# **DUTTON ASSOCIATES**

# INDEPENDENT RESEARCH

# RESEARCH REPORT

Sally H. Wallick, CFA swallick@duttonassociates.com

## **HydroGen Corporation**

December 18, 2007

Symbol (NasdaqCM)	HYDG	Fiscal Year Ending: December							
Industry:	Oil, Gas & Energy	Year	<u>EPS</u>	<u>P/E</u>	<u>REVS</u>	<u>PSR</u>			
Recent Price:	\$2.61	2005 A	(\$2.18)	x	\$0.0	833.2 x			
52-Week Price Range:	\$1.90- \$6.57	2006 A	(\$0.67)	x	\$0.6	54.6 x			
Target Price (12-18 Months)	\$8.25	2007 N/A		X		x			
Avg. Daily Vol. (3 mo.):	10,370	2008 N/A		x		x			
		2009 N/A		x		x			

Balance Sheet Data (mil)	09/30/07	Ownership and Valuation (mil)		Current Rating History	
Cash Equivalent:	\$12.2	Shares Outstanding:	12.77	Date Assigned:	5/9/06
Working Capital:	\$12.4	Inside Ownership:	11%	Price at Rating:	\$6.50
Long-Term Liabilities:	\$0.1	Institutional Ownership:	N/A	Original Price Target:	\$8.25
Shareholders' Equity:	\$16.9	Equity Market Value:	\$33.3	Time Frame:	12-18 Mths

Update Report

**Rating: Speculative Buy** 

## **Summary and Conclusion**

HydroGen develops multi-megawatt hydrogen-powered phosphoric acid fuel cell (PAFC) systems utilizing technology acquired from Westinghouse Corporation and targets markets for power stations of over two megawatts. Fuel cells are a proven technology with important advantages relative to fossil fuel-based electricity generators: they are combustionless, emissions-free, quiet, energy efficient and have few moving parts.

HydroGen Corporation reported third quarter demonstration grant revenue of \$481,884 and a net loss of \$3.5 million or \$0.27 per share. Since HydroGen is a development-stage company transitioning to commercialization of its technology, we do not believe that current results reflect the Company's long-term potential.

HydroGen's business plan consists of three stages: market entry, cost reduction and growth. The market entry stage includes ramping up fuel cell manufacturing to a rate of two megawatts per year on a single shift, initiating production of 400-kilowatt modules, completing product and technology testing and validation, initiating development of accelerated manufacturing and pursuing sales and marketing efforts. In 2006 and thus far in 2007, we believe that the Company made significant progress on this stage of its business plan.

On November 13, 2007, HydroGen named John Freeh as Chief Executive Officer (CEO), replacing Dr. Leo Blomen, who will remain a consultant to the Company and Chairman of its Board. We believe that the principal reason for the management change is the Board's view that HydroGen needs a full-time CEO in the U.S. (Dr. Blomen has split his time between the U.S. and the Netherlands) as it prepares to become a commercial manufacturer. Mr. Freeh appears to be particularly well qualified to lead HydroGen at this important juncture. He has served as the lead independent director on the Company's Board for more than two years and, therefore, has first-hand knowledge of its technology, management team and strategic plan. In addition, he has more than 33 years of experience in advanced technology development and executive leadership positions with General Electric and Lockheed Martin.

We have been impressed with the progress that Mr. Freeh has made in the relatively short period of time since he was named CEO as reflected in an update letter to shareholders issued December 14 that highlighted the Company's progress in module production, technology development, business development and financial planning. We reiterate our **Speculative Buy** rating on HydroGen's shares, which we consider appropriate for aggressive investors willing to accept the above-average risk inherent in an early-stage company that is not yet profitable.

## Third Quarter and First Nine Month Results

HydroGen Corporation reported third quarter 2007 revenue of \$481,884, all from demonstration grants, and a net loss of \$3.5 million or \$0.27 per share. HydroGen has received two development grants from the State of Ohio, for \$1.25 million and \$1.0 million, and a \$250,000 grant from the Pennsylvania Energy Development Authority (PEDA) to support the construction of a small-scale air-cooled PAFC test facility. In addition, subsequent to the end of the quarter, Pennsylvania agencies awarded HydroGen two grants totaling \$730,000.

