Wasserman Morris Equity Research

Equity Initiation Report

WASSERMAN MORRIS

Alchemy Enterprises, Ltd. (OTC BB: ACHM)

Rating: **SPECULATIVE BUY**

Analyst: Kipley J. Lytel, CFA

Share Statistics	
Symbol (OTC BB)	ACHM
Last Trade (11/17/06)	$1.96
Low/High 52 weeks	$1.25.-$1.97
Average Volume (3m)	102,600
Market Capitalization	$153.9 Mn
Shares Outstanding	78.5 Mn

Source: Yahoo Finance, SEC Filings

Analyst summary

We are initiating coverage of Alchemy Enterprises, Ltd. (ACHM) with a Speculative Buy rating. ACHM is developing an innovative technology to power hydrogen fuel cell integrated with a new Hydratus technology that is believed to generate and manage electricity to power a broad range of applications from every day vehicles such as buses, trucks, trains and cars to alternative power supply stations to power homes. In the nearer term, however, the company is targeting buses, a potentially lucrative segment being tested all over the world. Indeed, the potential merits of penetrating just a fraction of the U.S. government, agency and city bus contracts would yield an immense financial windfall given the 32 million national bus inventory. Currently, some buses use highly compressed hydrogen to power their fuel cells that has many drawbacks that Alchemy's alternative solution overcomes. ACHM's technology is based on magnesium, which makes hydrogen-carrying fuel safer to use. Such a system can help avoid Hindenburg-type disasters by eliminating the need to deal with the volatile hydrogen gas.

A working device has already been tested and the first proof of concept bus is expected to be launched in Q1FY07, with commercial operations expected to commence in 2007-2008. In late September 2006, ACHM carried out a private placement of common stock, which brought in over $12 million in gross proceeds. This money should provide the company with enough financial strength to carry on with its R&D and early stage commercialization efforts.

ACHM has teamed with NASA's Jet Propulsion Laboratory (JPL) and the California Institute of Technology, which manages the JPL project for NASA. As a result of this unique task plan partnership, JPL is developing the technology in its research facilities; ACHM has exclusive rights to the technology on Earth, and Caltech owns a share of the company (8% as of end of Q2FY06). ACHM will use the 'big brother' approach of patent protection, by having JPL hold and protect these valuable assets.

With many automakers expecting to launch fuel cell-based vehicles around 2015-2020, Fuel Cell technologies are expected to develop at a fast pace in the coming decade. All federal transportation entities are approaching 'green' deadlines, while there are inherent 'credit' incentives. metropolitan planning organizations (MPOs), state or local transportation departments, transit providers, and any other organization that can accept federal transportation funds through their local MPO. The Congestion Mitigation and Air Quality (CMAQ) Improvement Program, provides a flexible funding source for state and local governments to fund transportation projects and programs to help meet the requirements of the Clean Air Act (CAA) and its amendments. Currently, city and transit buses are being tested in an effort to improve the technology and to educate the general public. Thus, this is the "hottest" fuel cell vehicle segment at the moment. Additionally, marketing such a solution to bus or delivery vehicle fleets eliminates the need for a wide startup refueling infrastructure, as fleet vehicles are refueled daily at the central garage. The product is a hydrogen generating system, providing hydrogen on demand via the company's "HYDRATUS" and ACHM intends to license technology.

An offsetting concern is that fuel cell propulsion systems are currently quite costly and wide adoption requires a refueling infrastructure to be installed (be it pure hydrogen or magnesium-based fuel). Also, the hydrogen infrastructure is already being built and if ACHM's solution is to be adopted, these hydrogen-filling stations will become obsolete – hardly pleasant news for those who have invested millions in hydrogen refueling.

We consider that the benefits outweigh the negatives and assign a Speculative Buy rating. However, investors should keep in mind that the company is a development stage one, its technology has not been fully tested yet and it has accumulated a large deficit. There can be no assurance that the company will be successful. These are the main reasons for the Speculative tag on our rating.

Investment Highlights

Significant advantages of HYDRATUS over existing technologies

HYDRATUS is expected to offer significant advantages over traditional fossil fuel technology. It is expected to be less expensive to use, non-polluting and safer for the vehicle operator and passengers. It is also expected to be superior to conventional battery power. Continuous electrical power from a typical battery is not possible due to surface degradation, and HYDRATUS is expected to overcome the time consuming recharging and limited performance associated with other batteries used for electric vehicles. The Hydratus is expected to be capable of powering a vehicle up to 500 miles before refueling; fuel cells add an estimated 7-8 years of vehicle life. HYDRATUS is also expected to be superior to hybrid electric/gasoline engines, because the latter are still dependent on fossil fuel as primary energy source and are prone to the same disadvantages, including expense of operation and environmental pollution, as traditional internal combustion engines. ACHM's expects that its rapidly rechargeable HYDRATUS technology will make all electric vehicles as practical and performance rich as modern gasoline-powered vehicles and, because this process is all electric, there will be no waste or exhaust

released from the vehicle or the refueling stations. Charged fuel has a shelf life expectancy of approximately ten years[1], making it ideal for emergency backup applications.

The technology was proven in a working test

On August 16, 2006, ACHM announced that it had successfully operated the proof of concept hydrogen generating apparatus Hydratus(HYDRATUS) integrated with a hydrogen fuel cell for the first time. During this experiment the HYDRATUS was connected to, and powered a series of 115-volt apparatus. It was the first time that the HYDRATUS had been connected to existing hydrogen fuel cell technology and produced ongoing electricity. The tests took place at the Jet Propulsion Laboratories in Pasadena during the week of July 26th with ongoing data analysis through August 12th. The prototype HYDRATUS generated well over twice the hydrogen flow required for the tests. The test lasted approximately one hour and produced the required electrical load, as mandated by the test, for 33 minutes. Subsequent testing will have modified controls more accurately regulating the materials flow thereby regulating hydrogen flows for specific on-demand characteristics. Water and magnesium utilization profiles have been improved significantly as well due to ongoing design improvements.

ACHM has the exclusive right to license technology from JPL

ACHM has entered into a development agreement and license agreement with JPL to assist the company in the commercial development of its HYDRATUS technology. JPL has been a key innovator in a host of power systems including the Mars Lander. JPL is a federally funded research and development center sponsored by NASA and operated by Caltech. JPL owns approximately 8% of ACHM's common stock.

NASA and JPL boast unrivalled expertise and superior research facilities in the fields of propulsion, systems reliability and innovation potential. Caltech is ranked in the top 10 universities worldwide by metrics such as citation index, Nobel Prizes, and general university rankings[2].

Caltech has granted ACHM the exclusive worldwide license, with the right to grant and authorize sublicenses, to make, have made, import, use, sell, and offer for sale any products, devices, systems, articles of manufacture, and compositions of matter, or processes or services that are covered by the patented Caltech Rights. With regard to non-patented Caltech Rights, Caltech has granted ACHM a non-exclusive worldwide license, with the right to grant and authorize sublicenses, to make, have made, import, use, sell, offer for sale, reproduce, distribute, display, perform, create derivative works of, and otherwise exploit products, devices, systems, articles of manufacture, and compositions of matter, or processes or services that utilize the technology covered by the non-patented Caltech Rights. All license rights granted by Caltech are subject to a reservation of rights by Caltech for non commercial education and research purposes and U.S. Government rights provided under the Bayh-Dole Act.

[1] Source: company website.
[2] Source: Wikipedia, http://en.wikipedia.org/wiki/Caltech

By licensing the technology from JPL, ACHM is avoiding investment in bricks and mortar. Financing supports pure technology development, piggybacking off of JPL's infrastructure. Thus, at the end of the research, ACHM will have a ready technology without the extra baggage of excess laboratories and expensive equipment.

Caltech owned about 8% stake in ACHM at the end of Q2FY06; this share is most likely smaller now, after the private placement in September 2006.

Low expected production cost of HYDRATUS devices and fuel

ACHM estimates that the cost of its technology combined with the other components of an electric vehicle (i.e. the fuel cell and the electric motors) -not result in vehicle cost of more than 10-15% above equivalent internal combustion engine systems, the whole system will be competitive in terms of price for the consumers. Currently the prices of fuel cells are quite high but are expected to fall as the technology advances and economies of scale step in following the introduction of fuel cell mass production.

