

CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC



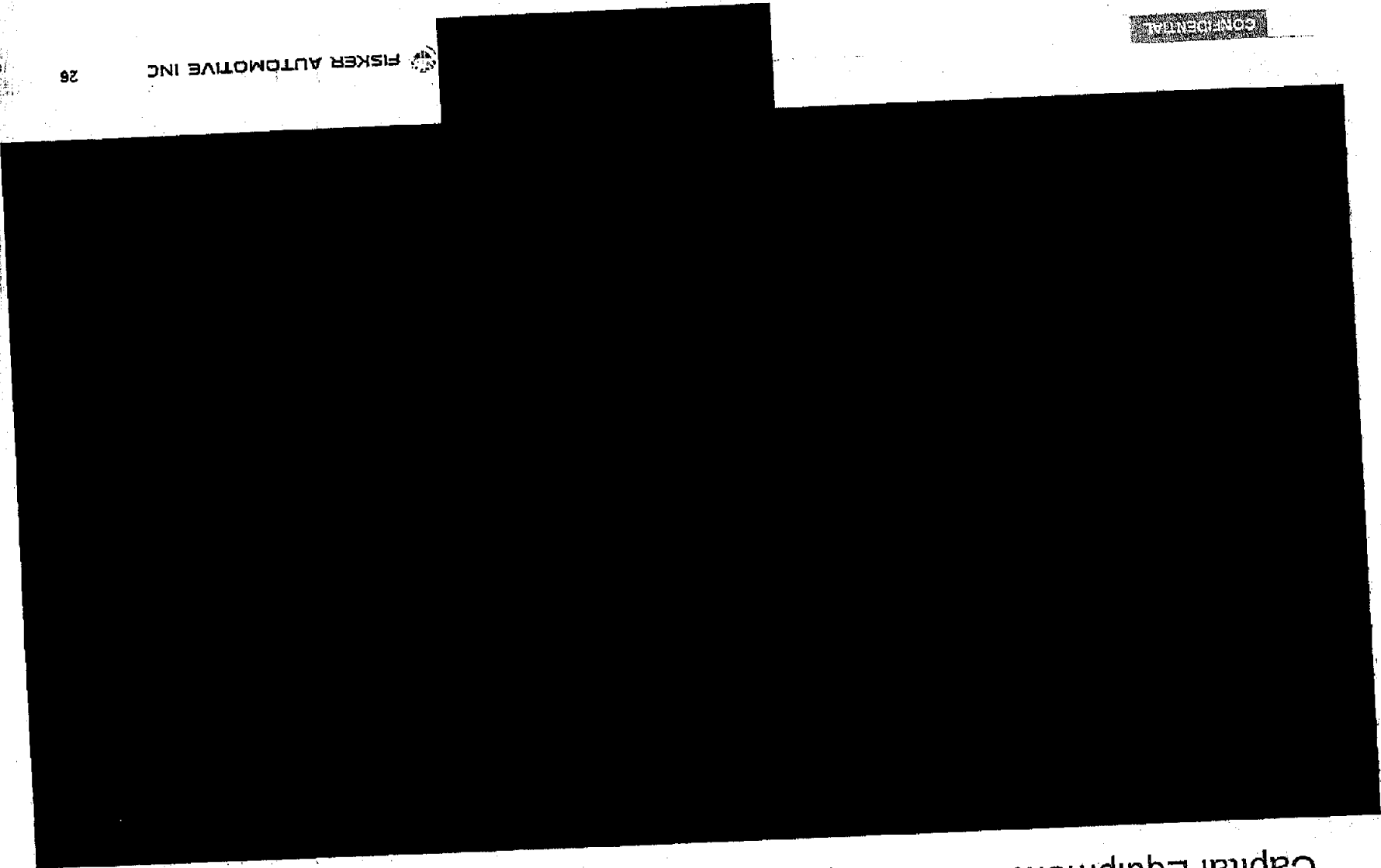
GENERAL ASSEMBLY ASSUMPTION LIST

Capital Equipment – Manufacturing Assumptions



CONFIDENTIAL

FISKER AUTOMOTIVE INC



Capital Equipment - Assembly Sequence (General Assy)



CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC



Capital Equipment – Assembly Sequence (Final Line)





# Marketing and Sales

Huge Market Opportunity, Flexible Distribution Model,  
Significant Media Attention

See Tab 2-G "Marketing Analysis" for additional detail.

