



[XXXXXX]

TECHNOLOGIES

BUSINESS PLAN FOR PRODUCING AND MARKETING
THE XXX HYDROGEN GENERATION SYSTEM

CONTENTS

I. EXECUTIVE SUMMARY	4
The Opportunity.....	4
Proposed business	4
The Technology	4
Market Potential	5
Competitive Advantages	5
Management Team.....	5
Stage of Development	6
Funding Sought	7
Exit Strategy	7
II. MISSION & STRATEGY	7
Mission.....	7
Strategy.....	7
Service, Support and Warranties	8
III. MARKETS.....	9
Total Market Opportunity.....	9
Demand Overview	9
Current Diesel and Distillate Market (U.S. and Global)	10
Looking Ahead.....	10
Market Drivers	11
Heavy Trucks	11
Customer Need	12
Market size (US).....	12
Sales Channels and Strategy	15

Marine (Tug, Tow, Dredge and Other).....	19
Rail.....	21
Power Generation.....	22
Other Markets.....	23
Competition	24
Direct Competitors.....	24
Dynamic Fuels Systems	24
Blutip Power (formerly Hy-Drive Technologies)	25
Epoch / HybridTech Energy.....	26
HyPower Fuel Inc.	27
Ronn Motors	27
Greenchek Technology, Inc.....	27
Greencell Technologies (Distributor)	27
Indirect Competitors	28
WorldKlass Technologies	28
EcoEmission Systems, Inc.....	28
Other Threats / Challenges	29
Alternative Fuels	29
Other Threats.....	30
IV. Operations	31
Prototype Stage	31
Prototype Stage Alternative Approaches	32
Legal	32
Pretest Engineering.....	33
Performance and Durability Testing	33

Professional Services and Management Salaries.....	34
Ancillary Expenses.....	35
Pre-Production Preparation.....	35
Total Prototype Funding & Timelines	37
Operations	39
Sales and Marketing.....	39
Manufacturing	41
Installation, Warranty & Service	41
Research & Development	44
Funding Request – Operations.....	45
V. Financial Projections.....	46
Appendix A: Tables and Source Data	47

I. EXECUTIVE SUMMARY

THE OPPORTUNITY

Concerns about energy supplies, fuel costs and greenhouse emissions are forcing companies to search for ways to reduce both fuel consumption and exhaust emissions. Global demand promises to make finding solutions to these challenges even more critical in coming decades. More than seven million barrels of diesel fuel are burned daily by the millions of trucks, buses, barges, trains, ships and power generators operating worldwide. [XXXXX] Technologies has developed a commercially viable solution that can help reduce that number by as much as 22 percent for the nearly 3 million trucks, barges, locomotive and electric generators in service in the United States when outfitted with our XXX hydrogen generation system.

PROPOSED BUSINESS

[XXXXX] Technologies has developed proprietary technology that allows for efficient, reliable on-demand generation of hydrogen that when injected into the fuel system of diesel internal combustion engines has demonstrated fuel savings of 22 percent in dynamometer testing. Our proprietary electrode technology overcomes the heretofore challenge of generating sufficient hydrogen to produce desired fuel savings without overheating the electrodes to the point of failure. We intend to market an affordable, compact hydrogen generation unit that can be installed on diesel engines in a range of applications that will significantly improve fuel efficiency and reduce undesirable exhaust emissions.

THE TECHNOLOGY

Hydrogen has been proven to improve horsepower, torque and general performance in internal combustion engines when injected into the fuel system, while reducing fuel consumption and exhaust emissions by anywhere from 10 to 40 percent. The reason is that hydrogen acts as an accelerant in the fuel chamber, causing faster and more complete combustion of the fuel at the moment of ignition so that a far higher percentage of the fuel is put to work driving the pistons and less is exhausted in a partially combusted state having done little or nothing to power the engine.

The challenge in developing a commercially viable onboard hydrogen generation unit has been that the energy required to hydrolyze water into its hydrogen and oxygen components in quantities sufficient to provide the desired benefits causes rapid degradation of electrodes, resulting in system failure. Therefore, systems developed to date have had to choose between performance and durability. Those that last do not provide the fuel savings necessary to justify the investment, while those that provide satisfactory savings are unreliable, resulting in maintenance costs that negate whatever fuel savings the system may provide.

[XXXXX] Technologies proprietary technology overcomes this hurdle by incorporating nanotechnology in its electrodes which greatly increases the surface area where hydrolysis takes place. This increased surface area reduces the current required to generate sufficient hydrogen, which in turn extends the lifespan of the

electrodes far beyond what is available on the market today. The result is more efficient hydrogen generation and superior durability.

MARKET POTENTIAL

We estimate the total domestic market potential to be \$8.8 - \$17.3 billion based upon a targeted Average Unit Price (AUP) of \$8,000 per unit. The ultimate size of the market will be determined by both the current price of diesel fuel and the actual fuel savings provided by the XXX system. The higher the cost of fuel and the greater the fuel savings realized, the greater the market potential as the cost savings qualify the investment for a greater number of diesel consumers.

COMPETITIVE ADVANTAGES

Our distinct competitive advantages include the superior performance of our proprietary electrode technology, our relationships with managers of large transportation fleets, our comprehensive installation strategy and the fact we are American-based, which we feel will help us with U.S.-based prospects since our primary competitors are all based in Canada.

MANAGEMENT TEAM

Partner 1 – President and Chief Executive Officer

Partner 1 has been the driving force behind the XXX system, working tirelessly to bring it to market since 2004 when he acquired the rights to an early prototype. He is expert in hydrogen injection technology and has developed a close working relationship with the scientist who has become [XXXXX] Technologies' collaborator in developing our proprietary system. His vision and determination have been instrumental in keeping the project alive and moving it forward.

Partner 1 will be responsible for coordinating all technical developments, supply chain, production and installation operations.

Partner 2 – Chief Financial Officer

Partner 2 has extensive sales and business management experience, spending the bulk of his early years in specializing in pensions, profit-sharing and related employee benefits within the insurance industry. He successfully started his own business, foodstuffs and materials from South and Central America. He later persuaded Walmart to carry paintball gear, selling up to one billion paintballs per order.

Partner 2 will be the chief financial officer responsible for finance and administration, as well as assisting with sales efforts, particularly with our large truck fleet prospects.

Partner 3 – Vice President, Sales

Partner 3 is an accomplished sales professional, in both corporate and entrepreneurial settings. His previous employment experience includes Eagle-Picher, IBM and ARA Services. He has twice built sales volumes at

small companies that resulted in strategic sales of the company, first as VP of sales for a purveyor of costume jewelry, then as a partner in a picture frame business.

Partner 3 will be responsible for all sales and marketing efforts. He will serve as the sole sales representative at the outset, then will take on the role of sales management as the sales force grows.

Our Scientific Collaborator

We refer anonymously to this person throughout this document for privacy reasons. He is the holder of a number of patents, including those involving our proprietary electrodes. He has agreed in principle to license the electrode technology exclusively to [XXXXX] Technologies for the purpose of hydrogen injection in internal combustion engines. He has also agreed to direct our internal R&D efforts. He not only brings a wealth of knowledge to water hydrolysis, but has successfully managed international R&D efforts as far away as Israel.

STAGE OF DEVELOPMENT

The XXX system has been in development since 2004 under the guidance of Mr. Partner 1, working with an independent authority on water electrolysis for hydrogen generation. An early prototype was tested on a dynamometer at Caterpillar, Inc. in Louisville, Kentucky that demonstrated a 22 percent reduction in fuel consumption. Concurrently, our scientific collaborator has run durability tests in his laboratory showing no electrode degradation after at least 1,000 hours of continual operation.

Further prototype testing needs to be done to demonstrate the following:

- Actual fuel savings under a variety of operating conditions
- Durability of electronic controls and other components under real world conditions
- Durability of the electrodes over extended periods (up to 10,000 hours)

The system will also require engineering for manufacture and installation.

Meanwhile, [XXXXX] Technologies has held discussions about the XXX system with fleet managers, barge operators and utilities representing more than \$150 million in potential sales about the viability of the system in their operations. All have expressed strong interest, including some who have indicated interest in investing in commercial development of the product.

Since our intellectual property is the cornerstone of our business, we feel it is prudent to perform an exhaustive patent search prior to any of the above in order to ensure that our system is not only protected from competitive systems, but that we will not run into any challenges regarding our ability to freely market our solution.

We are confident that the prototyping stage will prove successful, given that hydrogen injection has been proven to be an effective method of reducing fuel consumption and exhaust emissions, electronic controls are routinely installed on trucks, barges and in other applications where the XXX system might be used and the laboratory tests have shown no reason to doubt our electrode durability.

FUNDING SOUGHT

We are seeking funding in two stages. The first is a final prototype stage that will include final product engineering for commercial development and manufacture, performance testing under laboratory and real world situations to determine durability, fuel savings and emission reduction and finalization of legal matters regarding patents and the exclusive rights and obligations between [XXXXX] Technologies and our scientific collaborator.

Prototype Stage - \$660k - \$910k / 6 months – 1 year to finalize all legal protections, prototype, prove commercial viability, engineer for final production, generate pre-sales interest and initiate customer evaluation.

Production/Operation Stage \$2M - \$10M to put into production, fund ongoing research, market and service the product and initiate ongoing operations until profitability is attained.

EXIT STRATEGY

We anticipate a strategic sale or private equity acquisition in at end of Year 5, which at 5 times EBITDA would garner \$68.8 million, representing an internal rate of return of 87% on an initial investment of \$3 million. An alternative exit strategy would be to seek an initial public offering, though this would be a secondary strategy.

II. MISSION & STRATEGY

MISSION

[XXXXX] Technologies will develop, produce and sell proprietary on-demand hydrogen generation systems that reduce fuel consumption and emissions in the transport and power generation industries. We are technology leaders in the field of on-demand hydrogen generation, providing superior performance and reliability to our customers, opportunities to our employees and returns to our investors.

We value our intellectual property and are committed to research and development that keeps us a step ahead of the competition in our mission to find clean, affordable energy saving solutions in a wide range of applications.

STRATEGY

[XXXXX] Technologies will leverage its proprietary technology in onboard, on-demand hydrogen generation to provide our customers with reliable, cost-effective energy saving and emission reducing hydrogen generation systems. Our initial focus will be on the long-distance and high-use truck market, where we will target large end users in the retail and waste-hauling industries. Our initial contacts within these industries have demonstrated strong interest and a willingness to move rapidly toward deployment.

We will outsource manufacture of the system so that we can 1) maintain our focus on our core competencies of marketing and R&D, 2) leverage the manufacturing expertise of others, 3) minimize the capital investment required to begin production, 4) retain the ability to ramp up production quickly and 5) maintain low levels of overhead. This last point is important because the attractiveness of our system is based in part on fuel prices. As they can be volatile, so could demand for our system.

Pricing will be set such that we expect to have gross margins, excluding installation expense, in excess of 65 percent. We can justify this thanks to the savings our customers will realize along with the lack of viable competitive alternatives.

Our marketing effort will consist of direct sales to large customers, supplemented by industry-specific vehicles such as trade journals and industry events. We will establish a professional online presence to raise awareness and generate sales leads. We will leverage Search Engine Optimization and social marketing, including Facebook, Twitter and blogging to improve organic search results and generate “buzz” about our product. We envision a branding effort that includes logo decals that our customers may display to demonstrate their investment to save fuel and the environment. These will serve as mobile advertisements for the XXX system.

We will offer a lease program to make the system affordable to a broad range of potential customers. We have been in contact with finance companies and expect to reach agreement on customer financing programs shortly.

It is our intention to leverage our installation operation by providing training materials in print and digital formats to instruct customers on the simple installation of the units. This, too, will reduce the overhead costs of [XXXXX] Technologies.

We will expand our product line into markets where fuel consumption is much higher on a per unit basis, such as marine transport, rail and large-scale power generation. These markets do not offer the same unit volumes, but because of the hydrogen requirements in these environments, we expect the higher average unit price we will be able to command will provide superior margins.

SERVICE, SUPPORT AND WARRANTIES

SERVICE

Installations will be performed through a combination of [XXXXX] Technologies installation techs, trained customer service personnel and [XXXXX] Technologies-certified installation centers. We estimate the cost of installation to be between \$520 and \$580 per unit, depending upon customer mix (large operations with their own service personnel

SUPPORT

An 800 hot-line will be established to support each unit in the field. DVD's on training, installation, trouble shooting and parts replacement will be provided with each sale and for each customer location where

service is performed. Suggested routine preventive maintenance will be established as well as guidelines on when to service.