The estimated cost of the recharged fuel is also expected to be significantly lower than the price of petroleum products – approximately half of price of gasoline. We estimate the cost per gallon equivalent of the recycled fuel will be approximately $1.20 before tax with existing subsidies.

First mass-produced application of ACHM's technology expected to be launched in 2007-2008

ACHM and JPL are targeting a working 75-100 kW prototype to be installed in a specially-designed bus by February 2007. At the same time, ACHM has been working closely with a number of bus manufacturere to produce a prototype HYDRATUS for possible installation in their fleets of hybrid buses. ACHM anticipates that in 2007-2008, certain of these companies will begin to manufacture, under an exclusive sublicense, buses incorporating ACHM's HYDRATUS technology. If the first model is successful, ACHM plans to market the technology on a worldwide basis to medium- and heavy-duty vehicle fleet manufacturers.

Private placement brought in over $10 million in net proceeds

In late September 2006, ACHM completed an offering of 34.5 million shares, which brought in almost $10.5 million in net proceeds. The company estimates that this amount will be enough to support its operations until mid-2008. Considering that the company's plans include launching a prototype in Q1FY07 and beginning mass-production (through the partnership with DLH) in 2007-2008, we believe that these proceeds will provide a powerful springboard to begin commercial operations, which should eventually become self-sustaining in terms of cash flows.

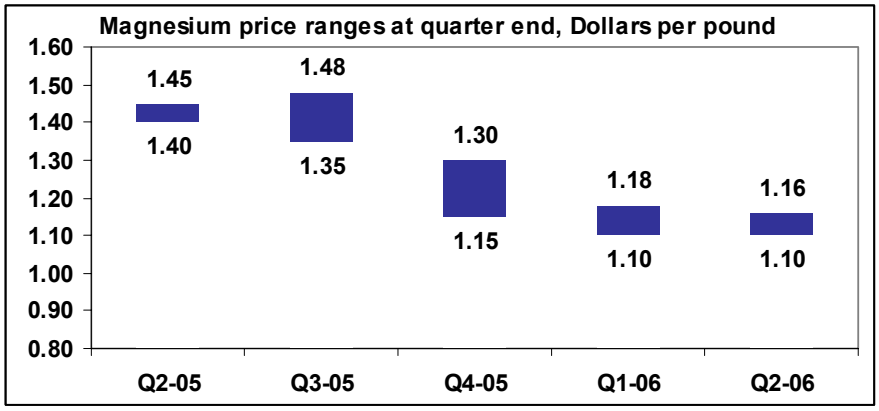
Refueling convenience

ACHM's technology offers a very strong benefit of quick and easy refueling. Virtually no raw material is needed for the refueling stations after the initial fill-up with fuel; only electric power supply is necessary to reprocess used material into new fuel. Thus, refueling station maintenance may be lower than for its gasoline counterpart. The concept of producing hydrogen for fuel cells

on demand on board of the vehicle is also a much safer option than storing highly flammable hydrogen at refueling stations or in hydrogen fuel tanks onboard of vehicles.

Magnesium is the eighth most abundant element on Earth

Magnesium, used in ACHM's technology, constitutes about 2% of the earth's crust by weight and is the third most plentiful element dissolved in seawater[3]. Thus, producing the hydrogen fuel is not likely to meet significant shortage of raw materials. Magnesium prices in the USA have decreased over the past 5 quarters:

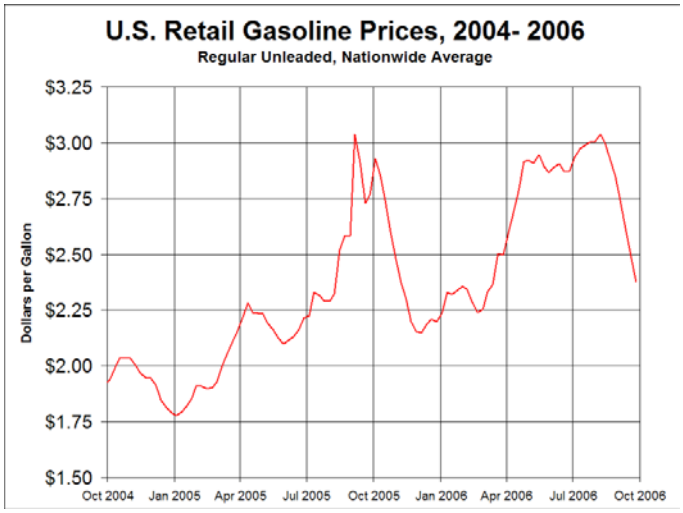


Source: USGS, http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/

Problems associated with fossil fuels have prompted government efforts across the globe to stimulate alternative sources of energy

The extensive use of fossil fuels has been criticized widely for a long time. While initially the criticism related to environmental issues, more recently the energy independence has come into view. With most fossil fuels originating outside of the Western world, price or export volume manipulation and attempts of energy blackmail by the exporting countries have become an increasingly important problem for Western countries. One of the most important issues came up the recent years – the rising price of oil and as a result rising prices of gasoline:

[3] Source: Wikipedia, http://en.wikipedia.org/wiki/Magnesium.



Data is for regular-grade unleaded gasoline, taken at one-week intervals and averaged nationwide. Prices are nominal.
Source: Wikipedia, http://en.wikipedia.org/wiki/Oil_prices, prepared from data at the U.S. Department of Energy.

Another important issue is the depletion of natural reserves of fossil fuels. With oil and natural gas consumption on constant rise, it is only a matter of time before these reserves are used up completely. According to Wikipedia[4], at current consumption levels, world oil supply will be gone in about 33 years.

Thus, governments have started promoting the use of alternative fuels and sources of energy. Particularly in the automotive industry, the use of hybrid vehicles is being stimulated in a number of countries by the means of various incentives, for example[5]:
In the USA:

- Starting January 1, 2006, the purchase of hybrid cars qualifies for a tax credit up to $3400 on the purchaser's Federal Income Taxes. Many states give additional tax credits to hybrid car buyers
- Certain states (e.g., New York, California, Virginia, and Florida) allow singly-occupied hybrid vehicles to enter the HOV lanes on the highway.
- Some states, e.g. California, exempt hybrid cars from the biennial smog inspection, which costs over $50 (as of 2004).
- Hybrid cars can go on certain toll roads for free.
- In some cities (e.g. San Jose, Los Angeles, Baltimore), electric and hybrid vehicle owners can benefit from free or discounted parking permits.
- Annual vehicle registration fees in the District of Columbia are half ($36) that paid for conventionally vehicles ($72).

In Canada, residents in Ontario can claim a rebate on the Provincial Retail Sales Tax of up to $2,000 CDN on the purchase or lease of a hybrid vehicle.

[4] Source: http://en.wikipedia.org/wiki/Petroleum.
[5] Source: Wikipedia, http://en.wikipedia.org/wiki/Hybrid_vehicles.

In the UK, drivers of hybrid vehicles benefit from the lowest band of vehicle excise duty which is based on CO2 emissions. These vehicles are also exempt from the £8 daily congestion charge in central London. Hybrid drivers also benefit from a discount in their insurance if they are insured with "MORE TH>N" who recently announced a discount for hybrids drivers in the UK of up to 13%.

To promote less dependence of fossil fuels, a number of federal initiatives have been enacted in recent years in the USA, including the Advanced Energy Initiative of 2006, the Energy Policy Act of 2005 and the Clean Efficient Automobiles Resulting from Advanced Technologies ("CLEAR") Act of 2003. These initiatives and other federal and state programs provide tax incentives for consumers to purchase fuel cell vehicles.

Experienced management

ACHM's executive officers have extensive experience in technology innovation, business development and corporate governance. Howard Foote, the Chief Technology Officer, has expertise in technology and familiarity with the patent process, as well as a long-term relationship with NASA and JPL. Jonathan Read, the Chief Executive Officer, has an established track record of building development stage companies into larger international businesses. In October 2006, ACHM announced that it had appointed Dr. Jerry Y.S. Lin to its Board of Directors, who has extensive knowledge and over 20 years of experience and has been on the cutting edge of fuel cell research and technologies.