Third quarter operating expenses increased 50% year over year to \$4.1 million, mainly due to growth in research and development, personnel and other expenses. Higher research and development spending was driven by continuing acceleration and expansion of ramp-up activities, power plant design, and other development activities. Most of the spending increase resulted from higher labor and benefits expense (due to the addition of about 25 employees involved in research and development) and investment in noncapitalized supplies and equipment to support technical and production work. Payroll and related costs (excluding stock-based compensation expense) rose 63% year over year in the third quarter mainly because of additions to the Company's staff and a modest increase in the Company's fringe benefit rate, and other expenses were up 244% as a result of higher depreciation, travel, and rent expenses. Partly offsetting these expense increases were a 34% decrease in stock-based compensation expense year over year and a 46% drop in professional fees.

During the first nine months of 2007, HydroGen's revenue was \$1.3 million and its net loss was \$10.7 million or \$0.83 per share.

Table 1. Third Quarter and First Nine Months Consolidated Statements of Operations (Dollars in thousands, except per-share data)

		Quarter Ended:					%		
		9/30/06		9/30/07	Chg.		9/30/06	9/30/07	Chg.
Demonstration Grant Revenue	\$	219.8	\$	481.9	119%	\$	348.3	\$ 1,298.6	273%
Expenses:									
Research & Development	\$	1,853.0	\$	2,530.0	37%	\$	3,288.0	\$ 7,850.0	139%
Payroll & Related Costs	\$	369.0	\$	601.9	63%	\$	844.2	\$ 1,784.5	111%
Professional Fees	\$	221.0	\$	119.0	-46%	\$	712.0	\$ 414.0	-42%
Stock-Based Comp. Expense	\$	63.5	\$	41.9	-34%	\$	259.7	\$ 317.7	22%
Other	\$	239.0	\$	823.0	244%	\$	848.0	\$ 2,305.0	172%
Total Operating Expenses	\$	2,745.5	\$	4,115.8	50%	\$	5,951.9	\$ 12,671.2	113%
Loss from Operations	\$	(2,525.6)	\$	(3,633.9)	44%	\$	(5,603.6)	\$ (11,372.6)	103%
Interest and Other Income	\$	352.3	\$	164.1	-53%	\$	713.1	\$ 667.2	-6%
Interest and Other Fin. Charges	\$	(5.7)	\$	(5.7)	0%	\$	(90.5)	\$ (15.0)	-83%
Net Loss	\$	(2,179.0)	\$	(3,475.5)	60%	\$	(4,981.0)	\$ (10,720.4)	115%
Net loss per share	\$	(0.17)	\$	(0.27)	59%	\$	(0.48)	\$ (0.83)	73%
Wtd. average shares outstanding Source: HydroGen Corporation financial r	eports	12,770		12,770	0%		10,485	12,770	22%

Page 2 of 11

## **Financial Position**

HydroGen's September 30, 2007, balance sheet highlights include cash and cash equivalents of \$12.2 million, working capital of \$12.4 million, no long-term debt, total assets of \$18.7 million and shareholders' equity of \$16.9 million. Management believes that the Company has sufficient working capital to fund operations through the first quarter of 2008.

Table 2. Consolidated Balance Sheets (Dollars in thousands, except per-share data)