WARRANTY

We intend to warranty the product against defects in materials and workmanship only, from the date of installation for the earliest of:

- 1) One year
- 2) 150,000 miles
- 3) 3,000 hours of engine use

The units will be modular in design, allowing for easy repair and service.

III. MARKETS

TOTAL MARKET OPPORTUNITY

We have performed extensive analysis on the U.S. diesel market and estimate our total domestic market opportunity at more than \$12 billion in the transportation and power generation markets (Table 1). Though we understand that we will not capture every opportunity, our research indicates there is demand for our product and provides a roadmap to tap it. The sections that follow outline the opportunities and our strategy to pursue them.

Table 1: Total Market Potential (dollars)

Market	Revenue Potential (millions)
Heavy Trucks	4,345 - 12,900
Workboat	530
Rail	3,691
Power Generation	258
Total Opportunity	8,824 – 17,379

Note that the U.S market represents approximately 1/6 of the global diesel demand, indicating that the global market opportunity is far larger than what we have presented here.

DEMAND OVERVIEW

Though [XXXXX] Technologies' XXX system can reduce fuel consumption in any internal combustion engine (ICE), the most cost-effective application of the system is in those situations where unit fuel consumption is highest. Detailed analysis of potential markets have identified transportation (trucking, marine and rail) and power generation as those that would benefit most from installation of the XXX system. These industries face significant fuel costs and are constantly in search of methods to reduce consumption and expense. [XXXXX] Technologies XXX system offers a simple, safe and affordable solution to this challenge.

While we foresee global demand for the XXX solution, our analysis will focus primarily on the U.S. market, since we feel the market provides more than ample opportunity to ensure a successful launch without diverting our attention and diluting our focus on key market opportunities.

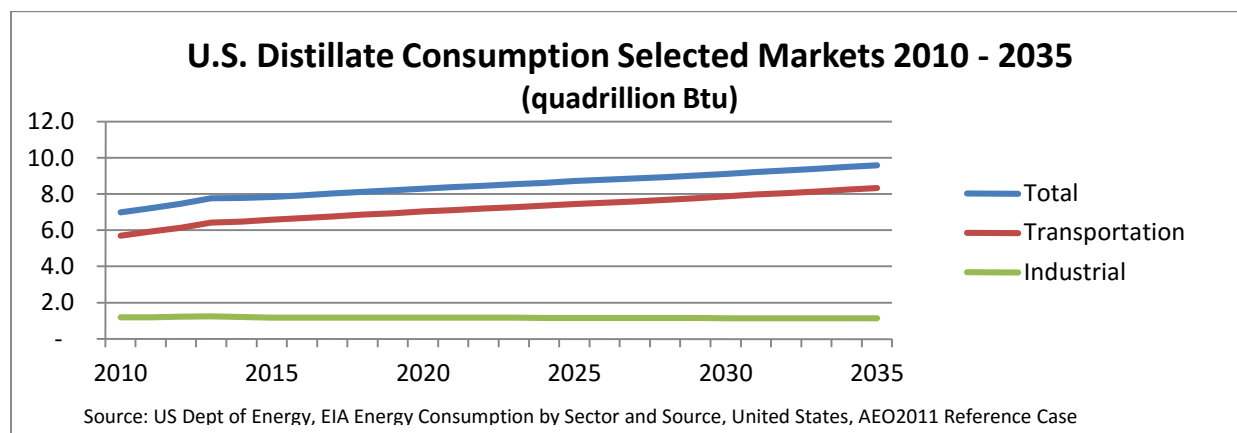
CURRENT DIESEL AND DISTILLATE MARKET (U.S. AND GLOBAL)

Diesel fuel, and the broader category referred to as petroleum distillate, has a long been used for transportation, heating and power generation. Globally, distillate consumption exceeds 7.4 million barrels daily¹, quadruple the daily volume in 1965. The United States alone will consume nearly 50 billion gallons of diesel fuel in 2011 at a cost exceeding \$170 billion. Meanwhile, rising global demand has driven the U.S. price of No. 2 diesel to \$3.52 per gallon as of February 2011², more than double where it was ten years earlier and more than triple the price in 1996. This has placed tremendous pressure on energy consumers to find ways to reduce fuel costs.

LOOKING AHEAD

Despite intensive efforts to develop alternative energy sources, U.S. petroleum distillate consumption is expected to increase 29% between 2010 and 2035 (Figure 1), most of which will be in the form of diesel fuel for transportation (Figure 2).

Figure 1

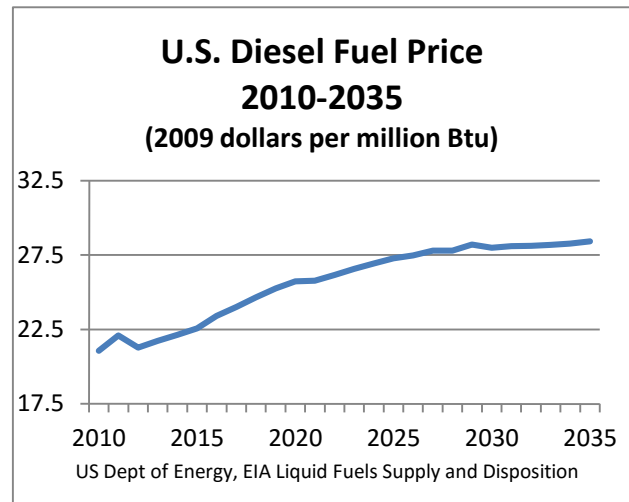
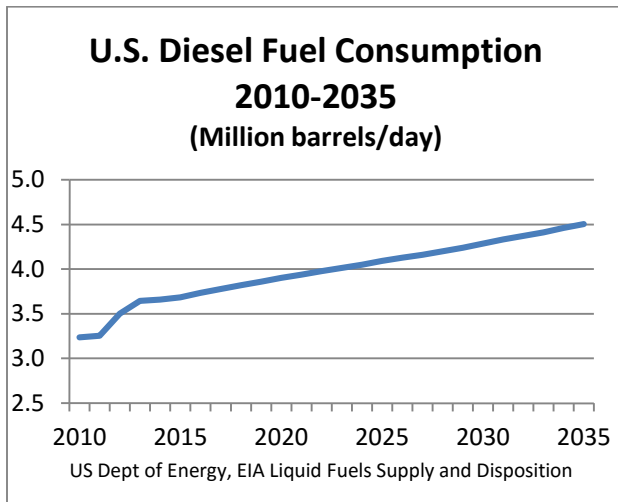


Industrial distillate consumption for both heating and power generation are expected to decline slightly as businesses transition to more affordable energy sources, but will remain a significant expense for industrial consumers. And as has been the case historically, fuel prices will continue to increase, with an expected inflation-adjusted rise of nearly 35% by 2035 (Figure 3).

¹BP Statistical Review of World Energy June 2010

² US Energy Information Administration

Figures 2 and 3:



As these charts show, opportunities for solutions that reduce energy consumption for diesel internal combustion engines, such as those used for transportation and power generation are not only significant today, but will continue to grow for at least the next 25 years. This is the market the [XXXXX] Technologies XXX system shall address.

MARKET DRIVERS

There are three primary factors we anticipate will drive demand for [XXXXX] Technologies' XXX system: rising energy demand, higher fuel prices and the need to satisfy government mandates regarding fuel efficiency and emission reduction. The XXX system, by reducing fuel consumption between 10% and 40%, and with what we anticipate will be corresponding reductions in the emission of hydrocarbons (HC), carbon monoxide (CO), carbon dioxide (CO₂) and nitrous oxides (NO_x), will help industrial and transportation customers realize immediate improvements in both fuel efficiency and emission control.

The appeal of the XXX system to our potential customers will be determined by their annual fuel cost per unit (e.g. the cost per truck, towboat or generator), the percent fuel savings provided by the XXX system and the cost to acquire and maintain the XXX system. We have determined that the best opportunities lie within the following categories:

- Long-distance heavy trucks
- Marine (Tugs, Tows and Dredges)
- Rail
- Power generation

HEAVY TRUCKS

Transport systems utilizing diesel fuel include local delivery trucks, over-the-road tractor-trailer rigs, farm and work equipment, buses, rail, barge and ocean-going vessels. Each provide sizable opportunities for the

XXX system, though certain segments are more desirable targets, due either to the size of the segment itself or the customer economics of that segment. For example, there are far more light-to-medium duty diesel trucks on the road than there are heavier vehicles, but because of their relatively low per vehicle fuel consumption, the fuel savings gained from the XXX system would require a much lower Average Unit Price (AUP) to make purchase economically viable for the customer. Therefore, at least initially, it has been decided to pursue those markets where customers will realize significant net savings at higher AUPs. Our initial development and marketing efforts will focus on the following:

CUSTOMER NEED

Depending upon the cost of fuel, energy costs are either the largest or second largest expense item for the trucking industry according to the American Trucking Association. Reducing fuel expense is an important focus for the industry during the best of times, but during periods of rising fuel prices, it becomes a matter of survival. When diesel prices rose above \$3.50/gallon in 2008, nearly 1,000 U.S. trucking firms went bankrupt in the first quarter of that year³. Firms are constantly searching for ways to reduce fuel consumption, including speed governors, negotiated fuel discounts and smart routing. Larger firms have lobbied for universally lower speed limits in an effort to force independent truckers who view speed as a competitive advantage to slow down, allowing the major carriers to remain competitive while saving fuel. These facts all demonstrate that there is strong industry demand for tools that reduce fuel consumption. The XXX system is designed for precisely that purpose.

MARKET SIZE (US)

We have performed an extensive analysis of the U.S. truck market (see Appendix A) to determine how many trucks would benefit from the XXX system. Based upon an average unit price (AUP) of \$8,000, we believe any customer that realizes savings of \$4,000 or more annually from the XXX system is a viable prospect, whether leasing or buying the unit outright (Table 2).

Table 2: Minimum Required Customer Savings (\$)

Outright Purchase		60 Month Lease	
XXX AUP*:	\$ 8,000	Monthly Lease cost	\$ 182
Required MIRR*	20%	Security Deposit (two payments)	\$ 364
Finance Rate	0%	End of lease buyout	\$ 1
Savings Reinvested at:	0%	Total 60 month lease cost	\$ 11,275
Annual Savings required (\$)	\$ 3,979	Total Cost/month (over 60 months)	\$ 188
		Savings required for 75% return/month	\$ 329
		Annual Savings required (\$)	\$ 3,946

* Average Unit Price

** Modified Internal Rate of Return

³ <http://www.usnews.com/news/national/articles/2008/05/02/high-fuel-costs-threaten-bankruptcy-for-truckers>

The actual dollar savings realized with installation of the XXX system will vary based upon the actual fuel economy improvements realized and the cost per gallon of diesel fuel (one hundred gallons of fuel saved represents greater savings at \$3/gallon than it does at \$2/gallon).

The U.S. Department of Transportation (USDOT) reported that there were 2.214 million long distance combination trucks on the road in 2008, averaging 5.35 miles per gallon and 64,800 miles traveled annually. Based upon detailed travel statistics provided by the 2002 Vehicle Inventory and Use Survey, we estimate that the number of new and existing trucks that would meet the savings criteria laid out in Table 2 ranges anywhere from 683,000 (10% fuel savings at \$2.50/gallon) to 1.79 million (25% savings at \$4.50/gallon). With diesel fuel prices averaging \$3.50 in February of 2011, we estimate at least 1.37 million trucks are viable prospects, representing a total market opportunity of \$9.65 billion at an \$8,000 AUP.

The tables on the following page offer a summary of the market opportunity. Existing trucks are split into two age categories because newer trucks tend to travel more miles than older trucks. If nothing else, this tells us that not all trucks are created equal and that the USDOT data needs to be parsed in order to eliminate those trucks that do not meet the required savings criteria.