Proven success of hybrid vehicles

A number of hybrid vehicles are already being mass-produced by Ford, General Motors, Honda, Mazda, Nissan, Peugeot, Renault, Toyota and others. Wikipedia reports[6] that an R.L. Polk survey of 2003 model year cars showed that hybrid car registrations in the United States rose to 43,435 cars, a 25.8% increase from 2002 numbers. Toyota had sold a cumulative 306,862 hybrids between 1997 and November 2004, and Honda had sold a total of 81,867 hybrids between 1999 and November 2004. This proves that consumers are ready to embrace a new technology, despite the fact that hybrid cars are usually more expensive than 100% gasoline-powered vehicles. It is logical to assume that as soon as it becomes technologically more viable, 100% electric vehicles will be able to capture the market.

Delivery fleets and public transport viewed as primary targets – where savings are most desired and sought after

The initial design and marketing of the HYDRATUS technology is for application in the transportation industry. This is in large part necessitated by the requirement for special refueling stations. ACHM plans to initially target fleet vehicle applications, such as buses, mail and delivery vehicles where the vehicles centrally refuel daily and single refueling stations will be adequate. The strategy to target fleets at first also has another benefit: large fleets are more interested in fuel cost savings and other benefits offered by ACHM's technology than individual

[6] Source: Wikipedia, http://en.wikipedia.org/wiki/Hybrid_vehicles.

drivers. The American Public Transportation Association estimates[7] that in the US alone, approximately 4,400 new Public Transport buses and demand response vehicles were purchased in 2005, and that the worldwide market is roughly four times that amount. The American Bus Association estimates that in 2005, the number of motorcoaches operated in the USA and Canada was up 1.5% to 39,068 versus 38,490 in 2004[8].

Multiple revenue streams expected

ACHM anticipates several revenue sources from its technology:

- royalties on each gallon of fuel purchased by vehicle operators.
- licensing, manufacturing, joint venture, technology transfers, engineering and design adaptation of the refueling system.

We would consider that royalties from car-makers and owners of refueling stations based on the number of vehicles produced and refueling devices installed, respectively, as another longer-term revenue scenario. Another possible scenario is a full purchase of technology by an energy or automotive company.

Market prospects are very bright for "clean" energy

According to Clean Edge, a research and strategy firm for emerging clean energy markets, the fuel cell and distributed hydrogen market will grow from $1.2 billion (primarily for research contracts and demonstration and test units) in 2005 to $15.1 billion by 2015[9].

Public relations firm expected to increase ACHM's visibility

ACHM has retained an investor/public relations firm to assist the company in promoting its value proposition to the market. The increased visibility should have a double-edged effect: it should promote the company and its technology to the market; and it may provide additional liquidity to the company's shares as investors gain confidence in the company's technology through this promotion.

Investment Risks

ACHM's technology is in the development stage

ACHM's technology is still being developed, and while a working device has been tested in a laboratory, there have been no working prototypes yet. The first prototype is expected to be launched in February 2007, and there is no assurance that this technology will be economically viable.

Short operating history, no reported revenues and large accumulated losses

The company has been pursuing its current business for less than one year, and has not received any revenues from its activities because its technology is still in the R&D stage. ACHM had accumulated $9.4 million in losses by the end of Q2FY06, and this amount should be even

[7] Source: APTA website, http://www.apta.com/research/stats/vehicles/newbuslg.cfm.
[8] Source: ABA website, http://www.buses.org/downloads/3440.cfm.
[9] Source: http://www.cleanedge.com/reports-trends2006.php.

greater by now. We do not expect the company to receive any revenues earlier than Q2FY07, as this is the period for which the company plans to start mass producing buses with its technologies through DLH. It is possible that commercial operation will be delayed and revenues will be received later than anticipated.

Refueling infrastructure will need to be installed; high initial investment costs

ACHM's technology relies on magnesium-containing fuel, and consequently, on the availability of refueling stations offering this fuel. To make ACHM's technology widely used, a network of refueling stations will need to be installed across the country, with a supporting infrastructure in place (i.e. fuel supply network to refill the stations to cover fuel loss). ACHM's current strategy envisages offering its technology to bus and truck fleets first, where a single refueling station can be installed to supply the entire fleet. However, if ACHM wants to push its technology further into the market, independent refueling stations will have to be launched. ACHM plans to offer current petroleum companies to have its refueling facilities added to conventional gasoline stations, but there is no assurance that these companies will be interested in such a proposal. The cost per fuel station is estimated to be $350-$450k with the initial goal of 200-300 bus stations, bringing total outlay of $60Mn-$120Mn.

While ACHM's solution offers a better alternative of onboard hydrogen fuel storage than the conventional compressed hydrogen form, hydrogen infrastructure is already being developed. Millions of dollars have already been invested in the hydrogen network and industry players may not be willing to switch to another infrastructure.

Hydrogen refueling stations in California: open and planned

Source: http://www.fuelcellpartnership.org/tourguide/tour2e.html

Large ownership by management

Following the private placement of the 34.5 million shares of common stock in September 2006, Management of the company owns approximately 44.7% of the company's stock and thus is able to exercise significant control over the company.

Limited liquidity of shares
Management of the company owns approximately 44.7% of outstanding shares, and in an October interview[10], Jonathan Read said that the free float was only 20-22 million shares,(increasing to 65 million shares after the registration of the September 2006 offering) representing less than 20% of the final 113 million shares after the September 2006 offering.

Future dilution is possible
While the recent private placement has provided the company with enough cash to refrain from issuing more shares to finance its operations within the next 1-2 years, the company intends to establish an equity incentive plan initially reserving up to 10,000,000 shares for issuance to executive officers, directors, employees and consultants upon option exercise. Also, as a result of the offering, the placement agent was issued warrants to purchase approximately 6.9 million shares at a price of $0.35 per share (the same price as the offering price), which is much below the current stock price ($1.27 as of October 28, 2006). The company may issue more dilutive securities or shares to reward its employees or in conjunction with paying for services.

Electricity is used to recharge fuel
While ACHM's technology provides a clean way to run vehicles, recharging fuel for further use requires electricity. Currently, a large portion of electricity is produced from burning coal, which pollutes the environment. Thus, recharging the HYDRATUS fuel will still not be 100% clean. However, all electricity-based technologies, including recharging electric vehicle batteries, rely on grid power.

Competitive solutions may eliminate the advantages of ACHM's technology
According to the Wikipedia[11], there are a number of technologies in the development, that are potentially competitive with ACHM's HYDRATUS:

- Technical University of Denmark (DTU) scientists announced in September 2005 a method of storing hydrogen in the form of ammonia saturated into a salt tablet. They claim it will be an inexpensive and safe storage method.
- Virent Energy Systems is working[12] on developing a low cost method for producing hydrogen on demand – from "sugar water" (glycerin, sorbitol, or glucose). Such a technology, if successful would solve many of the infrastructure (hydrogen storage) issues associated with the hydrogen economy.

If such technologies are commercialized, they may take away the market share from ACHM, especially if no specialized refueling stations are required.

[10] Source: http://www.tradersnation.com/achm.shtml.
[11] Source: http://en.wikipedia.org/wiki/Fuel_cell
[12] January 2006 quoted as date

Fuel cells are expensive to produce
Fuel cells are currently too costly to produce to make them affordable to the general public, and automakers say[13] that the cost of fuel cells must be cut by at least a factor of 10 to be competitive with internal combustion engines.

Magnesium is potentially a flammable material
Magnesium metal and alloys are highly flammable in their pure form when molten, as a powder, or in ribbon form; however it is difficult to ignite in mass or bulk. Burning or molten magnesium metal reacts violently with water. Magnesium powder is an explosive hazard. Burning magnesium fires can not be extinguished with water or carbon dioxide. However, the company estimates the risk of ignition as extremely unlikely, given it takes extraordinary circumstances to have magnesium burn. It would require a very continuous heat well over 20X that required to ignite gasoline which ignites with a mere spark. This needs to be toned way down.

Company profile

Company description
Alchemy Enterprises, Ltd is an alternative energy company that is developing a new Hydratus technology that it believes will generate and manage electricity to power a broad range of applications, from every day vehicles such as buses, trucks, trains and cars to alternative power supply stations to power homes. Working in a research and development partnership with NASA's Jet Propulsion Laboratories, the patent-pending Hydratus technology is believed to be a clean, environmentally friendly, re-usable source for electric power and fuel.

This unique technology allows the Hydratus to provide power levels and performance comparable to gasoline engines. This all Hydratus technology is designed to enable the consumer to power their vehicles at much lower costs than current cost of gasoline. The Power Cell recycling process produces no waste or exhaust release from the vehicle or the recycling service stations. The Power Cell technology will greatly reduce the pollution load when compared to that generated by gasoline powered vehicles and fuel stations. The Power Cell system is also directly applicable to long-term storage of electrical power for on-demand or emergency use, and has a shelf life expectancy of tens of years, far exceeding any other energy storage system currently known.