	As of:	12/31/05	12/31/06	3/31/07	6/30/07	9/30/07
Assets						
Current Assets						
Cash and Cash Equivalents		\$2,796	\$14,171	\$9,705	\$5,890	\$12,153
Short-Term Investments		6,493	9,890	10,159	10,172	0
Accounts Receivable		40	262	436	381	512
Other Current Assets		<u>317</u>	<u>1,290</u>	<u>1,191</u>	<u>1,736</u>	<u>1,500</u>
Total Current Assets		9,646	25,613	21,491	18,179	14,165
Property, Equipment & Leaseholds, Ne	t	807	3,470	3,929	4,227	4,488
Equipment Deposits		225	0	0	0	0
Other Assets		<u>14</u>	<u>57</u>	<u>57</u>	<u>66</u>	<u>66</u>
Total Assets		\$10,693	\$29,139	\$25,476	\$22,472	\$18,719
Liabilities and Stockholders' Equity						
Current Liabilities						
Accounts Payable & Accrued Exper	ises	\$613	\$1,659	\$1,040	\$1,923	\$1,633
Capital Lease Oblig., Curr. Portion		<u>\$0</u>	<u>\$72</u>	<u>\$74</u>	<u>\$98</u>	<u>\$101</u>
Total Current Liabilities		613	1,732	1,114	2,021	1,733
Capital Lease Oblig., Net		0	120	100	127	101
Stockholders' Equity		<u>10,080</u>	<u>27,288</u>	<u>24,262</u>	<u>20,324</u>	<u>16,885</u>
Total Liabilities & Stockholders' Equ	ity	\$10,693	\$29,139	\$25,476	\$22,472	\$18,719
Cash, Cash Equiv. & Short-Term Inv.		\$9,290	\$24,060	\$19,864	\$16,062	\$12,153
		\$9,034	\$24,000	\$20,377	\$16,002 \$16,158	\$12,133
Working Capital Current Ratio		τθ,034 15.7	φ23,661 14.8	φ20,377 19.3	9.0	\$12,431 8.2
Cash & Equivalents/Share		\$0.37	\$1.11	\$0.76	\$0.46	\$0.95
Book Value Per Share		\$0.37 \$1.32	\$1.11 \$2.14	\$0.76 \$1.90	\$0.46 \$1.59	\$0.95 \$1.32
Shares Outstanding		۶۱.32 7,615	φ2.14 12,770	په 12,770	پور.59 12,770	۳۱.32 12,770
Shares Outstanding		7,013	12,770	12,770	12,770	12,770

Source: Company financial reports

## **Cash Flow**

During the first nine months of 2007, HydroGen's operations used \$10.4 million of cash, up from \$5.3 million in the same period of the prior year, as a result of higher operating losses.

Table 3. Consolidated Statements of Cash Flows (Dollars in thousands)

	12 Months Ended:			Nine Months Ended:				
	12/31/05		1	2/31/06	9/30/06			9/30/07
Operating Activities								
Net Loss	\$	(5,741)	\$	(7,423)	\$	(4,981)	\$	(10,720)
Depreciation		14		231		150		455
Amortization of Discount on Convertible Notes		491		-		-		-
Stock-Based Compensation		626		561		260		318
Financing Cost Recognized upon Change in								
Terms on Convertible Debt		875		-		-		-
Loss on Disposal of Property & Equipment		-		35		35		-
(Increase) Decrease in Other Assets		(369)		(1,238)		(717)		(469)
(Decrease) Increase in Accounts Payable & Accrued Exp.		323		1,046	_	(53)		(27)
Net Cash Used in Operating Activities	\$	(3,780)	\$	(6,788)	\$	(5,306)	\$	(10,444)
Investing Activities								
Purchase of Short-Term investments	\$	(6,493)	\$	(24,692)	\$	(14,802)	\$	(6,010)
Purchase of Property & Equipment		(1,042)		(2,475)		(1,708)		(1,401)
Maturity of Short-Term Investments				21,296	_	21,296		15,900
Net Cash Flows from Investing Activities	\$	(7,535)	\$	(5,871)	\$	4,785	\$	8,489
Financing Activities								
Issuance of Common & Preferred Stock for Cash	\$	12,979	\$	24,069	\$	24,069	\$	-
Proceeds from (Repay.) of Notes Payable, Rel. Parties		(467)		-		-		-
Principal Payments on Capital Lease Oblig.		-		(36)		(19)		(63)
Proceeds from Issuance of Convertible Notes		370			_			<u>-</u>
Net Cash Flows from Financing Activities	\$	12,882	\$	24,033	\$	24,050	\$	(63)
Net Change in Cash and Temporary Investments	\$	1,566	\$	11,374	\$	23,530	\$	(2,018)
Cash - beginning of period	\$	1,230	\$	2,797	\$	2,796	\$	14,171
Cash - end of period	\$	2,797	\$	14,170	\$	26,326	\$	12,153

Source: Company financial reports

## **Progress on Business Plan**

HydroGen has developed a business plan consisting of three stages: market entry, cost reduction and growth. The market entry stage, which management expects to last through 2007, includes ramping up fuel cell manufacturing to a rate of two megawatts per year (single-shift production capacity), initiating production of 400-kilowatt modules, completing product and technology testing and validation, finishing two-megawatt power plant design, initiating development of accelerated manufacturing and pursuing sales and marketing efforts.

