recycling technology will smooth seasonality and increase the Company's gross margins to approximately 30%.

Pipeline of completed acquisitions set to grow GLYE profits as capacity expansion and retrofits occur. The current acquisition strategies pursued by management are designed to gain leverage of its patent-pending GlyEco Technology™ solutions across the five major industries outlined in the earlier paragraphs. The Company has made various acquisitions, including companies such as Recycool, Inc.; asset purchases for Full Circle Manufacturing Inc. and MMT Technologies; and most recently, as of January 13, 2013, a mixed acquisition offering of stock and cash for Renew Resources, LLC.

The various acquisitions that took place over the past 12 months highlight management's focus on creating synergistic, value-added, and all-encompassing ethylene glycol treatment solutions. If the Company is able to successfully integrate its Type I technologies into the existing Type II ethylene glycol recycling processes of these facilities, there could be potential first-mover advantages in successfully

developing and marketing itself as the leading Type I ethylene glycol waste treatment solutions provider, in the process capturing significant market share.

The Company has projected that the acquisitions will add approximately $2.0 million to $3.0 million to its net income in 2013. During 1Q13, the Company experienced a YoY revenue increase of 194% to $1.2 million, due primarily to acquisitions that were completed during 2012.

Environmental regulations and the development of industry-wide standards expected to accelerate long-term growth potential for GLYE. Glycol is a hazardous waste that ranks #23 on the National Pollutant Inventory Substance Profile. During use, glycols become contaminated with dirt, metals, and oils, which increase their toxicity and can contaminate soils and natural water. Recycling can mitigate potential liability as well as reduce costs and boost public image. The National Waste Minimization Program has included these contaminants in their 31 Priority Chemicals targeted to be eliminated from our industrial waste. GlyEco Technology™ effectively removes these contaminants from all five industrial waste streams and allows for their proper disposal.

Additionally, the American Society for Testing and Materials ("ASTM") has begun to create industry-wide standards for the composition of ethylene glycol. GlyEco is the only recycler currently able to meet the emerging standards for Type I ethylene glycol. Management is not aware of any competing recyclers that are able to fulfill these standards.