A majority of shareholders, holding 50.24% of ACHM's shares as of October 20, 2006, intend to rename the company on November 16, into "Ecotality, Inc."

Brief Operating History

April 21, 1999 – Alchemy Enterprises, Ltd was incorporated in the State of Nevada as a marketer of private-label bio-degradable cleaning chemicals.

[13] Source: http://hydrogenpowernews.com/2006/01/04/who-picked-hydrogen-cars-as-the-winner/#more-115

February 15, 2006 – the company entered into and closed a Technology Contribution Agreement with Howard Foote and Elliot Winfield, pursuant to which the company acquired all of Transferors' right, title and interest in and to a certain Hydratus (HYDRATUS) technology to be used in connection with the development of an improved electric battery represented by a U.S. Patent Office patent application. As a result of the Technology Contribution Agreement, the company's board of directors made a decision to change its business focus from marketing chemical products toward developing the HYDRATUS technology.

June 12, 2006 – the company entered into a License Agreement with California Institute of Technology (CalTech), which operates the Jet Propulsion Laboratory (JPL), a federally-funded research and development center for the National Aeronautics and Space Administration (NASA), whereby acquiring certain exclusive licensed patent and/or patent applications rights and improvement patent rights related to research performed under the JPL Task Plan No. 82-10777, entitled "Mechanically-Fed Metal-Air Fuel Cell As A High Energy Power Source" ("Task Plan"), as well as a nonexclusive licensed technology rights developed as a result of the Task Plan. The License Agreement carries a perpetual term, subject to default, infringement, expiration, revocation or unenforceability of the License Agreement and the licenses granted thereby.

Alchemy Enterprises' solution

The Alchemy Electric Vehicle system is made up of several elements. First is the electric power storage facility that stores the material for re-fueling purposes. Another system element is Hydratus Technology that is a fuelable battery that can be refueled many times just like a fossil fuel car receiving gasoline.

Refueling a vehicle using Alchemy's system is accomplished through a single hose assembly. This assembly incorporates intake capability for the removal of spent electric fuel, while at the same time filling the vehicle's electric fuel tank with new fuel. To the consumer this will be as simple as fueling their current car.

Refueling
Source: company website

The electric power and storage refueling station is supplied with an initial electric fuel load. As this fuel load is distributed, the waste loads are recovered and reprocessed into fuel ready material by electricity supplied from the power grid. The principal fuel supply for the refueling station is electrical power supplied from the electric power grid or other suitable source. Therefore to fuel a vehicle up will cost approximately half of the current cost of gasoline.

Material losses are made up by occasional re-supply of the refueling station. Normal operation

will result in the virtual elimination of materials re-supply. The only continuous and normal supply element is electrical power.

Alchemy will create the operating systems and license those applications to hardware manufacturers. The technology can be scaled to suit a myriad of applications.

Initial Application of the technology is being designed for implementation in the public transportation sector. Concurrent with the widespread use in buses and fleet delivery vans, the technology will be licensed for application in cars – by far the largest single market application of the technology.

A fuel cell bus
Source: company website

A fuel cell
Source: company presentation

Hydratus ("HYDRATUS") Vs. Batteries

- Magnesium metal is the primary "fuel" that the HYDRATUS uses to create electricity and hydrogen on demand;
- Magnesium generates power through a simple electrochemical reaction between the metal and a combination of salt water and oxygen;
- Once the magnesium and water chemistry are completely reacted, the "spent" fuel will be stored for return to the refueling station and reuse;
- Unlike a typical battery, the HYDRATUS is expected to use all of the fuel material to make electricity; regular battery only uses limited surface areas of the reacting materials;
- Since all the fuel is used – not just surfaces - the ability to produce electrical power is greatly increased;
- The HYDRATUS will be continuously supplied with new electric fuel – the magnesium mixture - much like conventional vehicles are supplied gasoline;
- The HYDRATUS will operate as long as there is a fuel, with a range expected to be similar to that of gasoline-powered vehicles.

How the technology works

Alchemy's unique patent pending Hydratus is a self-contained system that produces on-demand electricity. The material that is spent can be recycled to achieve safe, clean, reusable power.

The Hydratus is also capable of powering a vehicle up to 500 miles before re-fueling. The performance of a power cell operated vehicle will beat the performance of the conventional gasoline powered vehicle. The cost of operating a vehicle with Alchemy's Hydratus will allow for the first all electric power system. The power cell is not plagued with the performance limitations associated with conventional battery technologies in use today. The cost of producing the material for the power cell is lower than the cost of gasoline fuel, and the overall cost can be amortized to even lower cost because the material can be re-used over and over again. The cell is also ideal for on-demand, emergency situations that require long-term electrical storage. It has a shelf life expectancy of approximately ten years, far exceeding any other energy storage system currently known.

NASA/JPL Partnership

Alchemy has contracted NASA/JPL (The California Institute of Technology and Jet Propulsion Laboratories, a Federally Funded Research and Development Center) for design and development of the Hydratus. Alchemy has the honor of working with some of the top minds in the United States developing a new Hydratus with the same "brain-trust" that supported the development of power systems on the mars rover mission.

The initial working prototype is being developed, in conjunction with NASA/Jet Propulsion Laboratories. The prototype that is presently under development is being specifically tailored for implementation in vehicles manufactured by Designline Group in New Zealand. Designline is a world leader in the production of electric drive systems for buses.

The company expects to be able to unveil a working prototype in the first quarter of 2007, and to begin early stage implementation in that year. Once the initial bench model and bus system is completed, extensive marketing will begin, geared toward the public transport sector.

Management

Jonathan R. Read, President and CEO

Mr. Read is an experienced brand manager, international developer, and international licensor. He began his professional career in 1976 as a Regional Manager of Specialty Restaurant Corporation, CA, operating a theme dinner house throughout California. He then became Managing Director for a group of international Companies based in Malaysia, Indonesia and Singapore ranging from hospitality interest to manufacturing and real estate. From 1984 he was the Chairman and CEO of Shakey's International – a worldwide restaurant chain with operations in the US, Southeast Asia, Japan, South America, Mexico, Europe and the Caribbean, which he sold in 1989. In 1986, Mr. Read founded Park Plaza International (Park Inn International/Park Plaza Worldwide) and served as Chairman and CEO from 1986 to 2003. He expanded Park Plaza from 4 hotels into a global hotel group. He built, owned, operated, managed, and franchised hotels across the US as well as in England, France, Germany, Switzerland, Holland, Belgium, Hungary, Austria, Ireland, Scotland, Spain, Poland, South Africa, Australia, New

Zealand, Malaysia, Indonesia, Hong Kong, Philippines, New Guinea, Vietnam, Japan, Tahiti, Israel, Palestine, Saudi Arabia, Dubai, Lebanon, Jordan, Mexico, Costa Rica, and Brazil. Mr. Read sold the companies to Carlson Hospitality and Golden Wall Investments in 2003.

Harold W. Sciotto, Chief Financial Officer and Director
From June 1964 until his retirement in May 1993, Sears Roebuck & Company employed Mr. Sciotto in various sales and management positions. These positions encompassed store sales and department management positions, store merchandise manager, district business manager for six states and store manager of three stores in Arizona. His duties included, but were not limited to, sales, advertising, personnel management, financial statements and accounting. Prior to and after retirement through the present, Mr. Sciotto was an independent business consultant to various business ventures, including video sales and rentals, tanning and herbal product sales, hair styling salon, and a fast food service restaurant.

Howard A. Foote, Chief Technology Officer
In 1994, Mr. Foote enlisted in The United States Marine Corp., and served as a jet mechanic and plane captain for A-6E Intruders. Mr. Foote is qualified as a pilot in 25 different types of aircraft, including Russian military fighter aircraft and RAF military aircraft as well. During 1989-1992, Mr. Foote was privately educated by the world leading Aeronautical Engineering Professor, Svenn Ridder of the Swedish Institute of Technology. It was here where Mr. Foote worked on an advanced flying wing design in Swedish wind-tunnel facilities, to successfully design an advanced flying wing configuration vehicle; the vehicle used Microwave Power Transmissions to power the aircraft instead of conventional fuel. Mr. Foote received a patent for this unique aircraft design. The configuration is considered state-of-the-art, even after 12 years since test completion. He has been contracting with Jet Propulsion Laboratories-NASA since 1991. Mr. Foote holds many patents for advanced aircraft design, complex systems architecture, orbital power stations, and electric fuel cell technology. Mr. Foote has become one of the most progressive aeronautical engineers today.