During 2006, we believe that HydroGen made significant progress on this plan. Noteworthy accomplishments during the year include: (1) Ramping up of manufacturing capability at the Company's Versailles, Pennsylvania, facility, which is now fully operational and manufacturing at a rate of approximately four megawatts per year on a double shift; (2) constructing and operating at full capacity the first 2.5-kilowatt stack; (3) designing, engineering, procuring and initiating construction of a full-scale 400-kilowatt demonstration plant; (4) signing a contract with ASHTA Chemicals for a demonstration plant and starting construction on this project; (5) raising \$26 million in a PIPE transaction; and (6) achieving top-quality staffing development.

Progress has continued in 2007. In the first quarter, HydroGen announced the mechanical completion of its 400-kilowatt PAFC module demonstration and acceptance test facility and the initiation of precommissioning activities, and, in July, it said that it had initiated demonstration and acceptance testing of newly manufactured 400-kilowatt fuel cell modules at

this facility. Also in July, the Company announced mechanical completion of and initiation of precommissioning activities at a full-scale 400-kilowatt commercial demonstration PAFC power plant at ASHTA Chemicals' Ashtabula, Ohio, chlor-alkali plant. When the commercial demonstration power plant is fully operational, by-product hydrogen from the chlor-alkali facility will be used in HydroGen's newly produced 400-kilowatt modules to generate electricity, heat and water, allowing HydroGen to showcase its technology in an industrial setting.

Another 2007 accomplishment was the successful testing of a newly manufactured 2.5-kilowatt stack. Previously, the Company had tested 2.5-kilowatt stacks that included some vintage Westinghouse components as well as parts manufactured by HydroGen.

In October, HydroGen announced that it had been awarded two grants totaling \$730,000 by the Pennsylvania NanoMaterials Commercialization Center and PEDA.

The Pennsylvania NanoMaterials Commercialization Center grant, which totals \$230,000, is to support advanced fuel cell catalyst development. The Center's mission is to promote and support the commercialization of nanomaterials research for new and enhanced products critical to the U.S. economy and manufacturing base. It funds programs that are judged to have significant commercial potential. HydroGen's grant was one of only three awarded this round. HydroGen, which will use the grant to support the development of advanced fuel cell catalyst systems, will work on the project in cooperation with the University of Pittsburgh's Petersen Institute of NanoScience and Engineering.

The PEDA grant totals \$500,000, which is to be used to design, manufacture and install commercial-scale gas clean-up modules in order to validate the use of surplus hydrogen-rich coke oven gas for commercial-scale fuel cell electric power plants. HydroGen will be working on this project in cooperation with U.S. Steel's Mon Valley Works plant in Mon Valley, Pennsylvania.

We view receipt of these grants as very positive developments for HydroGen. Among other things, we believe that: (1) the success of HydroGen's proposals in the face of stiff competition (we believe that the Pennsylvania agencies awarding the grants received numerous applications for the available funds) reflects the quality and promise of the Company's technology and its technical expertise; and (2) the work funded with the grants could have practical applications and operational benefits for HydroGen long term. For example, successful development of a new catalyst utilizing already available nanomaterials might result in a lower-cost catalyst with a longer life. Also, the hydrogen-cleaning processes being researched at the Mon Valley Works plant, if successful, could be useful at numerous other facilities worldwide, perhaps expanding the potential market for HydroGen's technology.

## **Management Change**

On November 13, 2007, HydroGen named John Freeh CEO. He succeeded Dr. Leo Blomen, who will remain a consultant to the Company with a focus on plant engineering and production cost reduction efforts, as well as retaining his position as Chairman of the Company's Board of Directors.

We believe that the principal reason for the management change is the Board's view that HydroGen needs a full-time CEO in the U.S. (Dr. Blomen has split his time between the U.S. and the Netherlands) as it prepares to become a commercial manufacturer. In recent years, the Company has made significant progress on its business plan, including ramping up production capacity at the Company's Versailles, Pennsylvania manufacturing plant. In addition, it has begun the process of commercializing its technology. However, the transition to a successful commercial business will require an aggressive sales and marketing effort, substantial capacity additions, a build-up of the Company's project engineering capabilities, completion of another capital raise, and production cost reductions.