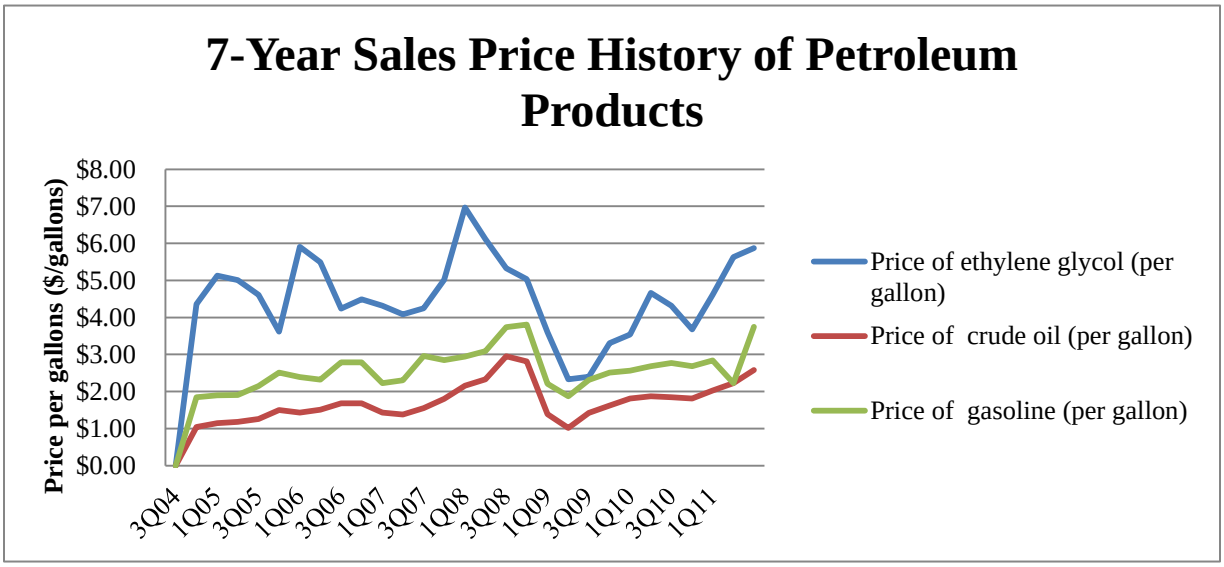
Market

As the owner of the only technology currently capable of turning ethylene glycol waste into virgin ethylene glycol equivalent, GlyEco is well-positioned to gain market share. Overall, the world consumes more than five billion gallons of ethylene glycol per year. Based on an average price of $5.30 per gallon, this represents an over $25 billion worldwide market opportunity. The U.S. consumes over 1.1 billion gallons of ethylene glycol per year; using the two-year average sales price of $5.30 per gallon, this represents a $5.8 billion market.

The rapid development of the ethylene glycol recycling industry has prompted the ASTM to begin creating industry-wide standards for the composition of ethylene glycol. One such standard, ASTM E1177, provides specifications on the purity level of ethylene glycol. ASTM has subdivided its ASTM E1177 ethylene glycol specification into two levels, Type I and Type II. Type I specifications are met by virgin ethylene glycol. Virgin ethylene glycol is produced in petrochemical plants using the ethane/ethylene extracted from natural gas or cracked from crude oil in refineries. Ethylene is oxidized in these petrochemical plants to ethylene oxide, which is then hydrated to form ethylene glycol. Recycled glycol can also meet the Type I standard. Management is not aware of any competing recyclers that are able

to fulfill these standards. Meeting the Type I standard is important, as it determines which customers are willing to buy the recycled product. In four of the five industries (HVAC, textiles, airline, and medical), a Type I ethylene glycol product is required; given that there is not another competitor in the marketplace that can create a recycled Type I ethylene glycol product, this gives GLYE a huge first-mover advantage into multiple large industries.

Type II (secondary grade) was established to define a product suitable for use as engine coolant or antifreeze. Ethylene glycols that are Type II are diluted with water and considered safe to use in vehicle engines. Due to its composition and water content, Type II material is not able to be used in other applications, but is a profitable and large business opportunity. Only a few ethylene glycol recycling companies currently meet Type II requirements, and management is not aware of any competitors that meet Type I standards on a commercial scale.



Source: Company reports (All prices are priced in US Dollars)

Based on the chart illustration showing the three commodity price trends, the historical price trend of ethylene glycol has shown significant price increases. According to independent analysis conducted by *ICIS Chemical Business*, between July 2011 and October 2011, the price of ethylene glycol shipped via truck or rail ranged between $5.80-$6.50/gallon. While elevated oil prices played a part, there were four main reasons for the high ethylene glycol prices: (1) high demand for plastic bottles during the summer and for antifreeze blending in preparation for the winter; (2) low supply caused by plant shutdowns and political unrest in the Middle East ('Arab Spring'); (3) the high cost of cotton causing an increase in demand for polyester; and (4) the growth in Asia. Ethylene glycol prices tapered off in November and December of 2011, as many antifreeze blenders had already bought most of the ethylene glycol needed and global growth slowed. The seven-year average sales price of ethylene glycol shipped via rail or truck was approximately $4.70/gallon, and the two-year average prices around $5.30/gallon.

Over the past few years, the price of ethylene glycol has outpaced the prices of crude oil and gasoline. This could bode well in terms of a potential source of added revenue, as there could be a high demand for ethylene glycol waste recycling solutions, which GlyEco could provide at a 10%-20% markup due to its product being environmentally friendly.

Products

Traditional used-antifreeze processing has been around since the 1980s, but doesn't address the unique sets of impurity challenges from other industries. In 2001, GlyEco's founders started developing new methods for recycling glycols, the result being their patent-pending and proprietary GlyEco Technology™.