Dr. Jerry Y.S. Lin, Chairman of the Technology Committee of the Board of Directors
Dr. Lin joined ACHM in October 2006. He has extensive knowledge and over 20 years of experience and has been on the cutting edge of fuel cell research and technologies. Dr. Lin is a professor and Department Chair of Chemical Engineering at the Arizona State University in Tempe, Arizona.

Dr. Lin received B.S. from Zhejiang University in China, and M.S. and PhD from Worcester Polytechnic Institute in the U.S., all in chemical engineering. He was a post-doctoral staff member at the University of Twente in the Netherlands. Dr. Lin joined the faculty of the University of Cincinnati in 1991, where he was a professor of chemical engineering and co-director of the NSF Center for Membrane Applied Science and Technology until coming to ASU in January, 2005. He is an expert in inorganic membranes, solid oxide fuel cells, adsorption and catalysis. Dr. Lin has over 150 referred journal publications and holds 3 patents. His papers have

received over 2100 SCI citations. Dr. Lin has given 100 invited lectures in academia and industry around the world. Dr. Lin has received numerous international professional and academic awards. He has also headed many research programs funded by such agencies as US Department of Energy and Department of Defense and private sector companies such as Amoco, BP, Exxon, Honda and the Petroleum Research Board. He is on the Board of Directors of North American Membrane Society and editorial boards of several journals. Dr. Lin is the conference chairman of the 8th International Conference on Inorganic Membranes (ICIM8).

Financial Overview

Extensive financial analysis of ACHM is impossible due to the fact that the company has been active for a very limited period of time and because it has not commenced commercial operations. In Q1FY06, the company decided to pursue a new line of business and discontinue its previous activities concerning chemical products. Thus, historical comparisons of any kind are irrelevant.

Income statement

The first half of 2006 was the period when ACHM was building up its intellectual property and technological base.

Expenses, $	Q1FY06	Q2FY06	QoQ Change
Depreciation	141	1,348	856.0%
Executive compensation	23,354	60,000	156.9%
Licenses and permits	0	8,220,487	nm
General and administrative expenses	322,815	259,104	-19.7%
General and administrative expenses – related party	0	360	nm
Research and Development	350,000	50,000	-85.7%
Interest expense	19,218	19,680	2.4%

Source: SEC filings

As can be seen from the table above, by far the largest expense item was the acquisition of licenses and permits in Q2 for $8.2 million. This expense relates mostly to a License Agreement with California Institute of Technology, whereby ACHM obtained certain exclusive and non-exclusive intellectual property licenses pertaining to the development of an electronic fuel cell technology, in exchange for 5,869,565 shares of common stock of ACHM with a fair market value of $8,217,391. The License Agreement carries an annual maintenance fee of $50,000, with the first payment due on or about June 12, 2009. The License Agreement carries a perpetual term, subject to default, infringement, expiration, revocation or unenforceability of the License Agreement and the licenses granted thereby. We expect this charge to be non-recurring.

Total R&D expenses amounted to $400K in H1, while ACHM had committed to spend a total of up to $1,350,000 to finance the development of the Hydratus system, pursuing to a Technology Contribution Agreement with two individuals to acquire the rights, titles and interests to the intellectual property for the development of an Hydratus. Additionally, in exchange for the rights

to this intellectual property, ACHM agreed to finance the payoff $15,000 in interest costs for related debt, all of which has been paid.

The G&A expenses seem rather high for a startup company, and most likely result from a number of agreements, such as:

- A consulting agreement dated February 15, 2006, with Universal Power Vehicles Corporation for annual compensation of $200,000. The term of the agreement is three years and may be extended upon agreement by both parties. ACHM prepaid one-half of the compensation upon execution of the agreement, with the remaining compensation to be paid monthly beginning August 15. ACHM recognized $73,425 as an expense in the six months ended June 30, 2006 and prepaid services for the unearned portion of $26,575.
- An employment agreement dated February 15, 2006, with an officer and director of ACHM, for an annual compensation of $120,000. Additionally, ACHM issued 7,500,018 shares to this individual as a bonus for services valued at $21,250. The term of the agreement is one year and is automatically renewed annually. ACHM paid this individual $10,000 for July 2006 compensation at the end of June, which amount has been recorded as prepaid expenses.
- An employment agreement dated February 16, 2006, with an officer and director of ACHM for annual compensation of $120,000. The term of the agreement is one year and is automatically renewed annually.
- A lease agreement dated March 21, 2006, to rent office space at a rate of $547 per month and requires a refundable deposit of $500, which was paid by ACHM during the period ended March 31, 2006. The lease expires March 31, 2007.

Balance sheet

The latest published balance sheet data (end of Q2FY06) became obsolete after the private placement in late September 2006, thus there is no point in analyzing it in detail. Subsequent to the placement, ACHM should have received almost $10.5 million in net proceeds, to be used to retire debt, finance R&D and G&A expenses, as well as provide working capital.

The balance sheet at the end of Q1 and Q2 is shown in the table below:

$	Q1FY06	Q2FY06
Cash and cash equivalents	357,199	17,618
Prepaid expenses and current deposits	95,400	42,075
Fixed assets, net	1,762	18,612
TOTAL ASSETS	*454,361*	*78,305*
Note payable, net of discount	749,934	749,980
Accounts payable	3,500	1,425
Accrued interest	4,192	23,826
Payroll liability	8,075	8,001
Stockholders' deficit	(311,340)	(704,927)

Net Working Capital	(313,102)	(723,539)

Source: SEC filings

Cash flows

As most startup companies, ACHM is characterized by negative operating cash flows, compensated by financing inflows. It is worth noting, that although in Q2FY06, ACHM had an $8.2 million expense, most of it was non-cash, paid in shares. With the private placement completed in September 2006, we expect such large non-cash charges to disappear for at least several quarters.

$	Q1FY06	Q2FY06
Cash Flows from Operating Activities	(773,679)	(321,383)
Cash Flows from Investing Activities	0	(18,198)
Cash Flows from Financing Activities	1,125,000	0
Net change in Cash	351,321	(339,581)

Source: SEC filings

Private Placement

On September 27, 2006, ACHM sold 34,500,000 shares of its unregistered common stock for gross proceeds of $12,075,000 in a private placement offering. The placement represented the Maximum offering of 30,000,000 shares and additional 4,500,000 shares for over-allotment. As a result of the offering, the total number of outstanding shares of ACHM reached 113 million (assuming no other shares have been issued since the end of Q2FY06). The net proceeds to the company total approximately $10,455,544. The Confidential Private Placement Memorandum issued on June 28, 2006, revealed ACHM's plans to use the proceeds:

Application of Net Proceeds	Maximum Offering	Percentage of Net Proceeds
Development of HYDRATUS technology	$2,865,000	27.4%
Investor relations expenses	500,000	4.8%
General and administration expenses	505,000	4.8%
Repayment of debt	800,000	7.7%
Working capital	5,785,544	55.3%
Total	**$10,455,544**	**100.0%**

Source: Confidential Private Placement Memorandum, analyst calculations

ACHM estimated that with the Maximum Offering completed, the company would have adequate working capital for at least the next 24 months. The funds provided by the placement should allow ACHM continue developing its technology and follow its schedule, unless some operational holdbacks take place. ACHM was intending to establish a reserve of at least 8% of the gross proceeds of the Offering (up to a maximum of $250,000) to retain an effective investor relations firm to perform financial relationship management services and to generate after-market interest in ACHM's stock.

ACHM has agreed to issue and sell to the Placement Agent five-year warrants to purchase, at a price of $.35 per share, a number of shares equal to 20% of the number of shares sold in the offering. This translates into 6,900,000 shares.