Mr. Freeh appears to be particularly well qualified to lead HydroGen at this important juncture. He has served as the lead independent director on the Company's Board for more than two years and, therefore, has first-hand knowledge of its technology, management team and strategic plan. In addition, he has more than 33 years of experience in advanced technology development and executive leadership positions with General Electric and Lockheed Martin.

On December 14, in an effort to increase communication with shareholders, Mr. Freeh issued an update letter reviewing the Company's progress in module production, technology development, business development and financial planning. Since becoming CEO, two areas of special focus for Mr. Freeh have been the status of production of HydroGen's first module and discussion with a potential large customer.

Highlights of Mr. Freeh's review include the following:

- HydroGen has strengthened production planning, scheduling, and control discipline at its Versailles manufacturing plant over the last several weeks. The Company has completed assembly of the first of four stacks for its first module and assembly of the second stack is well underway. It has set a firm date of March 7, 2008 to ship the completed module to its commercial demonstration power plant at a chlor-alkali facility owned and operated by ASHTA Chemicals. This site is ready to receive the module, and the Company's expects to be operating for test and procedure check out a month after the module arrives at ASHTA.
- HydroGen is in serious discussions with a prospective customer who has an interest in both hydrogen-based and
  natural gas-based fuel cells (HydroGen's initial market focus has been the hydrogen-available market). As a result,
  HydroGen has completed conceptual design of its first natural gas fuel cell power plant and has upgraded the technical
  specifications of its hydrogen-based fuel cell power plant for higher electric efficiency.
- HydroGen is pursuing a number of advanced technology development projects. The Company recently received a \$230,000 grant from the Pennsylvania NanoMaterials Commercialization Center to support advanced fuel cell catalyst development. It is moving forward with this project, which, if successful, could improve fuel cell performance and reduce platinum costs significantly (platinum catalysts represent a significant part of the cost of the Company's fuel cells). HydroGen also is making strides on reducing production costs, possibly by automating some production activity and changing plant manufacturing processes from machined to molded plates.
- HydroGen is addressing its financial strategy and developing plans to raise additional capital in the next few months. Management estimates that HydroGen has sufficient cash to fund operations through the first quarter of 2008.

We are impressed with the progress that Mr. Freeh has made in the relatively short period of time since he was named CEO and consider a number of aspects of his shareholder letter noteworthy. First, it appears that he intends to be a hands-on CEO with a clear focus on activities critical to HydroGen's successful transition from a development to a commercial operation. This is consistent with the Board's view when it chose Mr. Freeh that the Company needed a full-time CEO in the U.S. His predecessor, Dr. Blomen, had split his time between the U.S. and the Netherlands. Dr. Blomen is now devoting his time to technology issues. Second, we are encouraged by signs that the Company is working closely with potential customers on how its fuel cell technology can best satisfy their needs, as indicated by its work with a potential customer on a natural gas fuel cell. We believe that this flexibility in responding to individual customer requirements could be critical as the Company works to build a large book of orders over the next year and beyond. Third, HydroGen continues to make significant progress toward successfully commercializing its technology. Importantly, the Versailles facility is now operating as a manufacturing plant, having transitioned from its initial function of recapturing Westinghouse technology. Also, cost reduction is a key aspect of the Company's long-term business plan, and, in this regard, its focus on advanced technology projects, automation and other cost reduction initiatives are significant.

#### **New Director**

Dr. Alton D. Romig, Jr., Senior Vice President and Deputy Laboratory Director for Integrated Technologies and Systems at Sandia National Laboratories (a multi-program Department of Energy laboratory operated under contract by Sandia Corporation) was named to HydroGen's Board of Directors in December. Dr. Romig's appointment brings the number of directors to nine, five of whom are independent. As a result, HydroGen believes that it is in compliance with NASDAQ rules that require that the majority of Board members be independent.

Dr. Romig has extensive experience in technology and energy-related fields. He joined Sandia National Laboratories in 1979. Since then, he has served in a variety of management positions, including, most recently, Chief Technology Officer and Vice President for Science, Technology and Partnerships from 1999-2003; Vice President, Nonproliferation and Assessments from 2003-2005; and Senior Vice President and Deputy Laboratory Director for Integrated Technologies and Systems at Sandia National Laboratory to the present. He holds B.S., M.S., and Ph.D. degrees in materials science and engineering from Lehigh University.