Market Potential - Number of Trucks (New) at Fuel Cost/Gal and Pct. Fuel Savings

Fuel savings:		10%	15%	20%	25%
Fuel Cost/gallon					
\$	2.50	81,008	326,942	326,942	361,296
\$	3.00	281,008	326,942	361,296	361,296
\$	3.50	326,942	326,942	361,296	361,296
\$	4.00	326,942	361,296	361,296	361,296
\$	4.50	326,942	361,296	361,296	361,296

Market Potential - Number of Trucks (Existing) at Fuel Cost/Gal and Pct. Fuel Savings

Fuel savings:		10%	15%	20%	25%
Fuel Cost/gallon					
\$	2.50	402,600	1,043,100	1,043,100	1,431,609
\$	3.00	402,600	1,043,100	1,431,609	1,431,609
\$	3.50	1,043,100	1,043,100	1,431,609	1,431,609
\$	4.00	1,043,100	1,431,609	1,431,609	1,431,609
\$	4.50	1,043,100	1,431,609	1,431,609	1,431,609

Market Potential - Number of Trucks (All) at Fuel Cost/Gal and Pct. Fuel Savings

Fuel savings:		10%	15%	20%	25%
Fuel Cost/gallon					
\$	2.50	683,608	1,370,042	1,370,042	1,792,905
\$	3.00	683,608	1,370,042	1,792,905	1,792,905
\$	3.50	1,370,042	1,370,042	1,792,905	1,792,905
\$	4.00	1,370,042	1,792,905	1,792,905	1,792,905
\$	4.50	1,370,042	1,792,905	1,792,905	1,792,905

Market Potential - Revenue (\$) at Fuel Cost/Gal and Pct. Fuel Savings at \$8,000 AUP

Fuel savings:		10%	15%	20%	25%
Fuel Cost/gallon					
\$	2.50	\$ 4,345	\$ 9,653	\$ 9,653	\$ 12,898
\$	3.00	\$ 4,345	\$ 9,653	\$ 12,898	\$ 12,898
\$	3.50	\$ 9,653	\$ 9,653	\$ 12,898	\$ 12,898
\$	4.00	\$ 9,653	\$ 12,898	\$ 12,898	\$ 12,898
\$	4.50	\$ 9,653	\$ 12,898	\$ 12,898	\$ 12,898

Based upon 2002 VIUS, 2008 USDOT RITA data and extrapolations by Energy Technologies

* based upon USDOT average fuel economy of 5.35 miles per gallon in 2008

Market Potential based upon \$8,000 unit price for existing trucks and \$4,000 for new trucks

SALES CHANNELS AND STRATEGY

The trucking industry is a highly fragmented one, with an estimated 500,000 companies in the U.S. alone. Of these, 96% operate 28 or fewer trucks, 82% operate 6 or fewer and nearly one in nine drivers are owner-operators⁴. Among these firms are common, contract and private carriers. These terms respectively refer to whether a firm provides service to anyone, to a select few clients or only for themselves (a retailer, for example).

Conversely, the manufacture of heavy trucks is relatively concentrated among a handful of players that includes Freightliner (Daimler AG), International Trucks (Navistar), Mack (AB Volvo), Peterbilt and Kenworth (both Paccar). The same holds true for diesel engine manufacturers, with Caterpillar, Cummins and Detroit Diesel dominating the U.S. market. Any strategy to outfit new trucks and retrofit existing ones will need to address these diverse markets.

We believe that retrofitting offers the best opportunity to generate sales in the early stage of operation because of the diverse customer base and because the XXX system offers real savings to the buyer, whereas in the eyes of truck and engine manufacturers (OEMs) it is simply a desirable selling feature to offer their customers. Furthermore, the system can be easily installed on existing trucks, whereas OEMs are likely to require more extensive engineering and redesign of the XXX system and/or their products and manufacturing processes to incorporate it into their product lines. Finally, the retrofit market promises to allow [XXXXX] Technologies to realize the full list price of the unit, whereas the OEM market will likely require a significant discount from list. Therefore, we anticipate virtually all early sales will come from the retrofit market, including recently acquired trucks. It will be essential that we develop the OEM market, however, as this will be an important source of revenue as the retrofit market becomes saturated. Our plans for both markets are detailed in the following sections.

RETROFITTING

As mentioned earlier, the trucking industry is quite fragmented with more than 500,000 entities engaged in trucking. [XXXXX] Technologies has determined that the best prospects for early adoption of the XXX system lie among private carriers (those that transport their own products), contract carriers working for large retailers and individual owner-operators. We have reached this conclusion for several reasons, including:

- [XXXXX] Technologies has had numerous contacts with large retailers, consumer product manufacturers and waste-hauling firms representing more than 19,000 trucks about retrofitting their vehicles with the XXX system. All have expressed a high level of interest.
- Private carriers are unable to recoup higher fuel costs through fuel surcharges.
- Customers of contract carriers have expressed their willingness to encourage their carriers to install the XXX system with the savings passed on to them (the contractor).

⁴ <http://www.truckinfo.net/trucking/stats.htm>

- Successful owner-operators tend to maximize the number of miles they travel annually but often lack the pricing power to impose fuel charges to the same degree as large carriers, thereby making them especially susceptible to higher fuel costs.

LARGE PRIVATE AND CONTRACT CARRIER FLEETS

We will employ a direct sales model for large private and contract carriers, spearheaded by Partner 3. We anticipate that evaluation periods will be necessary, especially among early adopters, which we have included in our sales and financial forecasts. As this is a new market with little to no history upon which to base sales, we will need to estimate sales volumes based upon customer economics, prospect feedback to date and our general understanding of the industry.

We plan to build a professional sales force as sales increase that is compensated on a combination of salary plus commission. The plan will be designed so that sales representatives can earn a competitive income while helping the company achieve its unit, revenue and gross margin goals.

OWNER-OPERATORS AND SMALL FLEETS

We do not anticipate a face-to-face sales model for this segment. Instead, we will employ a variety of direct marketing techniques, including trade journal advertising, trade show participation, direct mail, internet marketing and social media to drive prospects to an inside sales force. Other marketing avenues to be explored will be targeted radio advertising on selected late night programming geared toward truckers and telemarketing. We do not anticipate direct online sales at this time due to the investment required by the customer and the logistics of installation, however, that may change if we find that acceptance of the system is so high that little human interaction is necessary to close a sale and our certified installation network eliminates the logistics issue.

COMMON CARRIERS

The common carrier segment, which includes companies like UPS, Fedex, J.B. Hunt, Roadway/YRC and more, offers a sizable market opportunity, with the ten largest U.S. carriers representing more than 100,000 tractors (Table 4). Our concern is that early mass adoption by any of the large players in this segment could overwhelm our supplier and manufacturing capabilities as well as place extreme stress on our working capital position. We will cautiously approach these prospects as we begin production, but will refrain from getting ahead of ourselves financially or operationally in dealing with them. We feel there is plenty of business to allow us to develop our systems, refine our operations and generate significant cash flow before we take on this challenge. We consider these our “ace-in-the-hole” so to speak, providing the opportunity for hockey-stick growth in the out years of our plan.

Table 4: Tractor Count at Largest Common Carriers

Firm	Tractors	Source
YRC	19,842	10-K
Swift National	16,200	Yahoo! Finance
Fedex	16,000	Company website
Schneider National	12,300	Company website
Con-Way	8,300	10-K
JB Hunt	7,970	10-K
Werner	7,300	Company website
UPS	6,700	Company website
USF Holland (YRC)	4,508	Company website
ABF	4,100	Company website
Total	103,220	

FINANCING

We are negotiating with finance companies to provide affordable leasing options of up to 60 months with fair market value (FMV) and one dollar buyout options in order to make the system affordable to a wide range of customers. Customers will need to be approved for financing prior to production of their system.

ORIGINAL EQUIPMENT MANUFACTURERS (OEMS)

The U.S Department of Transportation reported that there was an average of 193,000 new heavy truck tractors sold annually for the ten years ending in 2008. The bulk of these were sold by divisions of Paccar, Navistar, AB Volvo and Daimler AG. Fuel economy, reduced emissions and sustainability are central themes in their marketing materials, all of which play to the XXX system's strengths.

Still, there are several challenges that must be overcome to penetrate the OEM market. First, OEMs must be convinced that offering the XXX system as an option or standard equipment will provide them with a competitive advantage in the new truck marketplace. Second, OEMs are likely to require additional engineering to incorporate the system into their product design and assembly process, which is likely to extend the sales and implementation cycle. Finally, and perhaps most significantly, selling into the new truck market requires a strategic change in our marketing approach in that it adds a reseller (the OEM or dealer) to the sales channel. OEMs will certainly expect a price premium for installed systems, which presents a strategic pricing challenge for [XXXXX] Technologies in that we would likely have to sell at a significant discount to list price.

Our best option for direct sales to OEMs will likely come in other markets we will pursue in later years, namely the barge, rail and power generation markets. These markets will most likely require working

directly with the diesel engine manufacturers, which will require R&D, engineering and sales operations that are beyond the scope of this presentation at this time, though the markets are touched on later.

There are several approaches to penetrating the new truck market, which include:

- Sell complete units to OEMs
- Sell components
- License technology
- Sell units through dealers as an after-market option for new purchases

Each has advantages and disadvantages as outlined below (Table 5):

Table 5: Sales Strategy Pros & Cons

Strategy	Pros	Cons
Sell complete units (OEM)	<ul style="list-style-type: none"> • No change in operation • Improved purchasing power across product line • Concentrated customer base • High volume 	<ul style="list-style-type: none"> • Adds reseller • Longer initial sales cycle • Wholesale pricing
Sell components only (OEM)	<ul style="list-style-type: none"> • Better potential to maintain margins • Concentrated customer base • High volume 	<ul style="list-style-type: none"> • Requires system engineering by OEM • Slow initial sales cycle
License technology (OEM)	<ul style="list-style-type: none"> • No material cost • Improved margins • Little to no after-market support required • Concentrated customer base • High volume 	<ul style="list-style-type: none"> • Requires system engineering by OEM • Slow initial sales cycle • Requires diligence to protect IP and ensure proper royalty payment
Sell thru dealers	<ul style="list-style-type: none"> • Rapid market penetration • No need to re-engineer • Dealer financing • Dealers act as sales force 	<ul style="list-style-type: none"> • Adds reseller • Highly fragmented market • Wholesale pricing • Dealer inventory cost

Our initial approach will be to sell through new truck dealers at a 40% discount to list price. We believe that this approach will provide the most rapid entry into this market since it will require the least change to our operating model. Units will still be shipped complete and installation will remain the same, though installation will be performed by the dealers rather than a combination of [XXXXX] Technologies and customer personnel. This alone will reduce our costs by more than \$500 per unit. We do not, however, wish to jeopardize our full price retrofit market, so we do not anticipate pursuing this opportunity until we feel it will enhance rather than hinder our bottom line. Therefore, we do not project sales into this market until year three, at the earliest.

MARINE (TUG, TOW, DREDGE AND OTHER)

According to the U.S. Army Corp of Engineers (ACE), there are approximately 6,000 operating tugboats, towboats and dredges on U.S. waterways, ranging in horsepower from 400 HP to over 9,000 HP. These are hard-working vessels, operating 8-14 hours per day on average and consuming from 20 to over 500 gallons of diesel fuel per hour. Annual fuel consumption ranges from 40,000 to more than 1,000,000 gallons (Table 6). Some barges are equipped to burn residual fuel oil, which is far cheaper than diesel fuel. We have not tested the XXX system on such units, but it is likely that the technology would apply to these vessels as well. Nonetheless, there is ample opportunity in the diesel category alone.

Due to the higher horsepower and fuel requirements among tugs and tows, the XXX system will require a more robust configuration in order to generate sufficient hydrogen to provide the desired fuel savings. The rule of thumb is that one liter of H₂ needs to be produced each minute for each liter of engine displacement. Displacement is correlated to horsepower, though not directly proportional according to manufacturer specifications. For example, a 9,000 HP engine is 18 times as powerful as a 500 HP engine, but may have 50 times the displacement (300L vs. 6L). Though we have not engineered systems to satisfy the higher demands of this market, we can estimate the electrodes required, the cost to produce them, the engineering cost to be amortized and what the market should bear to determine a forecasted Average Unit Price and total market opportunity.

Table 6: Tug & Towboat Operating and Fuel Consumption Statistics

Horsepower Range	Gallons consumed / Hour*	Gallons / Year	Number of Vessels	Annual Fuel Cost at \$3/gal	Projected XXX List Price	Market Opportunity
Tugs & Towboats						
0 - 499	20	40,000	911	\$120,000	\$10,000	\$9,110,000
500 - 1000	40	120,000	1,629	\$360,000	\$30,000	\$48,870,000
1001 - 1500	62	186,000	706	\$558,000	\$57,500	\$40,595,000
1501 - 2000	80	240,000	627	\$720,000	\$115,000	\$72,105,000
Total < 2000 HP			3,873			\$170,680,000
2001 - 3000	125	250,000	515	\$750,000	\$133,333	\$68,666,667
3001 - 4000	150	300,000	383	\$900,000	\$233,333	\$89,366,667
4001 - 5000	200	400,000	293	\$1,200,000	\$250,000	\$73,250,000
5001 - 7000	290	580,000	260	\$1,740,000	\$300,000	\$78,000,000
7001 - 9000	420	840,000	118	\$2,520,000	\$300,000	\$35,400,000
Over 9000	500	1,000,000	49	\$3,000,000	\$300,000	\$14,700,000
Total > 2000 HP		-	1,618			\$359,383,333
Dredges						
0 - 499	20	53,200	?	\$175,560		
500 - 1000	40	106,400	?	\$351,120		
Other Boats						
500 - 1000	40	52,800	?	\$174,240		
1001 - 1500	62	81,840	?	\$270,072		
1501 +	80	70,400	?	\$232,320		
Total Workboat Market						\$530,063,333

Sources: Army Corp of Engineers (http://www.ndc.iwr.usace.army.mil//veslchar/pdf/wtlusvl1_08.pdf)

Source Inventory Categories 1194 - 1196, Tugs & Towboats, Dredge Vessels and Others

<http://www.arb.ca.gov/ei/areasrc/districtmeth/BayArea/99TD1194.pdf>

* Manufacturer specifications (Caterpillar, Cummins, EMD)

There are certain logistical challenges inherent in high demand applications such as marine and rail that may limit the ability to serve these markets, most notably the need for large quantities of distilled water to supply the necessary hydrogen. These will be part of the ongoing engineering effort as we seek to penetrate this market.