The Company's innovative technology removes challenging pollutants, including esters, organic acids, high-dissolved solids, and high-undissolved solids. Its technology has the added benefit of deftly clearing oil/hydrocarbons, additives, and dyes which are typically found in used engine coolants. A rigorous quality assurance and control program, which includes independent lab testing, ensures consistently high-quality, ASTM-standard-compliant recycled material customers can rely on.

Management has outlined several key advantages/benefits of integrating GlyEco Technology™ into their customers' waste treatment requirements, including factors such as:

Expanded Waste Sources – Effectively and profitably recycles all five types of polluted glycols, which opens up an additional four industries as target customers and potential revenue sources.

Equivalent to Virgin or Type I Glycol – Recycled glycols are considered equivalent to virgin (refinery grade) produced material as pursuant to the ASTM standards. (**RedChip's take:** Conforming to industry standard requirements might enable the Company to position itself as a leading glycol waste recycling handler with a dedicated focus on quality and minimization of environmental damage throughout its recycling process. Confirmation of this is the Company's agreement with Waste Management (WM) to retrieve polluted glycol at WM's landfills).

Reduced Production Costs – Proprietary tri-phase processing system reduces production costs by approximately 20%-50% over existing glycol recycling methods. The expected decline in production costs should increase operating efficiency, and eventually translate to greater output and potentially higher profits.

Recurring Revenue Model – Polluted glycols can be recycled, used, and reprocessed indefinitely, creating dependable revenue cycles from a base of repeat

customers. The Company's recurring revenue stream should help ensure more stable and predictable top and bottom line results.

Management

John Lorenz*, Chairman & CEO*

Mr. Lorenz has been the co-founder, Chief Executive Officer, President and sole director of Global Recycling Technologies since its formation in May 2006. Mr. Lorenz is experienced in identifying and managing new technologies, financing industry consolidations and acquisitions, and providing initial financing for such ventures. Mr. Lorenz has served as a founder and management, financial and strategic consultant to a number of emerging public and private companies. Mr. Lorenz founded Environmental Waste of America, Inc. ("EWA") in 1986, where he participated in virtually all management aspects of the solid waste industry, including acquisitions and integration. He served as President, Chief Executive Officer, and a director of EWA between 1986 and 1997 until its merger with Envirofil, Inc., a public company that is now Waste Management, Inc. In addition, Mr. Lorenz was formerly a founder, director, and Chief Executive Officer of Automotive Services of America. Earlier in his career, Mr. Lorenz worked as a financial, marketing, and political consultant, doing media, market, and public opinion research. Mr. Lorenz has articles on diachronic survey research, and is an author and editor of the book "The Political Image Merchants," published in 1971. Mr. Lorenz is an "inventor" on patents and is a frequent lecturer at universities in the U.S. on capital, financial strategies, and equity development. Mr. Lorenz holds an Adjunct Professorship at Marylhurst University, and is preparing a book for publication in 2014 on financial strategies in challenging economic environments. Mr. Lorenz is an active tri-athlete and regularly competes in triathlons and marathons in the U.S. Mr. Lorenz holds an undergraduate degree with honors from the University of Portland, and a master's degree from the University of Chicago.

William J. Miller, *SVP Strategic Planning & Facilities Development*

Mr. Miller was the founder and CEO of AutoXray from its beginning in 1994 to its sale in 2004. AutoXray pioneered low-cost diagnostic scan tools for automobile computers. The company's products were selected as Popular Mechanics Editor's Choice six out of seven years, and were featured in The Wall Street Journal, USA Today, and many of the PC Magazines, as well as CNN and Motor Trend television. During that time, Mr. Miller was selected as an Ernst and Young Entrepreneur of the Year, and the company received the Spirit of Enterprise Award from the WP Carey School of Business at Arizona State University. Prior to his endeavors with AutoXray, Mr. Miller worked in the semiconductor industry and in Europe in the lift truck industry. He holds a Computer Engineering degree from the University of

Arizona. Mr. Miller is an active angel investor in select companies and selectively provides consulting to emerging companies.