#### **Investment Considerations**

**Proven technology with competitive advantages.** Fuel cells are a proven technology with important advantages relative to fossil fuel-based electricity generators: they are combustionless, emissions-free, quiet, energy efficient and have few moving parts.

An abundant, clean, renewable alternative. Hydrogen is an abundant, clean, renewable energy alternative. Rising energy prices, energy security concerns and the need for cleaner energy sources are driving interest in alternatives to fossil fuels, and many experts consider hydrogen one of the most compelling long-term options for sustainable energy production. Hydrogen is abundant, accounting for 90% of the universe by weight and, therefore, feedstock containing hydrogen is readily available. It is renewable, nontoxic, clean, and when used to power a fuel cell, it gives off no emissions.

**Technology ready for commercialization.** HydroGen's fuel cell technology is well developed (Westinghouse and the Department of Energy [DOE] invested an estimated \$150 million in it before selling it to FCA, HydroGen's predecessor, in the mid-1990s) and appears to have the potential for relatively rapid commercialization. HydroGen's manufacturing facility in Versailles, Pennsylvania, is operational and the Company expects to commerce commercial demonstration field tests in 2007 and to obtain its first commercial orders for power islands this year.

Unique technology with cost and operating benefits. HydroGen's technology is unique in its use of air-cooled, not water-cooled, PAFC fuel cells, which management believes results in substantial cost savings and operating benefits. Air-cooled fuel cells have significant advantages relative to the water-cooled fuel cells commonly in use because they are simpler and cheaper to manufacture, are not subject to cooling system corrosion, have no water discharge or water cleanup problems, have a longer useful life and are more reliable. A second unique, cost-saving characteristic of HydroGen's fuel cell power plants is that they are "unbundled" from the power source. In addition, the combination of the Company's proprietary technology and standardized state-of-the-art balance-of-plant equipment with only a few custom components enhances reliability.

Cost-competitive alternative. HydroGen expects to enter the market at a cost of approximately \$3,000 per kilowatt to \$3,500 per kilowatt installed (including the balance of plant, but not taking into account tax or other incentives) for a first-article plant of approximately four to eight megawatts. However, the Company expects production costs to fall to less than \$1,000 per kilowatt to \$1,500 per kilowatt for a full system once its PAFC modules are produced in an accelerated manufacturing facility with a yearly capacity of 25 megawatts or more, resulting in competitive per-kilowatt-hour customer electricity costs. These costs should compare favorably with its manufacturing competition of water-cooled fuel cells.

Large and growing target markets. Initially, HydroGen is targeting distributed generation, an estimated \$2 billion—\$6 billion market in the U.S. today. The DOE estimates that by 2010 distributed generation will account for 20% of new generating capacity and that by 2020 23% of industrial electric demand will be met by distributed generation. Further, HydroGen is targeting applications where there is existing hydrogen infrastructure and, therefore, where little or no fuel processing is required, reducing capital and fuel costs. Such applications include chemical production facilities where hydrogen is a byproduct—for example, in the chlor-alkali industry.

**Experienced management team.** HydroGen's senior management team, while small, has impressive and extensive experience in fuel cell design, development and engineering in the U.S. and internationally, as well as strong management and financial skills.

**Healthy cash position.** Given the completion of a private placement in 2006, management believes that HydroGen has sufficient capital to fund its business plan through the first quarter of 2008. Although we believe that HydroGen will need to raise additional capital in the next year to complete its business plan, it appears to have some flexibility in terms of amount and timing.