As of February 2011, a large Midwestern barge operator representing approximately 150 workboats has expressed interest in not only installing the XXX system, but also possibly investing in its development. If nothing else, this demonstrates the interest this market has in the XXX system.

RAIL

There were more than 24,000 locomotives operating in the United States in 2007 according to the American Association of Railroads, consuming an average of 178,000 gallons of fuel each. Virtually all can be accounted for among the eight primary railroad operators in North America (Table 7).

Table 7: Key Statistics for Major U.S. Railroads

Railroad	Locomotives	Fuel Expense (\$million)	Pct. Of Revenue	Average expense/ Locomotive
Union Pacific Railroad	8,174	2,486	14.7%	304,135
BNSF Railway	6,759	2,372	16.9%	350,939
Canadian National Railway (CN)	n/a	1,048	12.6%	n/a
CSX Transportation	4,071	845	9.3%	207,566
Norfolk Southern	3,965	725	9.1%	182,850
Canadian Pacific Railway	1,709	580	13.5%	339,497
Kansas City Southern Railway	898	264	14.5%	293,541
Kansas City Southern (México)	372	119	15.0%	320,430
Total:	25,948	8,439		

Sources: Financial filings (10K and annual reports)

Locomotive horsepower generally runs between 2,000 and 6,500 per unit, with most new units in the 4,000 to 4,500 HP range, with displacement ranging from 90 to 230 liters. We do not have access to hard data regarding the distribution of diesel locomotive engine sizes, but based upon purchases reported by major railroads in recent years, we estimate the following mix and market opportunity (Table 8):

Table 8: Projected Market Size Based upon Locomotive Mix

Market Share	HP	Number of Locomotives *	Displacement (Liters)	Projected XXX List Price	Market Opportunity
5%	<3000	1,200	93	75,000	\$ 90,000,000
25%	3000-4000	6,400	139	110,000	\$ 704,000,000
50%	4000-5000	12,900	185	150,000	\$1,935,000,000
20%	>5000	5,200	231	185,000	\$ 962,000,000
100%		25,700			\$3,691,000,000

* [XXXXX] Technologies estimates based upon reported locomotive purchases 2006-2010

POWER GENERATION

Power generation refers to electricity produced by diesel generators, which vary vastly in size, output and fuel consumption. These units can be found as both primary and backup sources of electrical power in a wide variety of settings, including:

- Utilities
- Construction sites
- Mining
- Marine vessels
- Oil rigs
- Industrial plants
- Anywhere regular electric service is unavailable

Most diesel generators are small in size and low in fuel consumption, but many are large and consume vast quantities of fuel. Though hard market data is scarce, our contacts with a single large utility indicates that demand for their peak-shaving generator units could be for as many as 10,000 XXX units alone, representing an \$80 million opportunity.

Market data in this segment is rather spotty, but we do have data from the 2003 U.S. Commerce Department Current Industrial Report. Some data points were withheld by the D.O.C. to protect individual company information, but we have extrapolated where indicated to project new product shipments (Table 9). We have also estimated existing installations based upon anticipated equipment lifespan. We do not claim these to be precise, but are provided only to give an idea of market potential and to direct our sales and R&D efforts.

Table 9: Diesel engine-driven generator sets, ac and dc output (U.S.)

Output	Units Shipped	No. of Companies	Fuel / hour**	Installed Base***	Hours/week required ****
Under 15 kVA	35,748	16	1.26	357,480	n/a
15 to less than 50 kVA	10,144	23	4.22	101,440	91.2
50 to less than 100 kVA	6,320	20	8.43	63,200	45.6
100 to less than 200 kVA	5,180	18	16.86	51,800	22.8
200 to less than 400 kVA	3,119	15	33.72	31,190	11.4
400 to less than 600 kVA	1,508	12	50.58	18,096	7.6
600 to less than 800 kVA	1,449	12	67.44	21,735	5.7
800 to less than 1,000 kVA*	3,000*	8	84.30	45,000	4.6
1,000 to less than 2,000 kVA*	2,369*	9	168.60	35,535	2.3
2,000 kVA and over	293	5	252.90	4,395	1.5
	69,130				

Source: U.S. Department of Commerce, 2003 Current Industrial Report

* Actual data withheld, [XXXXX] Technologies estimates used to get known total of 69,130 units

** Fuel use based upon average consumption of 0.0843 gal/hour per kVA

*** Installed base = Units sold x 10, 12 or 15 years (larger units remain in service longer)

**** Number of hours the unit must run to justify the XXX system investment

Since not all generators run full-time, according to this data we estimate that there are approximately 32,000 installed units that could benefit from the XXX system, representing a market opportunity of \$258 million. However, our talks with one large electric utility indicated they are possibly interested in as many as 10,000 units, or \$80 million, indicating our market estimates above are quite conservative.

OTHER MARKETS

There are many more markets where the XXX system could prove beneficial. Some of these are smaller consumers of diesel that we may choose to pursue with a down-sized version. Other markets could also open up if our fuel savings are better than projected, the price of diesel rises to unforeseen heights, economies of scale bring our cost of production down or government regulation makes emission control mandatory in ways favorable to our system. Among potential future markets are:

- Work equipment including bulldozers, earth movers, etc..
- Military vehicles
- Medium and light duty trucks
- Pleasure boats
- Ocean vessels
- Mining equipment
- Oil exploration rigs

Furthermore, since the technology works on any internal combustion engine, there could be a market among gasoline powered vehicles, though we do not envision pursuing that market at this time.

COMPETITION

There are a number of hydrogen injection systems on the market, but most are unsophisticated systems sold as unassembled kits (one informs customers they'll have to provide their own mason jars). There are, however, several legitimate direct and indirect competitors actively pursuing the same markets as [XXXXX] Technologies. Direct competitors include:

- Dynamic Fuel Systems
- Blutip Power (formerly Hy-Drive)
- Epoch Energy / HybridTech Energy
- Ronn Motors
- Greenchek Technologies
- GreenCell Technologies (Distributor)

Indirect Competitors include:

- WorldKlass Industries
- EcoEmissions Solutions, Inc.

DIRECT COMPETITORS

Direct competitors are those who offer onboard, on-demand hydrogen injection systems for diesel engines.

DYNAMIC FUELS SYSTEMS

1288 Ritson Road, North, Suite 385
Oshawa Ontario, Canada L1G 8B2
Tel: 905 831 2440
Ticker: DYA.V
www.dynamicfuel.com

Product Names: JetStar (discontinued) and HydraGen™, which is to be available March 2011 at an anticipated price of \$9,000 installed.

A Canadian-based H2 injection system manufacturer founded in 2001, they reported no revenue in 2010 as they discontinued the JetStar system in anticipation of HydraGen. They reported \$721K in revenue during 2009, all resulting from sales to a single customer through their distributor, Hydrogen Fuels Systems (formerly Specialties Marketing Group). According to press reports, Equity Transport of Holland, Michigan, who paid between \$10,000 and \$12,000 per unit, and the Pepsi Bottling Group, who acquired 40 units, have both been customers. It is unclear which was the 2009 customer.

A DFS press release claims that the new HydraGen unit is lighter, more compact and less costly to manufacture. According to a Hydrogen Fuel Systems representative, the new system will utilize a new reactor that generates and separates both hydrogen and oxygen, then recombines them at the fuel injection source, thereby producing far better fuel economy. They expect the system to cost \$9,000 installed, which if all they say is true, the unit will perform better at lower cost. There is no information to confirm this data.

DFS raised \$1.075 million in a private placement that was reported 4/12/2010 and announced the retirement of their president CEO and his replacement by John Hultink as CEO and Grove Bennett as president on January 25, 2011.

Warranty: Product warranty commences with the installation date to the end user. Dynamic is solely responsible for administering warranty claims by the end user against defective materials and workmanship only, and all warranty claims arising for a period of the earliest of:

- (a) 1 year from date of installation;
- (b) 150,000 miles (240,000 kilometres); and
- (c) 6,300 hours of engine operation

BLUTIP POWER (FORMERLY HY-DRIVE TECHNOLOGIES)

6705 Millcreek Drive, Unit #4
Mississauga, ON L5N 5M4 Canada
888-359-5697
Ticker HGS.V
www.blutipower.com

Products:

- Hydracell Max, \$15,000 (per distributor) intended for the heavy truck market. Claims average 10.47% fuel savings.
- HGS – M3, \$12,000 (per data no longer available on website) intended for mining operations
- blutip power³, certified for CAT XQ400 gensets

Though Blutip has reported no revenue since 2007, they may be [XXXXX] Technologies' most sophisticated competitor. Since raising CDN\$4.27 million in a private placement during 2Q 2010 they have announced the following:

- HGS ruled a “non-defeat” device under California Air Resources Board rules, meaning the system does not worsen emissions, qualifying HGS for exemption from Executive Order requirement.
- Signed six fleets for HGS trials
- Direct mailed 1,500 fleets
- Received an order for 100 mining systems valued at \$1.2 million (\$12,000/unit)
- Hired a new CEO after a \$180k executive search
- Acquired clean energy IP rights
- Agreed in principle to a partnership with WorldKlass
- Announced 6-12% average fuel savings on Caterpillar XQ400 gensets

- Announced Australian trials
- Changed name to Blutip Power concurrently with changed emphasis on reduced emissions.

Blutip has invested time and money developing a rugged unit and in testing it on specific engines. To date the HydraCell Max has been certified on CAT series C12, C13 and C15 engines. They expect certification on Detroit Diesel engines sometime in mid-2011 and Cummins engines by year end 2011. A distributor representative stated that the unit “does not work well” on newer CAT models.

They have also invested in onboard electronic controllers that allow their systems to be tuned to specific engine operating parameters, as well as in Bluetooth-enabled data transfer that allows operators to monitor the system’s performance.

Strengths:

- Well-funded and professionally managed
- Onsite dynamometer and prototyping capabilities
- Solid understanding of regulatory hurdles (ie, CARB testing)
- Electronic controllers and wireless data monitoring
- Several customer trials underway
- Qualifies system on diesel engines before selling to customers
- Expects to be certified on Detroit diesel engines mid 2011
- Expects to be certified on Cummins engines by year-end 2011

Weaknesses

- Unit consumes only 1 gallon of water per 6,000 miles, indicating not enough H₂ is produced to maximize fuel savings
- Do not use nanotechnology in electrodes, indicating high maintenance costs if producing high volumes of H₂
- No revenue since 2007
- Only certified on Cat[®] C-12, C13 or C15 engines
- HydraCell Max priced at \$15,000 for truck application

The low hydrogen production coupled with Blutip’s recent change in focus to emission control indicates that they may not be generating the fuel savings necessary to generate interest in their unit. This is consistent with what has been true of this market from the outset – that prior technology such as that used by Blutip requires a trade-off between fuel economy and durability. That is Eath Technologies’ competitive advantage. However, much can be learned by studying their R&D effort and deliberate certification approach. It would be unwise to dismiss them as a competitor.

EPOCH / HYBRIDTECH ENERGY

No.3, Bengong 5th Rd, Gangshan Dist.,
Kaohsiung City, 82059, Taiwan
Phone: 886-7-6235588

HybridTech Energy
235 Golden Rod Ct.
Longmont, Colorado 80501
(720) 494-1443
www.hybridtech-energy.com

Epoch is a Taiwanese company that produces a range of products utilizing hydrogen generation technology, which in addition to diesel fuel injection systems include metal cutting, cooking and carbon cleaning applications. HybridTech is their master North American distributor. Marketing materials and emails from HybridTech's president indicate their focus is directed toward metal cutting and other applications where hydrogen's heat-producing properties are utilized for purposes other than fuel savings.