CONFIDENTIAL

103/243

December 2008

FISKER AUTOMOTIVE INC

28

CONFIDENTIAL

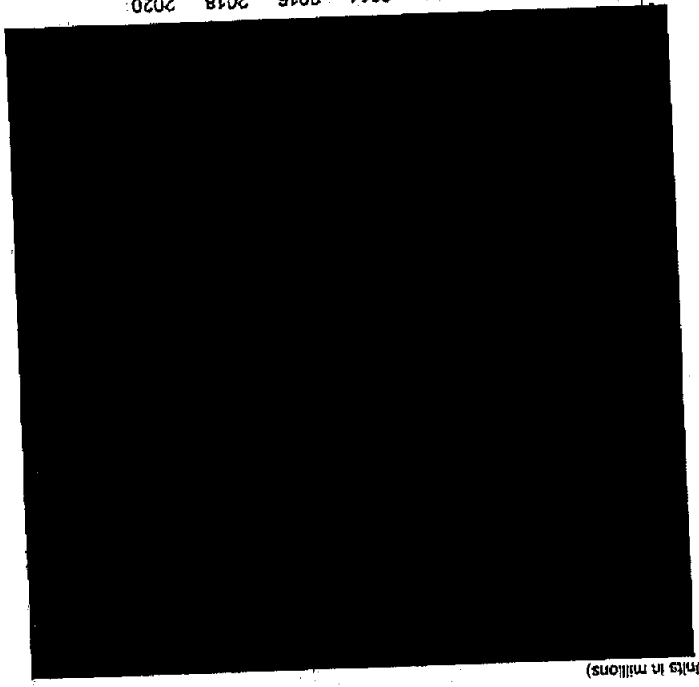
December 2008

FSKER AUTOMOTIVE INC

# Fisker is well-positioned to capture this attractive market opportunity

(1) Morgan Stanley Global Hybrid Demand Estimate with extrapolation of years 2011, 2012, 2013, 2014, 2015-2019 (March 2006). Assumes Global PHEV proportion to total Hybrid units is equivalent to US trends.  
(2) Based on 2008-2012 Global Light Vehicle CAGR (CSA, 302008) and predominantly driven by emerging market unit growth.

2008 2010 2012 2014 2016 2018 2020



## Huge Market Opportunity



CONDENSED

December 2008

FISKER AUTOMOTIVE INC



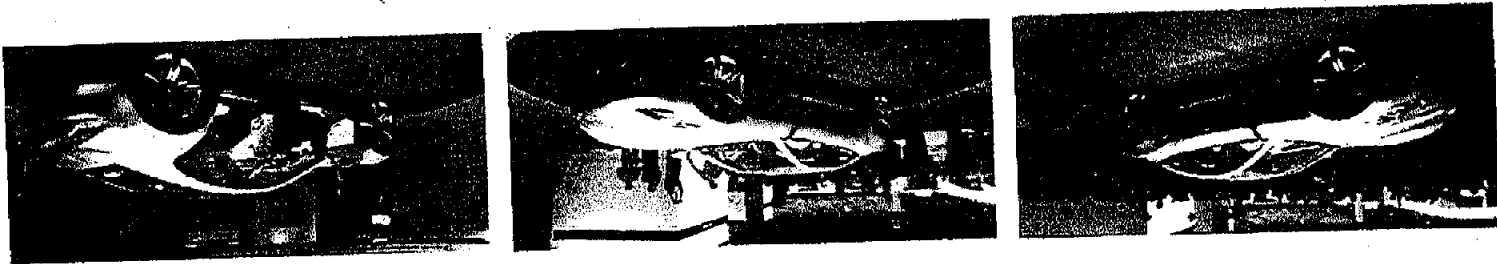
Flexible Distribution Model





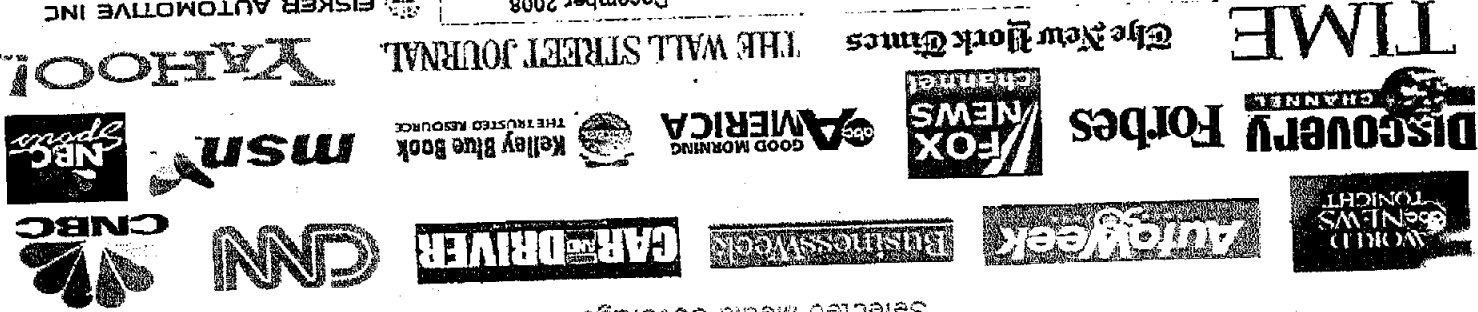
# Significant Media Attention

2008 North American International Auto Show



Online      Print      Broadcast

Selected Media Coverage



December 2008

CONFIDENTIAL

CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC

See Tab 2-G "Marketing Analysis" for additional detail.





CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC



# Management Team



# Experienced Management Team

## Management Team

**Henrik Fisker**  
Chief Executive Officer

**Bernhard Koehler**  
Chief Operating Officer

**Eric Weidner**  
Chief Financial Officer

**Alex Klatt**  
Director, Interior Design

**John Kwapis**  
Director, Manufacturing

**Russell Datz**  
Director, Public Relations

**Sylvia Navarro**  
Manager, Marketing/Retail

**Navin Jaitly**  
Director, Program Management

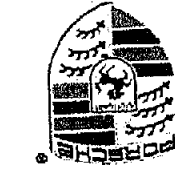
**David Anderson**  
Board Member, Palo Alto Investors

**Henrik Fisker**  
Board Member, CEO Fisker Automotive

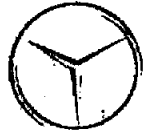
**Alan Niedzwiecki**  
Board Member, Quantum Technologies

**Ray Lane**  
Board Member, Kleiner Perkins Caufield & Byers

## Select Management Experience



ASTON MARTIN



Mercedes-Benz



Fisker's core management team has over 100 years of experience in the automotive industry

FISKER AUTOMOTIVE INC

December 2008

CONFIDENTIAL

## Henrik Fisker, Chief Executive Officer

With the creation of Fisker Automotive, Inc., Danish-born Henrik Fisker has fulfilled a lifelong dream of designing and creating a range of beautiful cars that make environmental sense without compromise. Already considered a legend in the automotive design field with creations that have included the BMW Z8, the Aston Martin DB9 and the Aston Martin V8 Vantage, Fisker is looking to turn the automotive world on its head with the soon to be produced Fisker Karma, the world's first luxury plug-in hybrid.