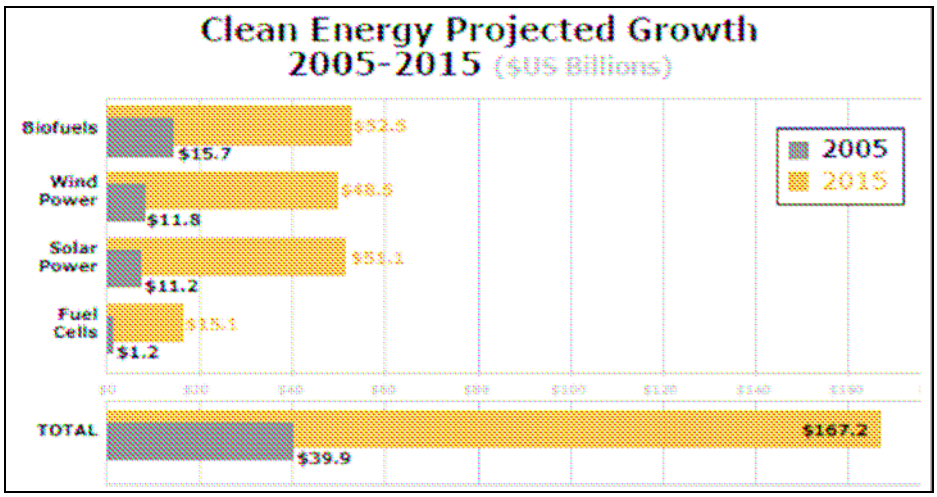
Industry Overview

Overall clean energy trends

Recently, the world has faced a number of problems in the energy sector, relating to the use of fossil fuels, especially oil and natural gas:

- Constantly rising and extremely volatile oil prices;
- Environmental concerns about pollution and greenhouse gas emissions from burning coal and petroleum products;
- Constantly rising world demand for energy coupled with depleting natural reserves of fossil fuels;
- Desire of the West to reduce its dependence on energy sources from "unstable" regions, such as the Middle East, Africa and the CIS.

As a result, quite a few government initiatives have been brought forward to stimulate research and adoption of alternative sources of energy. Clean Edge forecasts that these alternative segments will grow significantly between 2005 and 2015:



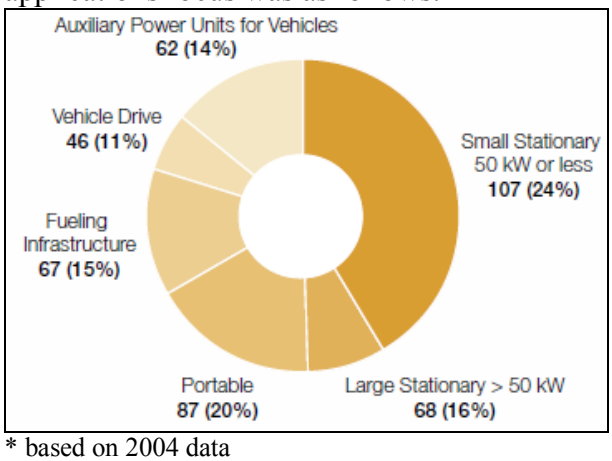
Source: http://www.cleanedge.com/reports/index.php?report=trends2006

Fuel cell trends

Fuel cells hold particularly good shorter-term prospects in electric power generation applications – in both distributed and grid-based formats – and as power sources for portable electronic devices (wireless phones, portable computers, etc.). Full cell-powered industrial stationary and motive power equipment (such as uninterruptible power supplies, lift trucks, automated guided vehicles and the like) are likely to achieve some commercialization as well during the next ten years.

Motor vehicle-related fuel cell demand is expected to develop more slowly, constrained by technical and infrastructure-related issues, as well as by high cost barriers. In addition, hybrid internal combustion engine/battery vehicles are viewed by many as an environmentally satisfactory alternative to conventional automotive power plants for the time being. The Freedonia Group does not expect widespread availability of fuel cell vehicles until well into the next decade[14]. Nevertheless, the use of fuel cell vehicles in government and commercial fleets is expected to provide impetus to market growth through 2009, as automakers continue to invest in demonstration and test marketing programs.

In a 2005 Fuel Cell Industry survey, carried out by USFCC, the distribution of fuel cell applications focus was as follows:



* based on 2004 data
Source: http://www.usfcc.com/resources/2005WorldwideFuelCellSurvey.pdf

It can be seen that Vehicle Drive applications have a relatively small share (only 11%), but this is likely to change as soon as the problems identified above are overcome.

Clean Edge forecasts that the global fuel cell and distributed hydrogen market will grow from $1.2 billion (primarily for research contracts and demonstration and test units) in 2005 to $15.1 billion by 2015[15].

WinterGreen Research, Inc. estimated in May 2004, that the cost of new global infrastructure for fuel cell refueling would rise from $2 billion per year initially to $21 billion per year by 2010[16]. This cost will likely be borne by governments as well as private industry. Market growth depends on $5 billion infrastructure investment in local hydrogen manufacture for fuel cells.

World commercial demand for fuel cell products and services, including revenues associated with prototyping and test marketing, is projected to increase sevenfold to $2.5 billion in 2009

[14] Source: http://www.the-infoshop.com/study/fd30204-fuel-cells.html.
[15] Source: http://www.cleanedge.com/reports-trends2006.php.
[16] Source: http://www.researchandmarkets.com/reportinfo.asp?report_id=72205.

and reach $13.5 billion in 2014[17]. According to the Freedonia Group[18], world fuel cell spending (including research and development funding and investment in fuel cell enterprises, in addition to commercial sales) will rise to $10.8 billion in 2009. Although commercial demand is currently limited, a number of viable markets for fuel cells are expected to develop over the next ten years as technological advances and economies of scale help drive costs down to competitive levels. High petroleum prices and ongoing concerns about the environment will also contribute to fuel cell market gains over the coming decade, supported by government funding and subsidies in the US, Japan and the European Union, among other areas.

Fuel cell sales are expected to come from three main market applications: automotive, stationary, and portables. Real Publishing estimated that the global fuel cell sales could generate nearly $35 billion if market conditions improved for automotive fuel cells[19].

Fuel cells in transportation

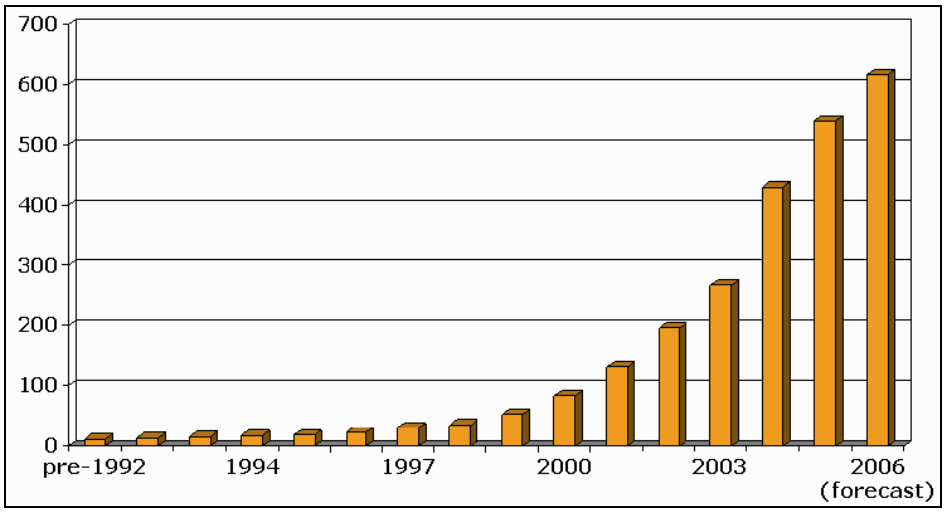
There are four basic challenges to commercialization of hydrogen fuel cell vehicles[20]:

- Ensuring that fuel cell vehicles are as durable as today's vehicles;
- Reducing the cost of building fuel cell systems to be competitive with internal combustion engines;
- Increasing vehicle driving range by improving on-board storage capacity and vehicle efficiency. Currently, fuel cell vehicles can travel about 100-200 miles before refueling.
- Investing in hydrogen fuel infrastructure.

Automotive industry leaders have estimated that fuel cell vehicles could account for 20% to 25% of new car sales within the next 20 to 25 years, a potential market of 12 million to 15 million vehicles each year[21]. Every major automaker is looking at fuel cells either for powering vehicle propulsion, or for supplying electricity for non-propulsion power needs such as lights and air conditioning.