HYPOWER FUEL INC.

Box 5561
High River, Alberta Canada, T1V 1M6
(973) 351-3868
Ticker: HYPF
www.hypowerfuel.com

We contacted the number on their website and got a gentleman who was with them at one time but no longer is (February 14, 2011). He said it's been several years and he doesn't know what's going on with them or if they are still in operation. Much talk on the Yahoo message boards centers on company president Doug Bender being a pump-and-dump scam artist.

RONN MOTORS

Ticker: RNNM.PK
www.ronnmotors.com/cms/#

Ronn Motors manufactures the H2GO™ Real Time Hydrogen Injection System, which is claimed to work in both cars and large trucks. Ronn Motors also makes high performance sports car kits and does not appear to be focusing on mass marketing of the H2GO™ system.

GREENCHEK TECHNOLOGY, INC.

Ticker: GCHK.OB
www.greenchektech.com

Greenchek licenses technology from a Chinese company, with exclusive U.S. and European rights. They reported \$0 revenue for the year ending 2/28/2010 and \$5,067 for 9 months ending 11/30/10 (they sold 2 units to their European dealer). They have \$101 in cash on their balance sheet as of 11/30/2010 and have been paying vendors with stock and warrants. It does not appear they are long for this world.

GREENCELL TECHNOLOGIES (DISTRIBUTOR)

Ticker: GT5.DE

www.greencelltek.com

GreenCell is now the exclusive distributor of the Hy-Drive (Blutip) HGS series of hydrogen gas generators for the diesel truck market in Canada and the USA. All the pros and cons listed for Blutip apply here. They will send a tech to install a system, but they prefer to send them only to install on fleets, training on two or three, then letting the fleet mechanic install the rest (per conversation with Ken on 2/28/2011)

INDIRECT COMPETITORS

Indirect competitors are those who offer similar promises of fuel savings and reduced emissions with technologies that do not rely upon hydrogen injection.

WORLDKASS TECHNOLOGIES

www.worldkass.com

They use ceramic ionization that changes the air/fuel mixture, resulting in more complete combustion similar to H₂ injection. They focus more on emission benefits than fuel savings, though fuel savings help justify installation. Their business model retains ownership of the system with no upfront cost to the customer. They use baseline data established with customer input, then use GPS data to calculate savings, which range from 0.14% to over 12% (average 5.9%) and bill the customer a portion of the calculated fuel savings.

They partnered with Blutip in late 2010, though the details of the partnership are unknown.

Strengths

- No electrodes to degrade
- No customer investment required
- Fuel savings up to 12% (average 5.9%)
- Ongoing revenue stream once installed
- Affordable for low energy consumers (bobcats, light duty trucks, etc.)

Weaknesses

- Customers billed whether savings are realized or not
- Meager fuel savings

ECOEMISSION SYSTEMS, INC.

www.ecoemissions.com

Ticker: ECMZ.PK

EcoEmissions' system injects a platinum-based catalyst into the pre-combustion chamber of diesel engines which results in more complete fuel combustion and reduced emissions. They claim 8-10% fuel savings and significant emission reductions. They recently reorganized under the guise of a merger wherein EcoEmission Solutions, a Delaware company, acquired the assets of EcoEmission Systems, a Nevada company.

Strengths

- No electrodes to degrade
- Fuel savings of 8-10%
- Emission reductions of 30-40% for particulate matter and 25% for nitrous oxides
- Patented delivery system for catalyst
- Added first distributor (Hatton Marine) and received first revenue (\$45,000) in 3Q 2010

Weaknesses

- Catalyst replacement is more expensive than distilled water
- Higher operating expense without improved performance versus H2 injection
- Only \$19,000 in cash, no receivables on balance sheet
- Accumulated deficit of \$13.1 million and negative shareholder equity of \$2.9 million

COMPETITIVE CONCLUSION

While there are several viable competitors in this market space, we believe that our superior technology will permit us to win in most competitive situations. Regardless, the size of the entire market offers significant opportunity for multiple players and we believe that since this is technology that has struggled to gain market acceptance due to the technological limitations described earlier, any success by our competitors will only serve to prove the viability of the concept and open the market to our solution. We are confident that our combination of fuel economy and product durability will allow us to gain a dominant position within this space.

OTHER THREATS / CHALLENGES

There are several issues we must consider beyond competition, including the development of alternative fuels, government regulation and market acceptance.

ALTERNATIVE FUELS

BIODIESEL

Biodiesel is similar to regular diesel except that it is produced from renewable sources including waste, algae, microorganisms and other biomass sources. While all represent alternative sources for diesel fuel, the same economics that make the XXX system attractive for regular fossil diesel also apply to biodiesel – and perhaps more so since biodiesel typically has 8.65% less energy content per gallon as measured in Btus than regular diesel⁵ while currently costing significantly more than No. 2 diesel fuel. We anticipate that the reduced energy content and higher cost per gallon will make the XXX system even more attractive from a fuel economy standpoint, though the relatively clean exhaust from burning biodiesel will make the environmental benefits of the XXX system less compelling.

Overall, we do not view biodiesel as a threat.

DIESEL HYBRIDS

⁵ Biodiesel.org: http://www.biodiesel.org/pdf_files/fuelfactsheets/BTU_Content_Final_Oct2005.pdf

Diesel hybrids, similar to gasoline hybrids, are already in development and have fuel savings of 10% or more along with reduced emissions. The biggest drawback to wide scale acceptance is the incremental vehicle cost, which in transit busses has been upwards of \$200,000 per vehicle⁶. While this cost is certain to come down, it is not expected to vanish completely. Also, diesel fuel will still be consumed in significant quantities in hybrids and the XXX system is expected to offer the same fuel-saving benefits as with traditional diesel engines, offering additional savings on top of those provided by the hybrid technology.

Overall, we believe hybrid technology will reduce potential demand somewhat as the number of trucks and other diesel consumers that consume enough diesel fuel to justify the XXX system will decline but that there will still be plenty of prospects for whom the system makes economic sense.

HYDROGEN FUEL CELLS

Hydrogen fuel cell (HFC) technology could be a game-changer, but the technical and logistical obstacles that need to be overcome suggest that HFCs are a long way off. The U.S. Department of Energy conducted a detailed study on the future impact of HFC technology on emissions and petroleum consumption in 2008 which looked at three development scenarios of increasingly aggressive HFC adoption. Even the most aggressive scenario showed no more than 10% of the light-duty truck market converting to HFC by 2025⁷. The study did not address heavy trucks, but we assume the same would hold true for this segment as well.

We do not view HFC technology as a viable alternative for at least 10 years and perhaps much longer, especially given the expense of replacing existing equipment that will delay adoption even after the technological and infrastructure hurdles have been overcome.

ELECTRIC VEHICLES

We do not foresee electric vehicles being a viable alternative for our target markets.

OTHER THREATS

IMPROVED DIESEL ENGINE TECHNOLOGY

Hydrogen injection works because a significant portion of the fuel consumed is not burned completely or does not combust at the proper time. If diesel engine manufacturers develop technologies that overcome this drawback the market for the XXX system may decline. While there would still be a sizable retrofit opportunity on heavy trucks, the opportunity going forward may not be as large as we anticipate.

DECLINING FUEL PRICES

The cost of fuel is a primary driver behind demand for the XXX system. If fuel prices were to fall below \$2 per gallon for a sustained period, our potential market would be cut in half, yet there would still be in excess

⁶ Hybridcenter.org

⁷ [http://www.eia.doe.gov/oiaf/servicerpt/hydro/pdf/oiafcneaf\(08\)04.pdf](http://www.eia.doe.gov/oiaf/servicerpt/hydro/pdf/oiafcneaf(08)04.pdf)

of 400,000 trucks for which it would make economic sense, not to mention the marine, rail and power generation markets which would be little affected. We do not foresee such a decline, however.

We do not view sustained low fuel prices as a threat, though they may pose a temporary, cyclical one.

GOVERNMENT REGULATION AND INTERVENTION

The government could impact [XXXXX] Technologies ability to successfully market the XXX system in these and other unforeseen ways:

- Subsidize alternative fuels to a degree that makes the system uneconomical
- Subsidize purchase of alternative fuel vehicles that reduces the number of target prospects for which the system makes economic sense
- Subsidize other fuel conservation technologies that render the XXX system obsolete
- Regulate against onboard hydrogen generation technology
- Regulate emissions in a way that makes the XXX system obsolete

While each of these is possible, they are unlikely and difficult to predict. We anticipate that the government will place emphasis on post-fossil fuel technologies but will not interfere with technologies that are seen as a bridge until the post-fossil fuel economy arrives. As for emission control, we view the XXX system as an enhancement to any future emission regulations or control devices that may be developed, though we cannot guarantee that future emission control systems will not interfere with the XXX system operation.

MARKET ACCEPTANCE

Since hydrogen injection has been around for several decades, our markets may view this as technology that has not lived up to its promise. We will need to overcome this objection with hard data supported by a concerted sales and marketing effort. Customer trials, testimonials and third party evaluations will be employed to convince skeptical customers of the benefits of the XXX system.

IV. OPERATIONS

Since we are seeking funding in two stages, our operational plan is split in order to outline both the prototype and production stages.

PROTOTYPE STAGE

The goals of our prototype stage are to prove the performance and durability of the XXX unit, arrange customer trials, begin engineering for manufacture and finalize the legal arrangement with our scientific collaborator regarding exclusive use of his electrode technology for the purposes of diesel hydrogen injection. We also anticipate a thorough patent search to ensure there is nothing that would preclude [XXXXX] Technologies from pursuing the market as we have outlined. Additionally, we will prepare for the production phase in ways that require little to no funding such as securing a contract manufacturer, setting up our supply chain system, site selection for our office and R&D operations, pre-sales activity to generate

customer interest and preparation of marketing and training materials, policies and procedures, lease negotiations, office layout and personnel recruitment. Furthermore, the prototype stage will include implementation of accounting systems and selection of providers for payroll and accounting.

PROTOTYPE STAGE ALTERNATIVE APPROACHES

There are two approaches we could take regarding the Prototype Stage. One would be to perform as many tasks concurrently as possible in order to minimize the time to complete the stage and move into the revenue-generating Operations Stage. The other would be to perform tasks consecutively, setting milestones and benchmarks for specific objectives. This would likely extend the time required to complete this stage, but it would allow investments to be made only after milestones are reached, thus limiting investor exposure. Timelines for both approaches are provided at the end of this section.

Depending upon the approach taken, we anticipate that this stage will be completed within six to twelve months from the time of funding.

We will consider the prototype stage complete upon the following:

1. Satisfactory results of patent search
2. Binding agreement with scientific collaborator for exclusive rights to nanotechnology electrodes for diesel engine hydrogen injection
3. Successful completion of dynamometer and/or SAE J1321 testing (10% fuel savings or better)
4. Electrodes exceed 3,000 hours with no degradation in performance
5. Successful completion of vibration tests (laboratory and on-road)

Once we have attained these objectives, the system will be considered ready for production at which time we would request the second round of funding in order to bring the XXX system to market. We would like to reserve the right to ask for earlier production stage funding with investor approval if prototype stage results present clear evidence that the prototype stage will prove successful. We feel this would ensure that no funds are spent prematurely, but would also ensure a timely transition into the production stage.

LEGAL

It is prudent to ensure there are no obstacles to our business plan prior to investing any further money in developing the system. Therefore the first order of business will be to perform a thorough patent search regarding hydrogen injection systems, as well as ensuring that the patents held by our scientific collaborator provide significant protection against competition who may try to employ similar solutions to the durability/fuel economy conundrum. The search will also reveal whether we can patent our scientific collaborator's electrode technology for the specific application of injecting hydrogen into internal combustion engines for the purpose of improving fuel economy or reducing emissions. We will seek the broadest patent protection possible. The cost of the search and application will depend upon any shared ownership or association with other parties (employers, universities, etc.) that might have an interest in any pertinent patents our scientific collaborator may hold.

We will also finalize a binding agreement with our scientific collaborator regarding exclusive rights to his nanotechnology electrodes, including royalty arrangements, rights to future development and his on-going efforts on behalf of [XXXXX] Technologies. To date, we have a mutual understanding that anything developed for [XXXXX] Technologies will become the property of [XXXXX] Technologies.

Anticipated expense:

- Patent search and clearance: \$6,000 - \$10,000
- Patent application: \$9,000 - \$15,000
- Collaborator agreement: \$5,000 - \$10,000

PRETEST ENGINEERING

Prior to durability testing, we will require additional electrode engineering by our scientific collaborator and further engineering for manufacture to ensure we are testing the system as it will be manufactured. Naturally, some design modifications may be necessary depending upon test results, but our prior testing has already given us direction on changes that need to be addressed. We will also seek UL certification if our pre-sales effort reveals that our customers will demand it.