Immediately upon graduating from The Art Center College of Design in 1989, Fisker began his career in Germany with BMW – first at their advanced design studio BMW Technik GmbH, then for the prestigious automaker's design headquarters. Some of his most notable BMW exteriors include the Z07 concept (showcased in 1997) and the Z8 roadster (launched in 1999). In January 2001, Fisker became President and Chief Executive Officer of BMW's California-based industrial design subsidiary, Designworks/USA.

Later that year, Fisker took his talents to Ford Motor Company, where he held such prominent positions as Creative Director for Ingeni, Ford's London-based design and creativity center; Board of Directors member and Design Director for Aston Martin; and Director of Ford's Global Advanced Design Studio (CAPC) in Irvine, California. Other concept cars Fisker designed during his tenure at Ford include the Lincoln Zephyr (now a production automobile) and the Shelby GR1, showcased at the 2005 Detroit Auto Show.

In 2005, Henrik Fisker and partner Bernhard Koehler launched Fisker Coachbuild, LLC, where they sought to combine beautiful design with existing world-class engineering. The result was the creation of the Fisker Tramonto, a thrilling two-seat convertible sports car, and the Fisker Latigo, CS – an uncompromising and elegant coupe.

CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC.



## Bernhard Koehler, Chief Operating Officer



Since 1980, Bernhard Koehler has shaped more than cars – he has shaped the industry. His rare combination of creative and strategic talents resulted in Design and Business degrees, which the German native first put to work for BMW. There, he met Henrik Fisker. Over the years, Koehler and Fisker worked together in many capacities, for multiple companies, before opening the doors to Fisker Coachbuild in January 2005 and subsequently to Fisker Automotive, Inc. in 2007.

Koehler's career with BMW spanned 22 years, starting at BMW Design in Munich. There, he simultaneously formed a model-creation training studio while spearheading the Mini Monte-Carlo and BMW Motorcycle "Cruiser" sidecar concept projects. He then moved to BMW's industrial design subsidiary Designworks/USA in Southern California – as Director of 3D Services and ultimately Director of Operations.

In January 2002, Koehler was appointed Director for New Business Development at Ingeni, Ford Motor Company's design center in London. Responsibilities included revenue targets, as well as Aston Martin's modeling and operations for design and concept. In fact, he and Fisker share credit for the stunning Aston Martin DB9 and V8 Vantage designs. Koehler returned to California in January 2004, as Director of Business and Operations for Ford's Global Advanced Design Studio (CAPC). In 2005, Koehler partnered with Henrik Fisker to launch Fisker Coachbuild, LLC, where they sought to combine beautiful design with existing world-class engineering. The result was the creation of the Fisker Tramonto, a thrilling twoseat convertible sports car, and the Fisker Latigo, CS – an uncompromising and elegant coupe. In 2007 Fisker Coachbuild, LLC and Quantum Technologies partnered to create Fisker Automotive, a green American premium car company.