[17] Source: http://www.the-infoshop.com/study/fd30204-fuel-cells.html.
[18] Source: http://www.powerelectronics.com/news/fuel-cell-market/.
[19] Source: http://www.researchandmarkets.com/reports/c/60a02a/0336/.
[20] Source: http://www.fuelcellpartnership.org/tourguide/tour2d.html.
[21] Source: US Fuel Cell Council, http://www.usfcc.com/resources/outreachproducts.html#form.

Cumulative number of fuel cell vehicles:



Source: http://www.fuelcelltoday.com/FuelCellToday/FCTFiles/FCTArticleFiles/Article_1083_MarketSurvey2006.pdf

Fuel Cell Today presented the following expected fuel cell vehicles launch timetable:

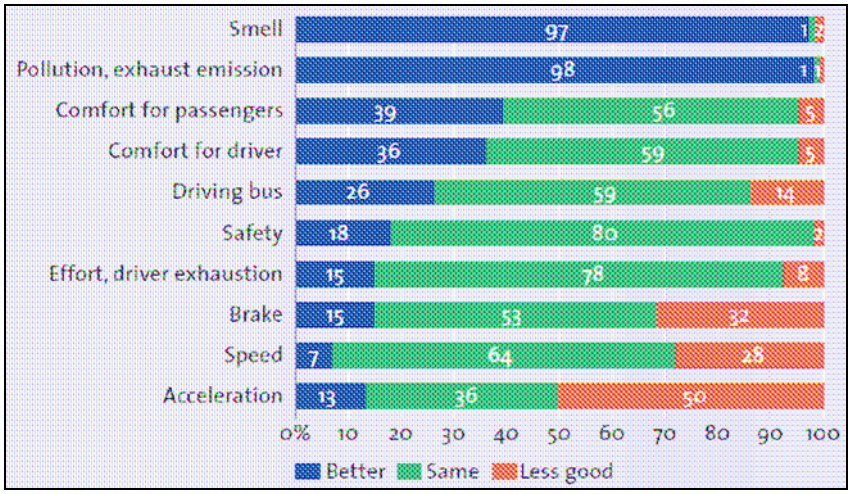
Manufacturer	Year	Numbers	Notes
DaimlerChrysler (Germany)	2012	10,000	Initial launch
	2015		Mass Market
Ford (USA)	2015		"commercial readiness"
GM (USA)	2010-2015		Commercial viability
	2025		Mass Market
Honda (Japan)	2010	12,000 (in USA)	Start production
	2020	50,000 (in USA)	
Hyundai (Korea)	2010		Road tests 2009
Toyota (Japan)	2015		Will cost US$50,000

Source: http://www.fuelcelltoday.com/FuelCellToday/FCTFiles/FCTArticleFiles/Article_1083_MarketSurvey2006.pdf

California Fuel Cell Partnership also reports[22] that automakers estimate hydrogen fuel cell vehicles to be ready for the public sometime between 2010 and 2020.

Tests of fuel cell buses in Europe within the CUTE framework (described further in this report), have revealed that fuel cell buses performed decently versus their internal combustion counterparts, according to drivers' responses:

[22] Source: http://www.fuelcellpartnership.org/tourguide/tour2c.html.



Source: http://www.fuel-cell-bus-club.com/modules.php?op=modload&name=UpDownload&file=index&req=getit&lid=750

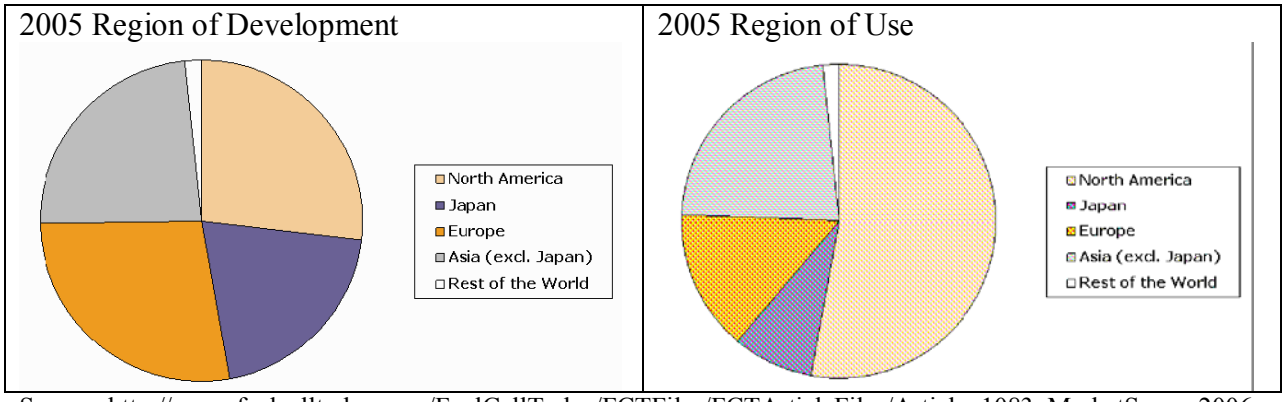
In May 2004, WinterGreen Research, Inc., forecast that total vehicle fuel cell markets for autos would grow from $772.7 million in 2007 to $98 billion by 2013[23].

Regional trends/forecasts

The Freedonia Group expects[24] that the largest national fuel cell markets will be found in the industrialized regions, where pre-commercialization activity has been concentrated – in North America, Western Europe and Asia/Pacific, at least initially. In the longer term, developing countries with insufficient and/or substandard central power grids hold the potential to comprise significant markets for fuel cell-based electric power generation systems. In 2004, five countries – the US, Japan, Germany, Canada and the UK – accounted for close to three-quarters of world fuel cell spending, including government grants and contracts, venture capital and outside equity investments. However, fuel cell spending is also sizable in several other nations such as China, Italy, France and South Korea.

Fuel Cell Today presents the following findings from their survey published in March 2006, regarding the regions where fuel cell vehicles are being developed and where they are actually used:

[23] Source: http://www.researchandmarkets.com/reportinfo.asp?report_id=72205.
[24] Source: http://www.the-infoshop.com/study/fd30204-fuel-cells.html.



Source: http://www.fuelcelltoday.com/FuelCellToday/FCTFiles/FCTArticleFiles/Article_1083_MarketSurvey2006.pdf

According to the findings of the survey, Europe seems to be strong in manufacture but weak in adoption of fuel cell vehicles.

USA

George W. Bush proposed an initiative that calls for a 22% increase in clean-energy research and a goal of replacing at least 75% of US Middle East oil imports by 2025[25].

***California*[26]**

In the USA, California has been most aggressive in terms of fuel cell technology adoption.

Since 2000, the California Fuel Cell Partnership (CaFCP) has supported fuel cell bus programs operating in California. Three California transit agencies are CaFCP members and operate demonstration fuel cell buses in the Palm Springs area (SunLine Transit Agency), Silicon Valley (Santa Clara Valley Transportation Authority) and Northeast San Francisco Bay Area (AC Transit). In 2003, all three CaFCP transit members finalized an Evaluation Plan to assess demonstration bus programs in California. At the beginning of 2005, Santa Clara VTA started operating three buses powered by Ballard Power Systems fuel cells (Preliminary NREL evaluation results). In 2006, Oakland's AC Transit placed three Van Hool buses into regular service. ISE Corporation integrated UTC fuel cells with high voltage batteries to create a hybrid powertrain for these buses. SunLine Transit Agency operates one fuel bus in regular service, using the same platform as the fuel cell buses deployed at AC Transit.

Other CaFCP members involved with fuel cell bus demonstrations include the US Department of Transportation, US Department of Energy, California Energy Commission, California Air Resources Board, Toyota, Chevron and Hydrogenics.

[25] Source: http://www.cleanedge.com/reports-trends2006.php.
[26] Information taken from the California Fuel Cell Partnership's website, http://www.fuelcellpartnership.org/fuel-vehl_buses.html.

Europe

Clean Urban Transport for Europe (CUTE)[27]

Clean Urban Transport for Europe is a European Union project initiative to test three Citaro fuel cell buses each in nine cities in Europe. Between 2003 and 2005, twenty seven innovative, hydrogen-powered, fuel cell buses were built and placed in the public transport fleets of nine European cities, in seven different countries. At the same time original and leading edge hydrogen production, refueling and support systems were also constructed. The buses were placed on normal public transport routes and data collected against a range of performance measures including reliability, economy, safety and public acceptance. Life cycle analysis of emissions and costs were also undertaken.