Anticipated expenses:

- Scientific collaborator services: \$65,000
- Engineering for manufacture: \$20,000
- Testing equipment for our scientific collaborator: \$20,000

PERFORMANCE AND DURABILITY TESTING

The objectives will be to determine expected fuel savings and emission reduction, durability of the nanotech electrodes and the ability of the assembled unit to withstand the vibration and environmental operating conditions to be expected in our various applications, beginning with the heavy truck market. Dynamometer or SAE J1321 testing will immediately follow the engineering stage to determine projected fuel savings, followed by on-road customer trials.

Dynamometer testing, which can be completed in a single day, provides relative fuel savings data under simulated conditions. The SAE Fuel Consumption Test Procedure Type II, commonly referred to as J1321 is a much more rigorous real world test and is considered the gold standard for evaluating the performance of fuel saving devices in over-the-road trucks. It generally takes two months to complete, not including backlog at testing facilities. Since the costs of both tests are relatively equal and we believe successful completion of J1321 testing will carry greater weight with our customers than dynamometer testing, we intend to pursue the J1321 option.

We have already completed one year of on-road testing of the unit as currently designed with no indication of vibration damage, therefore we anticipate that we will encounter no future difficulty in meeting our internal goals regarding vibration standards.

UL Certification is optional, though it may be required by certain customers (such requirements have not been determined as of this writing). We have budgeted and allowed for UL certification if, in fact, we find that our primary prospects will require it.

We will produce a total of ten test units for both sets of trials. Dynamometer testing would take place at the Caterpillar facility in Louisville, KY, while J1321 testing would take place at one of several testing sites depending upon cost and availability. Our preference would be to use the facilities at the Southwest Research Institute in San Antonio, TX. Customer trials will be performed by prospective customers with whom we've had previous contact, though the details remain to be worked out. We anticipate a three to six month trial period with frequent evaluations of the condition of the units and the real world fuel saving performance of the XXX system. Baseline performance will be measured prior to the actual testing in order to determine actual fuel savings.

Anticipated Expenses:

- Prototype parts and assembly, including freight: \$20,000
- Dynamometer or SAE J1321 testing: \$60,000 - \$80,000
- UL certification: \$75,000 - \$125,000

PROFESSIONAL SERVICES AND MANAGEMENT SALARIES

The partners in [XXXXX] Technologies, Partner 1, Partner 3 and Partner 2 are seeking salaries of \$5,000 per month each during the prototype stage.

We have engaged Paul Szydlowski to prepare this business plan and assist in securing funding for both the prototype and production stages of our plan. He is to be paid upon receipt of funding in the amount of \$5,000 cash plus 5.0% of the funds raised, split equally between cash and stock. In the event funding is provided in tranches, he will only be compensated as funds are actually received by [XXXXX] Technologies or its immediate successors. The \$5,000 cash component is to be paid out of the first tranche.

Anticipated expense:

- Partner salaries: \$90,000 (\$15,000/month x 6 months)
- CEO salary (optional): \$62,500
- CEO recruitment (optional): \$31,250
- Paul Szydlowski: \$5,000 plus 2.5% of prototype funding plus stock valued at an equal amount (2.5% of funding)

-

ANCILLARY EXPENSES

- Travel: \$6,000
- Payroll taxes & Workers comp: \$15,480
- Benefits: \$30,500 (20% of salaries)
- Miscellaneous
 - Phone: \$2,400
 - Miscellaneous supplies and maintenance: \$1,800
 - Accounting/payroll: \$1,810
 - Insurance: \$3,000
- Office furniture and fixtures: \$5,800

PRE-PRODUCTION PREPARATION

In preparation for production, we will need to accomplish the following:

- Finalize agreement with contract manufacturer
- Finalize supply chain
- Secure office and R&D facilities
 - Lease
 - Build-out
 - Office furniture and equipment
 - Phone system and internet access
 - Utility deposits
- Acquire testing equipment, tools
- Complete management team for production stage (detailed below)
- Implement accounting and IT systems
- Finalize marketing plan and prepare marketing materials
- Design website
- Arrange professional services (accountant, payroll, workers compensation)
- Secure product liability and business insurance
- Prepare HR resources (handbook, benefits, vacation, holidays)
- Investigate health insurance, retirement plans (Simple IRA, 401k)

An extensive financial analysis has demonstrated that contracted manufacture of the XXX system will preserve capital, reduce overhead and direct expenses and allow [XXXXX] Technologies to focus on our core

competencies of R&D and marketing. We have researched several contract manufacturers and plan to negotiate a final manufacturing agreement concurrent with the testing phase.

We will also fine tune our supply chain, seeking the suppliers who can provide components that meet our specifications for quality and delivery at the lowest possible price. Prototypes to date have been built with a number of off-the-shelf items at list price. We can secure discounts of 25% or more on many of these items through negotiated terms and discounts.

[XXXXX] Technologies currently has no facilities, operating instead out of the three partners' respective homes. This may suffice through the initial Prototype Stage, but office facilities will be required as we near production. Furthermore, we will require space for R&D work on current and future products. It is our desire to keep overhead at a minimum until we understand the demand curve for the XXX system. We will seek sites that offer a combination of low cost and space flexibility where we can expand as needed. It is our thought that it is easier to find additional space than to vacate unneeded space. We anticipate needing no more than 2,000 square feet of office space and 8,000 square feet of warehouse/testing space at the outset.

Though we anticipate completing the Prototype stage utilizing the services of the three partners, our financial projections include the expense of recruiting and employing a CEO from the outset. Though it is unlikely a CEO would be hired immediately, salary is included from the outset in the event one is retained early on. As for the position of CFO, it is anticipated that Partner 2 will handle this responsibility until forecasted volume of 800 units over the following twelve month period is achieved.

Anticipated expenses (to be incurred only if testing appears positive prior to completion):

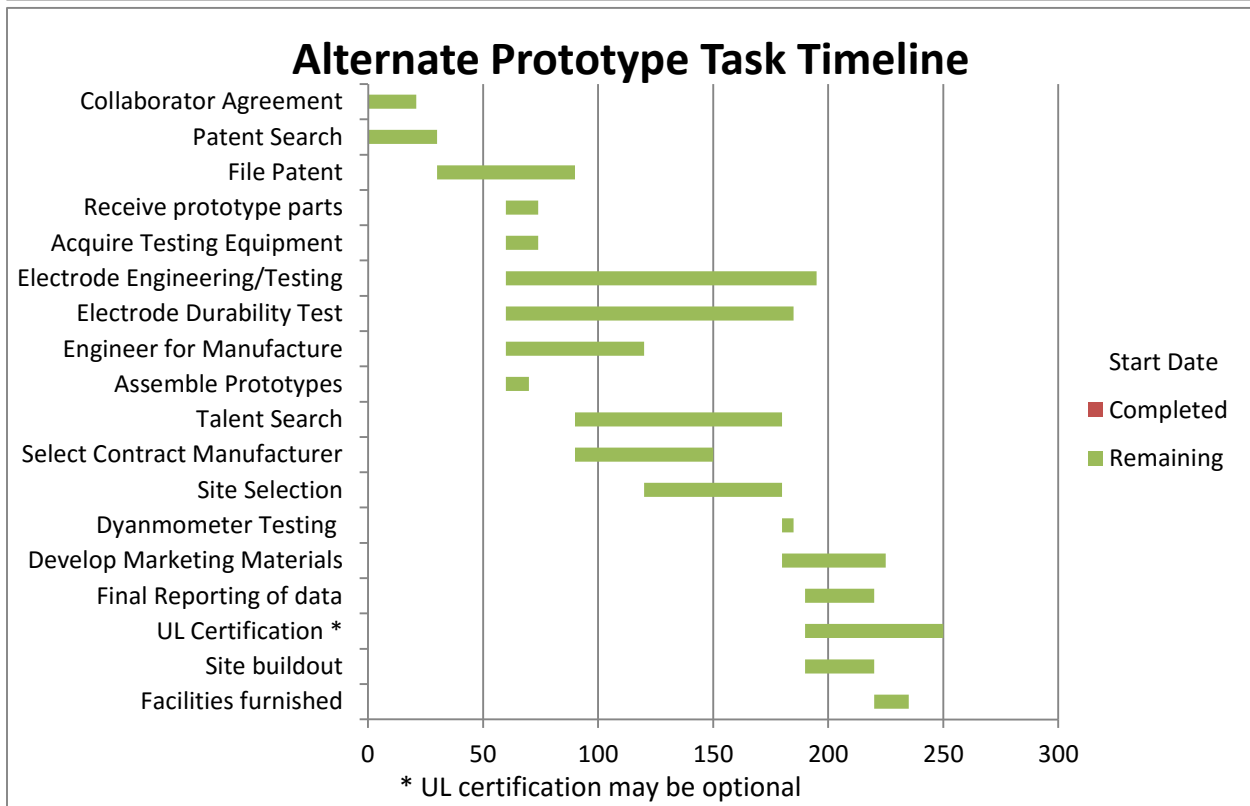
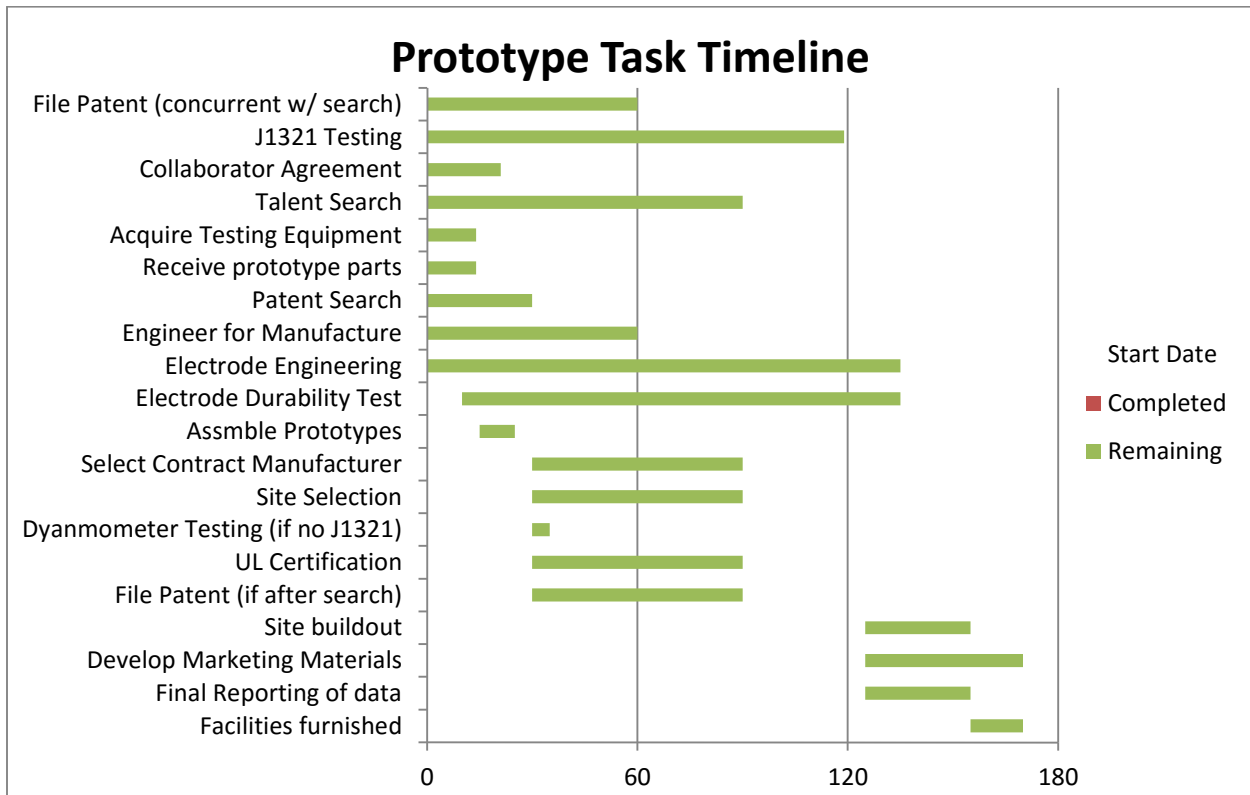
- Legal
 - Lease: \$2,000
 - Contract manufacturing agreement: \$2,000
- Marketing materials: \$5,000
- Website design: \$2,000 (basic) / \$10,000 (advanced)
- Utility and lease deposits: \$13,500

A complete summary of expenses for the prototype and pre-production stage follows below.