11/12/43

CONFIDENTIAL

December 2008

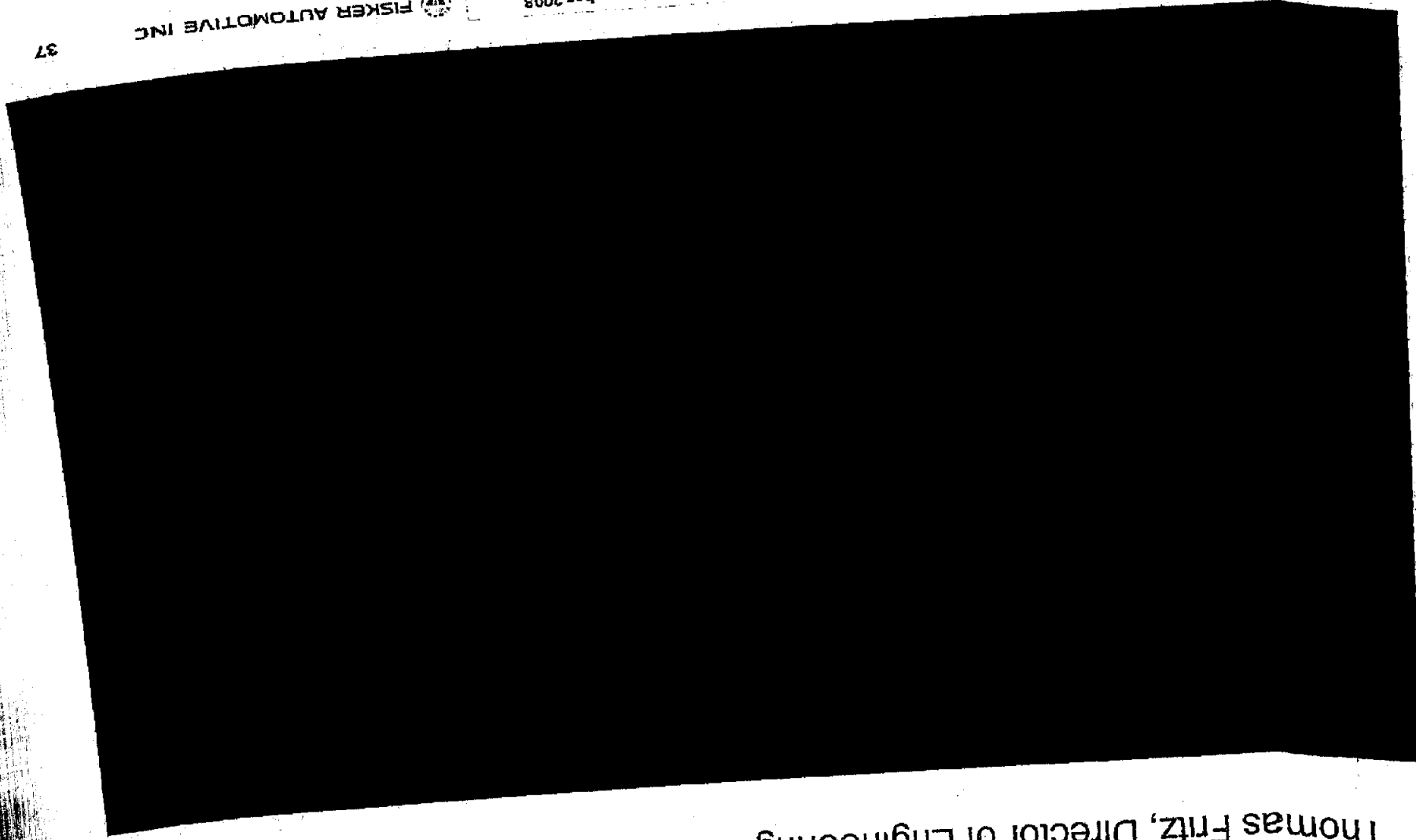
FISKER AUTOMOTIVE INC

36

CONFIDENTIAL

December 2008

FISKER AUTOMOTIVE INC



Thomas Fritz, Director of Engineering



Eric Weidner, Chief Financial Officer

Eric Weidner is a seasoned manufacturing operations finance leader with four years experience at the Division CFO level for international manufacturing companies. He has staff leadership experience including operations analysis and reporting, treasury, and tax and capital expenditure evaluation, spanning both domestic and international locations. Eric also has extensive M&A experience including acquisitions and divestitures. He has completed eight transactions (domestic and international).

Eric holds an MBA in Finance from Case Western Reserve University and is a Certified Public Accountant.



CONFIDENTIAL

December 2008 FISKER AUTOMOTIVE INC



Alexander Klatt, Director of Interior Design



11/15/243

CONFIDENTIAL

December 2008

FSKER AUTOMOTIVE INC



Mark Clarke, Director of Exterior Design







# Financials

Total Project Expenses, Expenses by  
Quarter, Capitalization Table

Pro Forma Financial Statements are included  
immediately following this document.



DESIGN EXCELLENCE

LOAN APPLICATION OF  
FISKER AUTOMOTIVE INC.

FOR

Advanced Technology Motor Vehicles Manufacturer Assistance Program

UNITED STATES DEPARTMENT OF ENERGY

10 C.F.R. Part 611

RIN 1901-AB25

APPLICATION FOR FISKER PROJECT # 1 -  
ENGINEERING INTEGRATION FOR FISKER KARMA

December 31, 2008

REDACTED VERSION

EXCLUDES CONFIDENTIAL INFORMATION - DO NOT DISCLOSE



### CONFIDENTIALITY NOTICE

The data contained in the Tabs listed below, which form a part of the application, have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that, if this applicant is issued a loan under Section 136 of the Energy Independence and Security Act of 2007 as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein, other than such data that have been properly reasserted as being trade secret or proprietary in the loan agreement. This restriction does not limit the government's right to use or disclose data obtained without restriction from any source, including the applicant.

Pursuant to the above notice, Fisker hereby asserts that the sections listed as "confidential" in the table below are exempt from disclosure pursuant to 10 C.F.R. § 1004.11. Where confidentiality is asserted, it is asserted with regard to a document in its entirety, except as noted as "partial".

Non-Confidential	Confidential
Cover Confidentiality Notice Table of Contents Overview (partial) Tab 1A: Certification Tab 1B: Project Description (partial) Tab 1C: Eligibility Analysis Tab 1I: Permits and Approvals Tab 1J: NEPA Compliance Tab 1M: Prevailing Wage Assurance Tab 1N: Form SF-LLL	Overview (partial) Tab 1B: Project Description (partial) Tab 1D and 1E – Project Cost Estimates and Financial Plan Tab 1F: Business Plan Tab 1G: Market Analysis Tab 1H: Financial Statements Tab 1K: Collateral Tab 1L: Financial Viability Analysis

Under 10 C.F.R. § 1004.11, DOE is required to provide notice to an applicant if DOE intends to disclose any information that the applicant has claimed to be exempt from disclosure. The regulations require such notice to be provided seven days prior to disclosure of the information, but provide that such notice in "notice is deemed to be given when mailed to the submitter at the submitter's last known address."

To ensure prompt notification, Fisker Automotive Inc. respectfully requests that any such notice be provided via email, rather than U.S. Postal Service. Any such notice should be directed to Bernhard Koehler, Chief Operating Officer, at [bkoehler@fiskerautomotive.com](mailto:bkoehler@fiskerautomotive.com). If notice is sent by mail, Fisker respectfully requests that it be directed to: Bernhard Koehler, Fisker Automotive Inc., 19 Corporate Park, Irvine, CA 92606.