Richard Geib, *Chief Technical Officer*

From 2002 to the present, Mr. Geib has served as the President of WEBA, which develops advanced additive packages for antifreeze and heat transfer fluid and used glycol treatment processes, including re-distillation and recovery technology. Under Mr. Geib's direction, WEBA launched its additive sales into Canada and Mexico. From 1998 through 2002, Mr. Geib served as President of Additives Inc., a former chemical division of Silco Distributing Co., where he developed new products, added many domestic customers, began industry trade show participation, became chairman of ASTM Coolants Committee, and established a laboratory, customer service, production, and sales department. From 1994 to 1998, Mr. Geib served as the Manager of the Chemical Division of Silco Distributing Company, where he developed and grew his division, developed products, designed a production plant, negotiated contracts for outside production, wrote marketing and technical literature, developed and implemented a sales program, arranged freight, and managed cash flow. From 1990 to 1994, Mr. Geib served as the President of Chemical Sales Company. From 1969 through 1989, Mr. Geib held several positions with Monsanto Company, including, Director of Sales, Detergents and Phosphates Division; Director, Process Chemicals, Europe/Africa Monsanto's Europe/Africa Headquarters, Brussels, Belgium; Strategic and Financial Planning Director, Process Chemicals Division; Business Manager for Maleic Anhydride, Chlor-Alkali, Phosphate Esters, Fumaric Acid, etc.; Plant Manager Monsanto's W.G. Krummrich Plant; Operations Superintendent Monsanto's W.G. Krummrich Plant; Production Supervisor for the 4-Nitrodiphenylamine Chlorine and Caustic Soda/Potash plants; and Design and Plant Engineer World Headquarters.

Alicia Williams, Esq., *Secretary, Controller & VP of Internal Operations*

Ms. Williams was appointed as Secretary of the Company by the Board of Directors on November 30, 2011. From October 2008 until the date Global Recycling merged with and into the Company, Ms. Williams served as the Director of Internal Operations of Global Recycling. Upon the consummation of the merger of Global Recycling with and into the Company, Ms. Williams became the Controller and VP of Internal Operations of the Company. From August 2004 until she joined the Company, Ms. Williams was a full-time law student and/or part-time law clerk. From March 2000 to August 2004, Ms. Williams served as a Senior Systems Analyst/Data Lead at Intel Corporation in Chandler, Arizona. Ms. Williams holds a law degree (J.D.) from the University of Southern California Gould School of Law in Los Angeles, California (December 2007) and a Bachelor of Science in Management Information Systems & Accounting (December 2009). Ms. Williams was admitted to practice law in the state of Arizona (2008).

Valuation Conclusion

	FY13	FY14	FY15	FY16	FY17	FY18	Terminal Value
Millions of gallons per year	3.0	23.4	40.3	57.2	74.1	91.0	
Average price per gallon	$4.72	$5.00	$5.25	$5.50	$5.75	$6.00	
Total revenue	14,160,000	117,000,000	211,575,000	314,600,000	426,075,000	546,000,000	
Revenue growth (%)		726.3%	80.8%	48.7%	35.4%	28.1%	
EBIT	**1,452,693**	**17,550,000**	**31,736,250**	**47,190,000**	**63,911,250**	**81,900,000**	
Less: Taxes on EBIT	363,173	4,387,500	7,934,063	11,797,500	15,977,813	20,475,000	
EBIT after tax (NOPLAT)	**1,089,520**	**13,162,500**	**23,802,188**	**35,392,500**	**47,933,438**	**61,425,000**	
Add: Depreciation and amortization	99,900	399,600	699,300	965,700	1,232,100	1,465,200	
Add/(less): Net changes in working capital	(108,952)	(1,207,298)	(1,063,969)	(1,159,031)	(1,254,094)	(1,349,156)	
Less: Capital expenditures	(3,000,000)	(9,000,000)	(9,000,000)	(8,000,000)	(8,000,000)	(7,000,000)	
Free cash flows to the firm	**(1,919,532)**	**3,354,802**	**14,437,519**	**27,199,169**	**39,911,444**	**54,541,044**	**286,812,469**
NPV ($' millions) (Year 1 to 6)	63,354,950						
Add: PV (Terminal value) (Year 6)	101,126,398						
Total NPV	**164,481,348**						
Add: Cash and cash equivalents	2,040,730						
Less: Market value of debt	(2,363,866)						
Equity free cash flows to the firm	**164,158,212**						
Number of outstanding shares	40,271,018						
Fair value per share	**$4.08**						