TOTAL PROTOTYPE FUNDING & TIMELINES

Funding Need	Low	High
• Patent search and clearance:	6,000	10,000
• Patent application:	9,000	15,000
• Collaborator agreement:	5,000	10,000
• Scientific collaborator services:	65,000	65,000
• Engineering for manufacture:	20,000	20,000
• Testing equipment for our scientific collaborator:	20,000	20,000
• Prototype parts and assembly, including freight:	20,000	20,000
• Dynamometer or SAE J1321 testing:	60,000	80,000
• UL certification:	75,000	125,000
• Partner salaries: \$90,000 (\$15,000/month x 6 months)	90,000	90,000
• CEO salary (optional):	-	62,500
• CEO recruitment (optional):	-	31,250
• Travel:	6,000	6,000
• Payroll taxes & Workers comp:	9,136	15,480
• Benefits: \$30,500 (20% of salaries)	-	30,500
• Ancillary Expenses		
• Phone:	2,400	2,400
• Misc Supplies and maintenance:	1,800	1,800
• Accounting/payroll:	1,810	1,810
• Insurance:	3,000	3,000
• Office furniture and fixtures:	5,800	5,800
• Legal		
• Lease:	2,000	2,000
• Contract manufacturing agreement:	2,000	2,000
• Marketing materials:	5,000	5,000
• Website design: \$2,000 (basic) / \$10,000 (advanced)	2,000	10,000
• Utility and lease deposits:	13,500	13,500
Total Prototype Outflows	424,446	648,040
Average outflow/month	70,741	108,007
Three month cushion (less one-time items)	154,723	234,020
Total required including cushion	579,169	882,060
Total funding requested	600,000	910,000
Less Paul Szydowski cash compensation:	20,000	27,750
(\$5,000 plus 2.5% of total funding (plus 2.5% in stock)		
Net Prototype Cash Funding	580,000	882,250

Figure 4



We would request that all requested prototype stage funds be made available from the outset under the first Prototype scenario outlined above, whereas the anticipated expenses under the second bootstrap scenario would allow funds to be disbursed in stages. The incremental expenses under the second scenario are as follows:

Time period (days):	0-50	50-100	100-150	150-200	200-250	Total
Total Expenses	45,641	160,513	88,718	230,256	15,643	540,771*
Expenses	35,000	147,000	77,000	215,000*	5,800	
Wage expense	9,500	9,500	9,500	9,500	9,452	
Prof Services (PRS **)	1,141	4,013	2,218	5,756	391	

* Includes UL certification of \$125,000, which may not be required

** Funds due Paul Szydowski for services rendered in plan analysis and preparation

Under this scenario we would request funding of \$300,000 in three stages, the second and third tranches to be disbursed only if pre-determined milestones are met.

OPERATIONS

The four key functions critical to [XXXXX] Technologies’ success are sales and marketing, manufacturing, service (including installation) and R&D. Our strengths are our proprietary technology and our contacts within the truck, barge and power generation markets. Therefore, the bulk of our human and capital resources will be deployed in these areas (sales and R&D), while we enlist the service of others in order to leverage our time and expertise in the lesser value-added areas of installation and manufacturing. Each of the four functions are detailed below.

SALES AND MARKETING

Partner 3 and Partner 2 will lead the sales and marketing effort. Our initial focus will consist of direct sales to managers of large transportation fleets. We have already developed interest within the transportation operations of numerous large retail and consumer goods organizations responsible for more than 18,000 heavy trucks.

We will eventually employ professional sales representatives who will be compensated through a combination of salary and bonuses. These sales representatives will pursue multi-unit operators in the private, contract and common carrier markets. We do not anticipate hiring professional sales representatives until we feel that the opportunities are greater than those that the two founding partners can handle, are comfortable that our manufacturing and installation systems can support the increased volume and we have the financial wherewithal to back them. [XXXXX] Technologies will reimburse our sales representatives for travel and expenses associated with the sales function.

In addition, we will market the XXX system through industry-specific channels including trade journals, trade shows and other industry events. We will establish a professional online presence to raise awareness and generate sales leads. We do not anticipate selling the system directly over the internet due to the

importance of matching the system's settings to the customer's unique operating circumstances and the need to arrange professional installation of the unit.

We will leverage Search Engine Optimization and social marketing, including Facebook, Twitter and blogging to improve organic search results and generate "buzz" about our product. We will encourage customer feedback, both positive and negative, to assist in our design and marketing efforts. There are proprietary blogging services that maximize user-generated content in order to improve organic search engine rankings that we will investigate as part of our online marketing strategy.

Our branding effort will include a logo and tagline, yet to be developed, that highlights the product name and our value proposition in a uniform, consistent manner across all corporate internal and external communications. This includes logo decals packaged with each unit that our customers may display to demonstrate their commitment to saving fuel and the environment. These will serve as mobile advertisements for the XXX system. Ideally, our logo would inspire thoughts of blue sky and green earth, but our desire to differentiate ourselves from the competition may preclude the dominant use of those colors.

We anticipate word-of-mouth being a powerful marketing tool. During one road test of the system through the Appalachian Mountains, the driver reported constant radio contact from other truck drivers inquiring as to how he was able to climb steep grades without downshifting. He was unable to answer at the time because the unit was an early, unnamed prototype, but once we are on the market, we expect such communication to pay rich dividends.

Phone and internet leads will initially be fed to our direct outside sales force, but as volumes increase and we become more comfortable with all the variables within the truck segment, we will add a dedicated inside sales force to manage these inquiries.

We anticipate that early adopters will require evaluation units for a period of 3 to 6 months before acquiring units. This evaluation period may be shortened (at the customer's request) if the fuel savings are proven to be significant and/or fuel costs rise rapidly, spurring quicker widespread installation, or may be lengthened if the evaluation is not demonstrating concrete results. We have incorporated this evaluation period into both our cost and revenue projections.

Our initial approach to the new truck market will be as an aftermarket product to be installed by new truck dealers. We feel this will be the quickest route to addressing the market since it will not require time-consuming and possibly costly engineering and design work in conjunction with truck manufacturers. Units will need to be sold at a discount so that dealers can make a reasonable profit and be incentivized to upsell the unit. We will pursue this market when 1) we have attained a strong foothold in the retrofit market, 2) our unit cost has been reduced significantly due to design improvements and increased purchasing power, meaning 3) we can sell at a discount without significantly damaging our gross margins. We will want to ensure that the volume gained will offset justify whatever GM erosion entry into this market might entail.

Direct sales to Original Equipment Manufacturers (OEMs) will be pursued, though we want to be certain that we vigorously protect our intellectual property. We anticipate that any direct incorporation into the truck manufacturing process will require close collaboration with the design and engineering functions within the

various OEMs. We do not wish to provide enough information that they may be able to find solutions outside of our patent protection, allowing them to bypass [XXXXX] Technologies.

We believe that our best opportunity within the OEM market is a strategic sale to one of the five largest players within the arena, or to one of the diesel engine manufacturers.

MANUFACTURING

We have performed a detailed analysis of the pros and cons for both in-house and contract manufacturing and have decided that contract manufacturing is the best course of action for several reasons. While an in-house model would provide a greater degree of control over the assembly of the units, the rather simple and straightforward nature of the assembly process adds little value to the overall system and therefore we feel it is best left to others who are in the business of making profit on low-margin activities. This eliminates the ongoing overhead that would be associated with a manufacturing facility, production staff and management, while reducing the capital outlay required to establish and equip such a facility.

Furthermore, it shifts a portion of the risk of cyclical demand due to fuel prices and economic conditions from [XXXXX] Technologies to the contract manufacturer. Perhaps most important, we can leverage the manufacturing expertise of those already involved in such endeavors in a way that will remove bottlenecks to production, especially if sales were to ramp up quickly.

We have had preliminary talks with a contract manufacturer who can provide engineering services for the manufacture of the product on short notice. They have estimated that the time required to assemble the unit once final engineering is complete to be between 30 and 60 minutes per unit at a shop labor rate of \$25 to \$30 per hour, depending upon the technical expertise required. It is their estimation that once production is in full swing, the lower labor rate will apply.

[XXXXX] Technologies would be required to pay in advance half the cost of assembly and any parts or materials not supplied by [XXXXX] Technologies, with the balance due within 30 days of shipment. This arrangement will continue until a credit history is established, at which time [XXXXX] Technologies will be granted payment terms. Any significant increase in volume thereafter, including an unusually large single order would result in a return to the up-front payment model described above until credit is reestablished at the increased volume. These payment terms have been incorporated into our cash flow projections and working capital requirements.

We will have the option of shipping directly to customers from the contract manufacturer or to our own warehouse, from which we would make final shipments. While we will most likely keep a small inventory of product on hand, we feel it is best to allow shipment directly to the customer in order to shorten the delivery time, eliminate the additional shipping costs and reduce the need for shipping personnel at the [XXXXX] Technologies facility.

INSTALLATION, WARRANTY & SERVICE

INSTALLATION

We view installation as an area where we can gain a competitive advantage versus our primary competitors, who both rely upon single North American distributors to perform installations and appear to have little to no staff dedicated to the task.

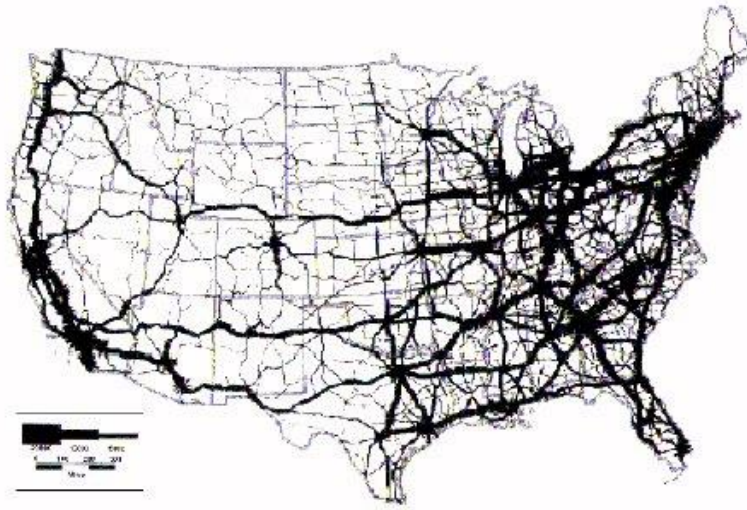
We foresee several obstacles that must be overcome to provide quick, reliable installation at high volumes, including:

- Units must be properly installed to ensure correct operation and prevent the unit from becoming loose or dislodged from the vehicle
- Making it convenient to the customer
- Providing the manpower to quickly outfit a fleet of trucks
- Covering the cost of installation
- Avoiding liability for improperly installed units

We estimate that a trained technician can install a unit properly in two hours, which means a single tech could outfit 10 trucks in two or three days. The challenge arises when we might have a fleet of thousands, requiring thousands of man-hours. There is also the challenge of outfitting trucks that are located across the country. Therefore, we are going to pursue a multi-pronged approach that includes the following:

- 1) Provide on-site installation training and assistance for large fleet purchases, whereby we would send a tech to the customer's location to perform the initial installations while training customer personnel to perform the bulk of the installations. The fee would be either a fixed amount or billed on a "time and travel" basis. The fee may be fully or partially waived if the size of the sale justified such a waiver.
- 2) Develop a network of certified independent installation centers that would provide convenient installations for a fee to be paid by the customer. We would target strategically located truck service centers along major trucking corridors to maximize the number of trucks for whom this service would be convenient (see Figure 4).
- 3) Provide written and video training materials with each purchase in quantities sufficient to allow multiple concurrent installations by customer personnel (following proper training).
- 4) Maintain an in-house training program that customers and/or certified installation technicians may attend.
- 5) Provide online and telephone installation support.

Figure 3: Truck Traffic Density



We estimate that ten strategically located installation centers would provide convenient access for approximately 80% of U.S. truck traffic, with most being located in the eastern half of the United States. We plan to visit each center at least once annually to ensure proper techniques, refresh training, train new mechanics and update procedures. This will be supplemented by routine communication including conference calls and webinars.

Our financial projections assume that we will need to staff one installation tech for every 250 units sold annually, with our tech installing 1/3 of those units and the balance installed by certified installation centers or by customer mechanics after being trained by [XXXXX] Technologies personnel.

WARRANTY

We intend to warranty the product against defects in materials and workmanship only from the date of installation for the earliest of:

- 4) One year
- 5) 150,000 miles
- 6) 3,000 hours of engine use

We anticipate that the few moving parts and durability of the electrodes will make the system quite reliable, keeping warranty costs low. Our warranty will include a disclaimer that voids the warranty if unapproved modifications, including installation of third party replacement parts, are made to the unit.