UK

London recently announced plans to bring 70 fuel cell vehicles to the city by 2010, probably boosted by the 2012 Olympics[28].

Iceland

Ecological City TranspOrt System (ECTOS)[29]

The overall objective of ECTOS is to implement a demonstration of state-of-the-art hydrogen technology by running part of the public transport system with fuel cell buses within Reykjavík, Iceland. The energy chain will be next to CO_2 free, because domestic geothermal and hydro-powered energy sources will be used to produce hydrogen by electrolysis.

Japan

According to a November 2004 report[30] released by Fuji Keizai Co., a Tokyo-based market research firm, Japan's fuel cell market will be worth about US$2.7 billion in 2015 and about US$11.7 billion in 2020.

Canada

National Research Council (NRC) of Canada reports that "a study by a leading American market research company"[31] predicts that Canadian fuel cell industries – most of which reside in Vancouver – will seize nearly 30% of an estimated US$2.4 billion share of the world fuel cell market in 2007. The Council reports that in 2004, Canadian fuel cell companies generated revenues of CAD 133 million, and that R&D expenditures increased from CAD 218 million in 2003 to CAD 237 million in 2004 – an increase of 8%. A Hydrogen Highway is expected to be operational by 2010 Winter Olympics, extending north from the Vancouver airport to the Resort Municipality of Whistler.

[27] Source: http://www.fuel-cell-bus-club.com/modules.php?op=modload&name=UpDownload&file=index&req=getit&lid=750

[28] Source: http://www.fuelcelltoday.com/FuelCellToday/FCTFiles/FCTArticleFiles/Article_1083_MarketSurvey2006.pdf.

[29] Source: http://www.fuel-cell-bus-club.com/index.php?module=pagesetter&func=viewpub&tid=1&pid=14

[30] Source: http://www.fuelcellsworks.com/Supppage2424.html.

[31] Source: http://www.nrc-cnrc.gc.ca/aboutUs/corporatereports/pdf/vancouver_e_2006.pdf, no source identified.

Australia

Sustainable Transport Energy Project (STEP)[32]

This initiative of the Government of Western Australia's Department of Planning and Infrastructure (DPI) is being run by Path Transit. Three fuel cell buses began service on September 27, 2004. The Perth trial has been endorsed by the United Nations Environment Program and the United Nations Industrial Development Organization. BP produces hydrogen for the project as a by-product at its Kwinana oil refinery (50km south of Perth).

By June 2005 the Perth buses had covered more than 60,000km and completed almost 3,000 operational hours, with almost 60,000 passengers having used the service.

India

In November 2005, the government of India announced plans to put one million hydrogen-fuelled vehicles on the country's roads and generate 1,000MW from hydrogen by 2020 through public-private initiatives[33]. The Steering Group on Hydrogen Energy estimated an investment of about $5.5 billion over 15 years to achieve these objectives. About 4% of this amount would be directed to research, development and demonstration of technology and the rest – to creating infrastructure for hydrogen production, storage, transportation and distribution to meet the need for hydrogen under transport and power initiatives.

The government roadmap proposed two major initiatives – the green initiative for future transport (GIFT) and green initiative for power generation (GIP). The green initiative for transport aims to develop and demonstrate a hydrogen-powered engine and fuel cell-based cars ranging from small two- and three- wheeled cars and taxis to buses and vans. The green initiative for power generation envisages developing and demonstrating a hydrogen powered engine and turbine and fuel cell-based decentralized power generating systems to target 1,000MW generation capacity by 2020.

[32] Source: Wikipedia, http://en.wikipedia.org/wiki/Sustainable_Transport_Energy_for_Perth#STEP

[33] Source: http://www.hindustantimes.com/news/181_1553338,00020010.htm.

Price Chart: Alchemy Enterprises Ltd, one year

Source:
http://www.marketwatch.com/tools/quotes/intchart.asp?symb=achm&sid=2233469&freq=1&time=8&siteid=mktw

ALCHEMY's S.W.O.T ANALYSIS SUMMARY

Strengths	Opportunities
• A working device has been tested. • A prototype is expected in early 2007 and mass production later that year. • JPL's unparalleled expertise in applied science. • Experienced management. • Working partnership with a bus manufacturer. • Private placement brought in over $10 million in net proceeds. • On-demand production of hydrogen for fuel cells. • Easy refueling. • Magnesium is an abundant element. • Low expected costs of HYDRATUS production and fuel. • Bus and other fleets targeted first – no need for a wide refueling network to launch.	• Governments stimulate alternative energy: tax incentives on federal and state levels. • Hybrid vehicles paved the way and have been accepted by the public. • A PR company has been hired to increase visibility. • The "clean energy" market is expected to boom. • Multiple revenue streams are possible: royalties from vehicles, refueling stations and fuel itself. • Bus and other fleets targeted first – greater demand for savings in this segment. • Hydrogen fuel cell buses are being tested all over the world, representing a "hot" segment.
Weaknesses	**Threats**
• Need for refueling infrastructure. • No working prototype available yet. • Grid electricity used to recharge the fuel – not an environmentally friendly solution because power plants pollute the environment. • Limited share liquidity. • Large accumulated losses and no revenues. • Magnesium is not readily available in pure form and represents a fire hazard in certain forms.	• Competing technologies are in development. • Technology is licensed from JPL, but not owned. • Fuel cell-powered vehicles are being only introduced, representing mostly prototypes. • High cost of fuel cells. • Hydrogen infrastructure is already being developed – too high cost to give up in favor of another infrastructure

Analyst: Kipley J. Lytel, CFA, is a Senior Partner with money management firm Montecito Capital Management and Chief Operating Officer of a publicly traded company focused on taking companies public and staying public with a compliance support platform. Mr. Lytel also provides investment services to several independent equity research companies. For over three years, Mr. Lytel served as the lead securities analyst for M.L. Stern & Company - a leading regional investment securities firm headquartered in Beverly Hills, with offices serving most major California markets & Nevada. Previously, he performed portfolio management and analyst coverage during his employment with two hedge funds. His background has been marked by his experience as a technology sector analyst, coverage spanning various sectors: telecommunications & wireless, IT equipment/services, integrated systems, networks, etc. He received his Masters of Business Administration (MBA) from the Peter F. Drucker School of Management at Claremont Graduate University, where he also received his undergraduate Bachelors of Arts (BA) degree in Economics. Mr. Lytel is a Chartered Financial Analyst (CFA) and an active member of the CFA Institute and the Los Angeles Society of Financial Analysts (LASFA). He has frequently served as a Senior Grader for CFA Institute's Examination and has been a

Regional Expert for CFA Institute's advisory panel on investment management covering: institutional portfolio management, individual portfolio management, analysis of alternative investments, macro strategy formulation, and quantitative modeling applications. Mr. Lytel has been cited and/or published in Barons, Financial Planning Magazine, Physicians Financial News, Forbes, Wealth Manager, among others.

Wasserman Morris & Company, ltd, is an independent fee based research, publishing and distribution firm whose contract analyst adhere to the ethics and standards of the Association for Investment Research Management. The views expressed in this research report reflect the analyst's personal views about the issuer and its securities. Opinions and recommendations contained in this report are submitted solely for advisory and information purposes and are not intended as an offering or a solicitation to buy or sell the securities mentioned above. The analysts are responsible only to the public and this report is not a service to the company. We received a fee of $25,500 for the Initiation of Coverage contract of one year coverage from a third party. We do not inform any company in advance of the nature or conclusions of our analysts' reports in advance of paying the fee nor can a company withdraw from coverage before the expiration of the one year term. Neither the Analysts nor the company own equity or debt securities of the companies on which our contract analysts report. More information about Wasserman Morris & Company policies are available at www.wassermanmorris.com. Wasserman Morris & Company Inc. 36 West 44th Street, Suite 620, New York, NY 10036 Phone: (212) 382 1791 Fax: (212) 221 1578 Web www.wassermanmorris.com Email: info@wassermanmorris.com

Information, opinions or recommendations contained in this report are submitted solely for advisory and information purposes by the qualified professional analyst. Wasserman Morris & Company provides report publication and distribution services only. The information used and statements of fact made have been obtained from sources considered reliable but neither guarantee nor representation is made as to the completeness or accuracy. Such information and the opinions expressed are subject to change without notice. This report or study is not intended as an offering or a solicitation of an offer to buy or sell the securities mentioned or discussed. Please read full disclosures at www.wassermanmorris.com.