We have determined a fair value per share of $4.08 for GLYE. We have conservatively estimated the average price per gallon of ethylene glycol to range from $4.72-$6.00 per gallon, EBIT margins of 15%, and a WACC of 23.2%. Upside to the valuation includes an increase in production (initially, this will be determined by how smoothly the initial retrofits are implemented and the amount of additional capital GLYE can raise), an increase in virgin ethylene glycol prices (approximately $5.00 per gallon at present), and higher realized EBIT margins (management estimates that the GlyEco Technology process has a 20%-50% reduction in processing costs over currently utilized methods). Additionally, as GLYE proves to the market that its technology can be profitably implemented and ethylene glycol can be produced in the millions of gallons per year, the investment will be derisked, leading to a higher fair value per share.

Additional Information

Auditor: Jorgensen & Co.
Legal Counsel: Hool Law Group
Transfer Agent: Olde Monmouth Stock Transfer Co., Inc.

Interview with Chairman & CEO

Recent press releases

SEC filings

About RedChip

RedChip Companies, an Inc. 5000 company, is an international small-cap research, investor relations, and media company headquartered in Orlando, Florida; with affiliate offices in San Francisco, Seoul, Hong Kong and Singapore. RedChip delivers concrete, measurable results for its clients through its extensive global network of small-cap institutional and retail investors. RedChip has developed the most comprehensive platform of products and services for small-cap companies, including: RedChip Research(TM), Traditional Investor Relations, Digital Investor Relations, Institutional and Retail Conferences, "The RedChip Money Report"(TM) television show, Shareholder Intelligence, Social Media and Blogging Services, and Webcasts. RedChip is not a FINRA member or registered broker/dealer.

None of the profiles issued by RedChip Companies, Inc., constitute a recommendation for any investor to purchase or sell any particular security or that any security is suitable for any investor. Any investor should determine whether a particular security is suitable based on the investor's objectives, other securities holdings, financial situation needs, and tax status. RedChip Companies, Inc., employees and affiliates may maintain positions and buy and sell the securities or options of the issuers mentioned herein. All materials are subject to change without notice. Information is obtained from sources believed to be reliable, but its accuracy and completeness are not guaranteed. GlyEco, Inc. ("GLYE") is a client of RedChip Companies, Inc. GLYE agreed to pay RedChip Companies, Inc., a monthly cash fee and 28,000 stock options, plus 18,000 stock options per quarter, for twelve (12) months of RedChip investor awareness services. Investor awareness services and programs are designed to help small-cap companies communicate their investment characteristics. Investor awareness services and programs are designed to help small-cap companies communicate their investment characteristics. RedChip investor awareness services include the preparation of a research profile(s), multimedia marketing, and other awareness services.

Additional information about the subject security or RedChip Companies Inc. is available upon request. To learn more about RedChip's products and services, visit http://www.redchip.com/visibility/productsandservices.asp, call 1-800-RedChip (733-2447), or email info@redchip.com.

Company Contact Info:
GlyEco, Inc.
4802 East Ray Road, Suite 23-196
Phoenix, AZ 85044
(866) 960-1539
www.glyeco.com

Investor Contact Info:
RedChip Companies, Inc.
500 Winderley Place, Suite 100
Maitland, FL 32751
(407) 644-4256
www.redchip.com