Additionally, we are considering a 90 day money-back guarantee in lieu of evaluation units once we have established a reputable reference base.

SERVICE

The modular design with relatively few moving parts will make component replacement quite simple. In most instances, repair will consist of simply replacing the defective component, which can be performed by the end user or by a general mechanic. In rare instances, the entire unit may need to be returned to [XXXXX] Technologies, where we will make a determination whether to replace individual components or the entire unit. We expect such instances to be rare.

We will sell replacement parts at retail list prices following the expiration of the warranty. We expect this to provide a secondary, albeit relatively small, revenue stream.

We will provide an 800 number hotline for warranty and service inquiries.

RESEARCH & DEVELOPMENT

Partner 1 will oversee the ongoing scientific and engineering work on our electrode technology and XXX unit design. Our R&D efforts will be to perfect the initial design of the XXX unit for manufacture, ensure performance and durability for our selected markets and continually

Basic research on our proprietary electrode technology will continue to be carried out by the inventor at his private laboratory on a contract basis. He typically works off of a retainer, charging \$250 per hour against the retainer. We estimate that we will require 120 hours of his services each year at a total cost of \$30,000. The purpose of this work will be to find optimal design of the patented technology for our applications in the various segments of our transportation and power generation markets. We will also seek to reduce the size of the electrodes, the current required to produce sufficient hydrogen and the cost of electrode manufacture. Reducing the size of the electrodes while improving their efficiency not only provides better gross margins and pricing flexibility, but will be an important factor in developing other markets where size and efficiency will be crucial. These include the barge and rail markets, where smaller size will make it easier to incorporate the system into high hydrogen demand applications, as well as lower fuel consumption markets like medium and light duty trucks and automobiles, where unit cost currently outweighs the fuel saving benefits.

Engineering regarding the practical application of the technology will enlist a combination of in-house and outsourced work. This work will consist of continual improvement in the general design of the unit to make them less costly to manufacture, ship and install, as well as improving the performance, durability and reliability of the system. It will also involve the development and programming of electronic controls to maximize the unit's performance for specific applications, including different load types, vehicle use and engine makes and models.

Our testing facility will need to have the ability to test system operation and performance. Rather than spend approximately \$75,000 for outsourced dynamometer testing, we propose installing a water break dynamometer system that will allow rapid testing of new prototypes on an ongoing basis. We have received quotes of \$62,000 for the dynamometer, plus \$45,000 for the infrastructure (ventilation, cradles, etc.) required for operation.

Our staffing needs beyond Partner 1 will initially consist of test technicians who can also act as installation technicians while sales ramp up to projected levels. We will employ at least one mechanical engineer to act as chief engineer as we look to penetrate additional markets.

In-house engineering will take place in a facility to be determined that will also house our sales, service, shipping and administrative functions. We anticipate the need for a minimum of 15,000 square feet, of which 6,000 square feet will be used for office space and 9,000 for testing and warehousing.

FUNDING REQUEST – OPERATIONS

We anticipate the need for a minimum of \$2 million to fund the operational stage of our business. The financial projections and assumptions that lead us to this conclusion are presented in the sections that follow.

V. FINANCIAL PROJECTIONS

The financial projections below include the following datasets:

- Revenue and unit projections
- P&Ls
- Balance Sheets
- Cash Flow projections
- Head count by position
- Assumptions

The format for each year's dataset is as follows:

- Monthly: Prototype stage and Year 1 of operation
- Quarterly: Years 2 and 3
- Annual: All years, including Prototype stage

APPENDIX A: TABLES AND SOURCE DATA

MARKET ANALYSIS OF COMBINATION TRUCKS (US)

The first step in determining the potential market for the XXX system is to determine the fuel cost savings required to make the system a wise investment, from which we can then calculate how much fuel a truck must consume in order to be a prospect for our product. We looked at both outright purchase and a five year lease purchase arrangement to determine the minimum savings required. We assume that a customer making an outright purchase would require a minimum modified internal rate of return of 20%, while a customer that leases the system would require savings that were 1.75 times the minimum payment on a five year lease. While these assumptions are somewhat arbitrary, they provide a minimum return upon which we can further analyze the truck market to determine both potential market size and segments to target. The results of this analysis appear in Table 1:

Table 1: Minimum Required Customer Savings (\$)

Outright Purchase		60 Month Lease	
XXX AUP*:	\$ 8,000	Monthly Lease cost	\$ 182
Required MIRR*	20%	Security Deposit	\$ 364
Finance Rate	0%	End of lease buyout	\$ 1
Savings Reinvested at:	0%	Total 60 month lease cost	\$ 11,275
Annual Savings required (\$)	\$ 3,979	Total Cost/month (over 60 months)	\$ 188
		Savings required for 75% return/month	\$ 329
		Annual Savings required (\$)	\$ 3,946

* Average Unit Price

** Modified Internal Rate of Return

This analysis shows that annual savings of approximately \$4,000 are required to make the XXX system attractive to customers whether leasing or buying outright. To determine how many trucks meet this criteria, we must determine the annual fuel consumption of individual trucks. The 2002 Vehicle Inventory and Use Survey provides total vehicle miles traveled, average fuel economy and the number of trucks within each weight class, from which we can deduct average fuel consumption per vehicle (Table 2):

Table 2: Truck Statistics by Gross Vehicle Weight Class, 2002

Weight Class	Gross Vehicle Weight	Number of Trucks	Average Annual Miles	Mean Fuel Economy	Gallons / Truck	New Sales/ Year*
1	<6000 lbs	51,941,389	11,882	17.6	675	5,712,000
2	6001 – 10000	28,041,234	12,684	14.3	887	2,375,000
3	10001 – 14000	691,342	14,094	10.5	1,342	123,000
4	14001 – 16000	290,980	15,441	8.5	1,817	44,000
5	16001 – 19500	166,472	11,645	7.9	1,474	34,000
6	19501 – 26000	1,709,574	12,671	7.0	1,810	50,000
7	26001 – 33000	179,790	30,708	6.4	4,798	81,000
8	33001 and up	2,153,996	45,739	5.7	8,024	193,000
Totals:		85,174,777	13,088	13.5	973	8,612,000

Source: U.S. Department of Commerce, Bureau of the Census, 2002 Vehicle Inventory and Use Survey

* Ten year average for year ending 2008

In 2008, the U.S. Department of Transportation (USDOT) reported there were 2.2 million combination trucks (trucks with a separate cab and trailer) that traveled 143.5 billion vehicle miles with average fuel economy of 5.4 miles per gallon (mpg)⁸. The 2002 VIUS provided data on how many trucks two years old or less traveled in a given year, broken down into 5,000 mile segments (i.e., how many traveled 0-5,000 miles, 5,001-10,000 miles, etc.). We backed out the data on vehicles less than two years old to determine the total vehicle miles driven by the remaining trucks, then assigned those remaining trucks to annual miles driven ranges so that when older and newer trucks were added together the total miles driven equaled the 2008 USDOT data. Using this data and the 2008 USDOT information, we estimate the number of combination trucks and their fuel consumption based upon miles driven annually Table 3:

⁸ U.S. Department of Transportation, Research and Innovative Technology Administration
http://www.bts.gov/publications/national_transportation_statistics/html/table_04_14.html

Distribution of Trucks over 26,000 lbs. less than Two Years Old by Vehicle-Miles Traveled

Annual Vehicle Miles Traveled	Share of Combination Trucks	Number of Combo Trucks < 2 Years old	Number of Combo Trucks > 2 Years old (estimated)*	Gallons Used	Vehicle Miles Traveled
0-5,000	0.004	1,544	107,793	467	273,341,532
5-10,000	0.010	3,860	61,308	1,402	488,762,705
10-15,000	0.012	4,632	74,370	2,336	987,525,410
15-20,000	0.014	5,404	87,432	3,271	1,624,624,836
20-25,000	0.021	8,106	91,148	4,206	2,233,215,000
25-30,000	0.020	7,720	83,305	5,140	2,503,198,315
30-35,000	0.016	6,176	65,844	6,075	2,340,660,225
35-40,000	0.019	7,334	78,940	7,009	3,235,279,635
40-45,000	0.015	5,790	61,479	7,944	2,858,934,410
45-50,000	0.019	7,334	78,940	8,879	4,098,020,871
50-55,000	0.018	6,948	92,882	9,813	5,241,093,529
55-60,000	0.023	8,878	119,794	10,748	7,398,646,765
60-65,000	0.019	7,334	158,595	11,682	10,370,586,697
65-70,000	0.029	11,194	152,088	12,617	11,021,550,882
70-75,000	0.030	11,580	157,471	13,551	12,256,167,647
75-80,000	0.034	13,124	19,816	14,486	2,552,870,766
80-85,000	0.036	13,896	21,217	15,421	2,896,841,053
85-90,000	0.046	17,756	28,222	16,355	4,023,075,837
90-95,000	0.041	15,826	24,720	17,290	3,750,469,593
95-100,000	0.052	20,072	32,425	18,224	5,118,445,837
100-105,000	0.035	13,510	12,128	19,159	2,627,864,029
105-110,000	0.044	16,984	16,275	20,093	3,575,323,165
110-115,000	0.053	20,458	20,422	21,028	4,598,993,525
115-120,000	0.053	20,458	20,422	21,963	4,803,393,237
120-125,000	0.093	35,898	38,854	22,897	9,157,070,647
125-130,000	0.042	16,212	16,773	23,832	4,205,584,054
130-135,000	0.033	12,738	16,322	24,766	3,850,399,865
135-140,000	0.030	11,580	14,838	25,701	3,632,452,703
140-145,000	0.019	7,334	9,397	26,636	2,384,209,865
145-150,000	0.024	9,264	11,870	27,570	3,117,304,865
150-155,000	0.012	4,632	9,150	28,505	2,101,755,000
155-160,000	0.015	5,790	11,438	29,439	2,713,331,250
160-165,000	0.006	2,316	4,575	30,374	1,119,787,500
165-170,000	0.008	3,088	6,100	31,308	1,538,990,000
170-175,000	0.007	2,702	5,338	32,243	1,386,813,750
175-180,000	0.005	1,930	2,033	33,178	703,491,667
180-185,000	0.005	1,930	2,033	34,112	723,308,333

185-190,000	0.006	2,316	2,440	35,047	891,750,000
190-195,000	0.003	1,158	1,220	35,981	457,765,000
195-200,000	0.003	1,158	1,220	36,916	469,655,000
200-205,000	0.002	772	813	37,850	321,030,000
205-210,000	0.003	1,158	1,220	38,785	493,435,000
210-215,000	0.002	772	813	39,720	336,883,333
215-220,000	0.002	772	813	40,654	344,810,000
220-225,000	0.001	386	407	41,589	176,368,333
225-230,000	0.002	772	813	42,523	360,663,333
230-235,000	0.001	386	407	43,458	184,295,000
235-240,000	0.003	1,158	1,220	44,393	564,775,000
240-245,000	0.001	386	407	45,327	192,221,667
245-250,000	0.002	772	813	46,262	392,370,000
250,000 & up	0.004	1,544	1,627	47,196	800,593,333
	0.997**	384,842	1,829,990		143,500,000,000

Source:

U.S. Department of Commerce, Bureau of the Census,
 2002 Vehicle Inventory and Use Survey, Microdata
 File on CD, 2005.

* Our estimate based upon 2002 VIUS and 2008 U.S. Department of Transportation data

** 2002 VIUS data does not add up to 1 due to rounding errors

Finally, we look at how many gallons must be consumed at various fuel savings rates and fuel price levels to realize the \$4,000 in annual savings required to justify purchase of the XXX system and compare that to average fuel consumption in Table 3 to determine how many vehicles can be considered qualified prospects. The data appears in Table 4:

Table 4: Fuel Consumption Required to Realize \$4,000 Annual Savings at Given Price and Consumption Reduction

Consumption Savings:	10%			15%			20%		
	\$2.00	\$3.00	\$4.00	\$2.00	\$3.00	\$4.00	\$2.00	\$3.00	\$4.00
Consumption Required to achieve \$4k savings:	20,000	13,333	10,000	13,333	8,889	6,667	10,000	6,667	5,000
New Trucks (1000s)*	94	147	160	147	164	174	160	174	181
Trucks <2 yrs old (1000s)	187	293	320	293	327	347	320	347	361
Trucks >2 yrs old (1000s)	220	516	947	516	1,039	1,259	947	1,259	1,408
Total Existing	407	809	1,267	809	1,366	1,606	1,267	1,606	1,769

* Assumes that new trucks will travel similar miles as trucks less than two years old