DESIGN EXCELLENCE

APPLICATION FOR FISKER PROJECT # 1 -  
ENGINEERING INTEGRATION FOR FISKER KARMA

TABLE OF CONTENTS

Overview

*Overview of Proposed Project (CONFIDENTIAL (IN PART))*

*Attachment 1: Correspondence CONFIDENTIAL*

*Attachment 2: Recent Articles*

*Attachment 3: Recent Press Releases*

Tab 1A: Certification

*Certification of Eligibility for ATVM Loan*

Tab 1B: Project Description

*Description of Nature and Scope of Proposed Project (CONFIDENTIAL (IN PART))*

*Attachment 1: Body Module Presentation CONFIDENTIAL*

*Attachment 2: Chassis Design Summary CONFIDENTIAL*

*Attachment 3: Interiors CONFIDENTIAL*

*Attachment 4: Safety CONFIDENTIAL*

*Attachment 5: Thermal Management CONFIDENTIAL*

Tab 1C: Eligibility Analysis

*Analysis of Eligibility for ATVM Loan*

*Attachment 1: Summary of Fuel Economy Analysis for Fisker Karma*

*Attachment 2: PSAT Modeling Data for Fisker Karma*

**Tab 1D and 1E: Project Cost Estimates and Financial Plan**  
*Project Cost Estimates and Financial Plan for Fisker Karma* CONFIDENTIAL

**Tab 1F: Business Plan**  
*Business Plan for Fisker Karma* CONFIDENTIAL  
*Attachment 1: Pro Forma Financial Statements* CONFIDENTIAL

**Tab 1G: Market Analysis**  
*Marketing Analysis and Plan for Fisker Automotive Inc.* CONFIDENTIAL

**Tab 1H: Financial Statements**  
*Independent Auditors Report for 2007 – Fisker Automotive Inc.* CONFIDENTIAL  
*Preliminary 2008 Financial Report – Fisker Automotive Inc.* CONFIDENTIAL

**Tab 1I: List of Siting, Construction, and Operation Permits/Approvals**  
*Summary of Potential Permitting Requirements*

**Tab 1J: Information to Support NEPA Compliance**  
*Analysis of NEPA Requirements*  
*Attachment 1: Comprehensive Environmental Report*

**Tab 1K: Collateral**  
*Summary of Proposed Collateral* CONFIDENTIAL  
*Attachment 1: List of Pending Patent Applications* CONFIDENTIAL

**Tab 1L: Financial Viability Analysis**  
*Summary of Financial Viability Pursuant to 10 C.F.R. 611.100(c)* CONFIDENTIAL  
*Attachment 1: Supporting Data for Financial Viability Analysis* CONFIDENTIAL

**Tab 1M: Prevailing Wage Assurance**  
*Assurance of Compliance with Prevailing Wage Requirements*

**Tab 1N: Form SF-LLL**  
*Copy of Form SF-LLL signed by Fabiant & Co.*

FISKER AUTOMOTIVE INC.

APPLICATION FOR FISKER PROJECT #1 -  
ENGINEERING INTEGRATION FOR FISKER KARMA

**OVERVIEW**

*Overview of Proposed Project CONFIDENTIAL (IN PART)*

*Attachment 1: Correspondence CONFIDENTIAL.*

*Attachment 2: Recent Articles*

*Attachment 3: Recent Press Releases*

**CONFIDENTIALITY NOTICE**

Documents marked as "Confidential" contain proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

## OVERVIEW

### Vision

Fisker Automotive's vision is to create an environmentally friendly American car company offering premium plug-in hybrid electric vehicles (PHEV's). Fisker's PHEV's will not only have an all electric range of up to 50 miles, but will also accept gasoline so that the effective driving range is unlimited and new fueling or recharging infrastructure is not necessary. It is important to note that a 50 mile electric range would allow the vast majority of Americans to recharge each night and never need to use gasoline.

### Strategy

---

*"While driving eco-friendly cars is important to today's consumer, they don't want to sacrifice the comfort they are accustomed to. By designing around the technology and the driver to deliver a car with comfort, convenience and great design, we believe we have created a vehicle that will satisfy the consumer demand."*

---

Henrik Fisker  
Chief Executive Officer  
Fisker Automotive Inc.

Today, the electrification of transportation is seen as one of the core strategies to increase fuel efficiency, decrease emissions, and reduce dependence on foreign oil. Broadly speaking, there are two main obstacles to a near-term increase in the use of electricity for transportation: (i) technology and (ii) market adoption. Fisker Automotive has the expertise to solve both challenges, and in the process help reestablish the United States as a world leader in automotive technology and design.

It is important to note that with DoE funds, Fisker Automotive believes it will be able to break down barriers to entry to the PHEV market for American car companies through improved technology and accelerated market adoption.

Fisker's intent is to scale its technology and/or manufacturing and decrease the cost of PHEV's to make these cars accessible to most U.S. consumers. This creates economic and national security impacts that reach far beyond Fisker's initial vehicle production.

Fisker Automotive has already created hundreds of jobs in the United States. With assistance from DoE, Fisker will create hundreds more. Fisker technology together with DoE funds will create vehicles that will drive technology acceleration and market adoption.

Application of Fisker Automotive Inc.  
ATVM Loan Program  
Fisker Project # 1 - Engineering Integration for "Fisker Karma"



**Technology.** Fisker has the exclusive rights to integrate a cutting-edge electric vehicle powertrain originally developed for the U.S. military by Quantum Technologies (NASDAQ - QTWW). Quantum is a joint venture partner [and has a 19% fully-diluted equity stake] in Fisker. In addition, Fisker has the exclusive right to exploit the advanced lithium ion battery technology from Advanced Lithium Power, Inc. (ALP) [in which Fisker holds a equity stake]. Fisker's first vehicle, the Karma, boasts exceptional performance capabilities on battery power alone with zero to sixty miles per hour achieved in 7.5 seconds and a top speed of 95 miles per hour.