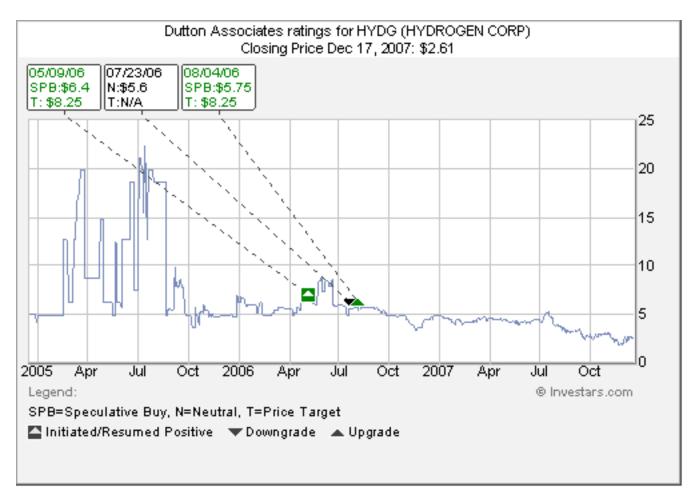
# **Investment Opinion**

We rate HydroGen common stock **Speculative Buy**. Since the Company has no commercial revenue at present and is likely to be unprofitable at least through 2008, traditional measures are of limited use in valuing its stock. We believe that HydroGen's share-price performance is most likely to be driven by investor perceptions of the outlook for the renewable energy sector in general, and hydrogen fuel technologies in particular, as well as Company-specific events and progress. We consider the shares appropriate for aggressive investors willing to accept the above-average risk inherent in an early-stage company that is not yet profitable.

#### **Risks**

HydroGen faces many risks faced by any development-stage company, including the following:

- Although Westinghouse and the DOE spent substantial sums on developing and testing the technology that HydroGen plans to commercialize, the Company has not yet proven its commercial potential. Further, HydroGen has limited operating history in the fuel cell industry, has no experience manufacturing fuel cell modules and has not yet obtained a large number of contracts for its products.
- We believe that the Company's commercial success will depend, in part, on its ability to substantially reduce production costs per kilowatt, which is not assured.
- The Company will require additional capital to execute its business plan.
- HydroGen's technology represents a break with traditional electricity production methods. Also, the Company faces competition from much larger, better-capitalized, established companies that may view its technology as a threat.



Dutton Associates					
Current Ratings Distribution					
Rating % Total					
Not rated	2.24				
Strong Buy	10.45				
Buy	12.69				
Strong Speculative Buy	28.36				
Speculative Buy	32.09				
Neutral	12.69				
Avoid	1.49				

#### Analyst: Sally H. Wallick, CFA

Prior to joining Dutton Associates, Ms. Wallick has spent nearly 25 years as an analyst in the research departments of Alex. Brown & Sons and Legg Mason Wood Walker in Baltimore. Most recently, she was Managing Director with Legg Mason Wood Walker following leisure, retail, and consumer companies. Prior to Legg Mason, she was with Alex Brown for 15 years following retail, consumer, and transportation companies. She received her B.A. degree from the College of William and Mary, Williamsburg, VA, and her MBA from Loyola College, Baltimore, MD.

#### **Analyst Certification:**

I, Sally H. Wallick, CFA hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report.

HydroGen Corporation, 2 Juniper Street, Versailles, PA 15132, USA, (412) 405-1000, www.hydrogenllc.net.

Dutton Associates. John M. Dutton, President, 4989 Golden Foothill Parkway, Suite 4, El Dorado Hills, CA 95762 Phone (916) 941-8119, Fax (916) 941-8093.

Information, opinions or recommendations contained in Dutton Associates' research reports or research notes are submitted solely for advisory and information purposes. The information used and statements of fact made have been obtained from sources considered reliable but we neither guarantee nor represent the completeness or accuracy. Such information and the opinions expressed are subject to change without notice. A Dutton Associates research report or note is not intended as an offering or a solicitation of an offer to buy or sell the securities mentioned or discussed. Neither the Firm, its principals, nor the assigned analysts own or trade shares of any company covered. The Firm does not accept any equity compensation. Anyone may enroll a company for research coverage, which currently costs US \$35,000 prepaid for 4 Research Reports, typically published quarterly, and requisite Research Notes. Dutton Associates received \$70,000 from the Company for 8 Research Reports with coverage commencing on 05/09/2006. Reports are performed on behalf of the public, and are not a service to any company. The analysts are responsible only to the public, and are paid in advance to eliminate pecuniary interests and insure independence. Please read full disclosure and other reports and notes on the Company at www.DuttonAssociates.com.

The views expressed in this research report or note accurately reflect the analyst's personal views about the subject securities or issuer. Neither the analyst's compensation nor the compensation received by Dutton Associates is in any way related to the specific recommendations or views contained in this research report or note.

Periodic Research Reports and Research Notes on this Company are available at our web site: www.DuttonAssociates.com.

© Copyright 2007, by Dutton Associates