**Market Adoption.** U.S. consumer embrace of fuel efficient vehicles has a mixed history that corresponds roughly to the price of gasoline. Simply put, consumers in the United States have tended to purchase fuel efficient vehicles only when there was an economic incentive to do so. As is well known, the price of gasoline can vary widely through the lifecycle of an automobile and therefore provide an inconsistent driver of consumer demand.

Fisker plans to break this cycle by creating a vehicle that consumers will want to own and drive regardless of the price of gasoline. The driving force behind this demand is the exceptional quality of the design of Fisker automobiles.

The design team at Fisker is truly an automotive "dream team" with designers from BMW, Porsche, Mercedes Benz, Ford, GM, Volvo, and Aston Martin. Henrik Fisker, CEO, has been recognized worldwide for designing the BMW Z8, The Aston Martin V8 Vantage, and the Aston Martin DB9. This team's first car, the Fisker Karma, will be unveiled at the Detroit Auto Show on January 12, 2009 and will be ready for production October 2009 with the first deliveries expected in November 2009. This time frame for car production is far ahead of any other U.S. PHEV or EV car company. Fisker already has over 1000 pre-orders with deposits for the new vehicle.

### **Technology Transfer with the 'Big Three' and Suppliers**

Fisker's strategy is not only to establish itself as the leading manufacturer of green premium PHEVs, but also to license its technology to other American companies.

Fisker has already built a strong working relationship with General Motors and will use General Motors as a supplier for the internal combustion engine portion of the Karma. In addition, Fisker is exploring the purchase of production components with General Motors.

<sup>1</sup> CONFIDENTIALITY NOTE The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

<sup>2</sup> CONFIDENTIALITY NOTE The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

<sup>3</sup> CONFIDENTIALITY NOTE The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

Application of Fisker Automotive Inc.  
ATVM Loan Program  
Fisker Project # 1 - Engineering Integration for "Fisker Karma"

In the future, Fisker intends to license portions of its PHEV technology to other American automobile companies, tier 1 and tier 2 suppliers. To that end, Fisker has already held detailed discussions regarding Fisker's ability to supply certain portions of PHEV technology in order to advance the U.S. auto industry as a whole.

### Proposed Projects under ATVM Program

In this application, Fisker seeks two loans under the ATVM program to fund separate projects. The two projects are:

- **Fisker Project # 1: Fisker Karma – Engineering Integration.** Fisker is seeking a \$145.3 million loan for an engineering integration project for the Fisker Karma, the first Fisker vehicle. The Karma is a high-end performance sedan with a base suggested retail price of \$87,900. Fisker has already received over 1000 pre-orders in the U.S. for this vehicle. This project will take place primarily at Fisker's existing Engineering and Design Center in Pontiac, Michigan, with support from Fisker's existing headquarters in Irvine, California. This proposed loan would cover 80% of the total costs of this project.
- **Fisker Project #2: Fisker Kx – Reequipping a Manufacturing Facility.** Fisker is seeking a \$318.8 million loan to reequip a manufacturing facility to produce the Fisker Kx, which will be the second Fisker vehicle. This project will also include engineering integration for the Kx. The Kx will be positioned in the market as a sport sedan *with a base price of \$49,000/.* This project will take place at a facility in the United States. Fisker has identified two existing plants, [REDACTED] that meet Fisker's requirements. If Fisker is unable to secure either facility, then there are numerous other facilities with similar characteristics in the United States owned by one of the 'Big 3' auto manufacturers. This proposed loan would cover 80% of the total costs of this project.

### The Company

**Founders.** Fisker Automotive was started in 2007 to leverage the design capabilities of Fisker Coachbuild, LLC and the industry-leading PHEV powertrain of Quantum Technologies (NASDAQ – QTWW). *(Currently, these companies hold a combined stake of 30.8% in Fisker Automotive.)*

**Venture Capital Investment.** Fisker Automotive has attracted over \$90 million in venture capital investment since its founding in 2007. Fisker's investors include Kleiner Perkins Caufield & Byers, one of America's premier venture capital firms. As a growing company,

---

<sup>4</sup> CONFIDENTIALITY NOTE. The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

<sup>5</sup> CONFIDENTIALITY NOTE. The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

Fisker continues to seek out additional investment partners as dictated by the financial plan of the company

**Management Team.** Fisker Automotive has assembled a team of internationally recognized automotive specialists with experience from such renowned automotive companies as BMW, Porsche, Mercedes Benz, Ford, GM, Volvo, and Aston Martin. Fisker Automotive's seasoned management team has the industry knowledge and capability to successfully launch a vehicle from every angle including design, clay modeling, CAD engineering development, prototype build, part supply chain, manufacturing, and distribution. This application includes biographical profiles for Chief Executive Officer Henrik Fisker, Chief Operating Officer Bernhard Koehler, Chief Financial Officer Eric Weidner, Director of Engineering Thomas Fritz, Director of Interior Design Alexander Klatt, and Director of External Design Mark Clarke (see Tab I-F for biographical information)

**Suppliers.** Fisker Automotive is able to leverage the deep automotive industry expertise of the management team to develop a broad network of suppliers. Fisker is working with various third-party automotive engineering and manufacturing firms [including, but not limited to, ██████████ EDAG US, and various domestic divisions of Magna International.]. This team ensures that the Karma will meet all FMVSS and ECE standards. Fisker has extensive CAD (computer aided design) and CAE (computer aided engineering) underway within this group to comply with these standards. This includes crash testing, aerodynamics, thermal modeling, and simulation. Fisker will also utilize 50 to 60 sub-suppliers that will support engineering efforts as well as component production

**Manufacturing Partner.** Fisker plans to establish a manufacturing facility in the United States, but in order to achieve the fastest path to market for its first vehicle, the Karma, Fisker has entered into an agreement with Valmet Automotive to manufacture and assemble vehicles in Finland. The majority of these vehicles will be sold in the United States. Valmet has world-class assembly capability and a depth of experience in managing the assembly and the supply chain for high quality specialty cars such as the Porsche Boxster and Cayman for Porsche AG. After initially producing the Karma in Finland, Fisker expects to begin manufacturing future models in the United States, there is simply no facility in the U.S. capable of making the Karma at this time.

### Application Note

This application contains each of the required elements for each proposed loan. Fisker requests that DoE evaluate each loan request individually when determining the substantial completeness of this application and when determining whether to award the requested loans. To assist DoE in reviewing this application, the application includes a table of contents (inside the front cover) showing where each element of the application can be found for each proposed project

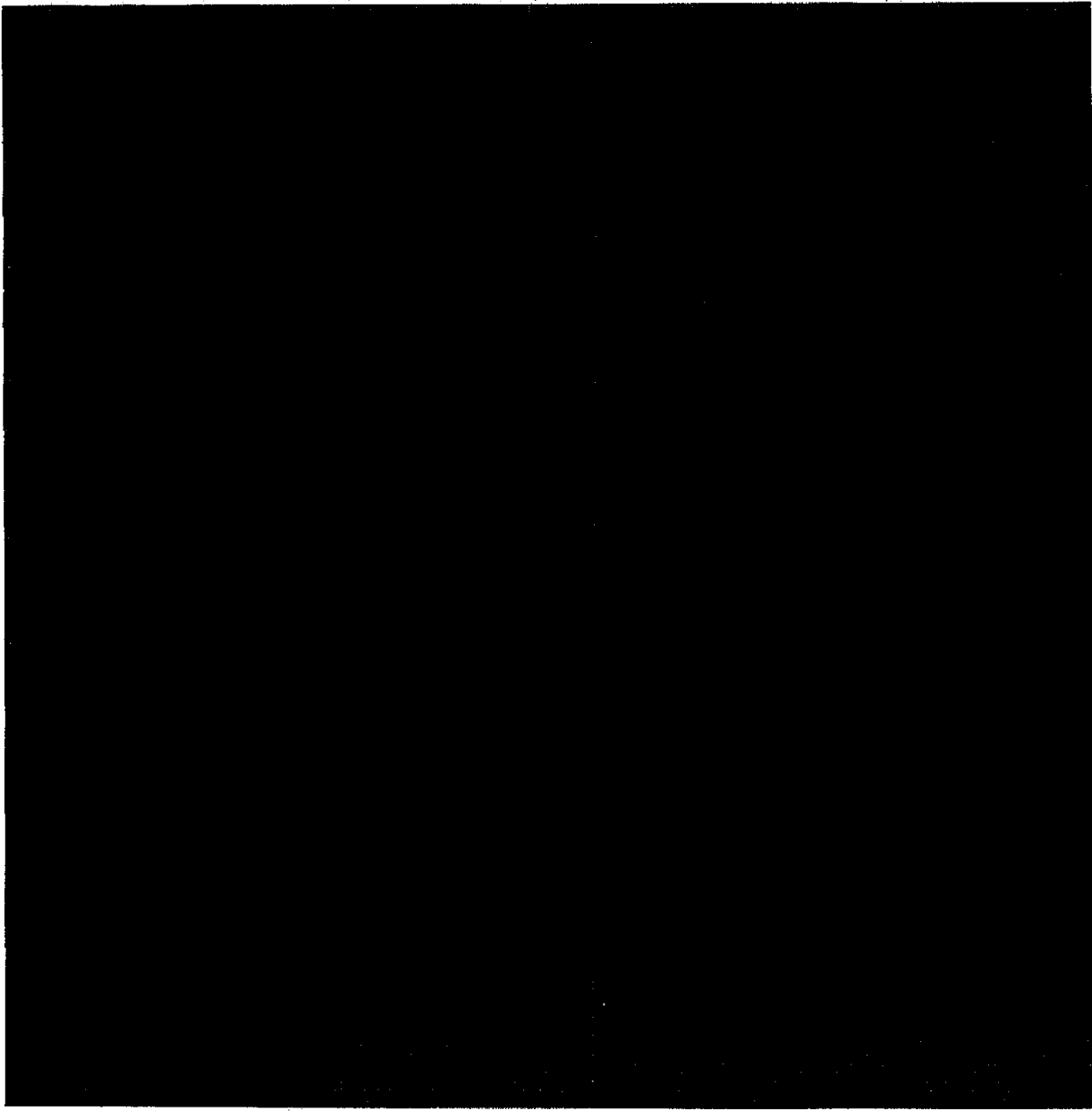
For more information, please refer to the attached press clipping and other materials

<sup>6</sup> CONFIDENTIALITY NOTE: The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation

Application of Fisker Automotive Inc.  
ATVM Loan Program  
Fisker Project # 1 – Engineering Integration for “Fisker Karma”

9/28/1







## OVERVIEW

### Attachment 2: Recent Articles

"Most Successful U.S. Startups 2008," Business Week (Dec. 22, 2008)

"Finalists Announced for Green Car Journal's Green Car Vision Award",  
AutoBlog (Dec. 22, 2008).

GET QUOTES

Finance Search

Monday

## Most Successful U.S. Startups 2008

by John Tozzi, Stacy Perman, and Nick Leiber  
Monday, December 22, 2008

provided by



While 2008 was clearly an awful year for business, a look back shows entrepreneurs running startups managed to raise significant amounts of capital to fund their plans for growth. In fact, venture capitalists invested more than \$7 billion in seed and early-stage companies in the past four quarters — more than any calendar year since the dot-com bubble burst in 2001.

With this in mind, BusinessWeek set out to find the hottest new businesses across the U.S., based on the collective judgment of the venture capital community. To do so, we followed the money, looking at deals that took place in the four most recent quarters available, from October 2007 to September 2008, based on the MoneyTree Report from the National Venture Capital Association and PricewaterhouseCoopers. We then reached out to a selection of the seed and early-stage companies that raised the most money. For profiles of 25 of these startups, click on. Then weigh in on how you measure a startup's potential for success in this post on our staff blog.

### More from BusinessWeek.com:

- Starting a Business in a Downturn
- Advice for Startups Seeking Angel Funding
- Your Startup on a Shoestring



Courtesy: Fisker Automotive

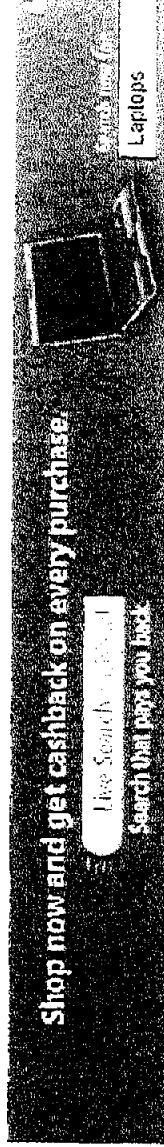
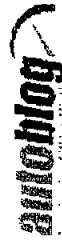
### Fisker Automotive

Irvine, Calif.  
Founders: Henrik Fisker and Bernhard Koehler  
VC Investment over the last four quarters: \$90.5 million

Henrik Fisker and Bernhard Koehler met at BMW, where both worked as auto designers (Fisker is credited with designing the Z8). In 2007, they founded Fisker to build plug-in hybrid luxury cars, with the goal of selling to car buyers who want to improve their impact on the environment but not have to make a compromise when it comes to style. The 45-employee company, which is still in the development stage, is predicting the recession will improve by midyear 2009 and that consumers will be turning to eco-friendly cars for good, explains Fisker spokesperson Russell Dalz.

**Key to startup success:** "Have a solid business plan and stick to deadlines."

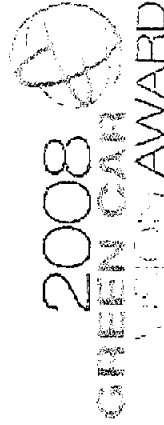




Filed under: Hybrids/Alternative, Etc., Green, Chevrolet, Honda, MINI, Mitsubishi, Misc. Auto Shows, Lifestyle

## Finalists announced for Green Car Journal's Green Car Vision Award

by Jonathon Ramsey on Dec 22nd 2008 at 7:01AM



The Green Car Vision awards celebrate a car that's got its headlights pointed down the road of the future. Among this year's five finalists are two serial hybrids (Chevrolet Volt and Fisker Karma) two electric cars (MINI E and Mitsubishi i-MiEV), and one hydrogen fuel cell vehicle (Honda FCX Clarity). It seems like a pretty good breakdown of where things stand now, with serial, plug-in hybrids and electric cars duking it out in center court and a hydrogen vehicle thrown in to keep things honest. Three of those cars -- the MINI E, i-MiEV, and Clarity -- are on the roads right now, albeit in limited numbers, and the Fisker is due to hit the scene at the end of 2009, while the Volt bows in 2010. The winning car will be announced on February 3 at the Washington, D.C. Auto Show. *You can read the full press release after the jump and check out a high-res gallery of the finalists below.*

[Source: Green Car Journal]

### PRESS RELEASE

#### 2009 Green Car Vision Award(TM) Finalists Announced

##### Plug-in Hybrid, Hydrogen, Range Extended Electric, Battery Electric Cars Included

**WASHINGTON, Dec. 19 /PRNewswire/ --** Five nominees have been identified for Green Car Journal's 2009 Green Car Vision Award(TM), which acknowledges a vehicle that best envisions the road ahead. One of these five finalists -- the Chevrolet Volt, Fisker Karma, Honda FCX Clarity, MINI E, or Mitsubishi i-MiEV -- will be honored as the 2009 Green Car Vision Award winner during a press conference on Public Policy Day February 3, at The Washington Auto Show in Washington D.C.

<sup>16</sup>  
<http://www.autoblog.com/2008/12/22/finalists-announced-for-green-car-journals-green-c...> 12/29/2008

*"Vehicles offering dramatically improved environmental performance are crucial to helping us move beyond today's challenges of oil dependence and growing environmental impacts," says Ron Cogan, editor and publisher of the Green Car Journal and editor of GreenCar.com ( <http://www.greencar.com/> ). "While not yet widely available in new car showrooms, these vehicles each inspire in important ways with their advanced powertrains, use of cleaner or more sustainable fuels, vastly improved efficiencies, or a combination of these attributes."*

*Unlike concept cars, which tantalize us with wild designs or features that may or may not ever make it to the highway, these five vehicles are real. They are either in limited production or in demonstration programs now, or are in development and on the road to commercialization.*

*Dispelling the myth that innovation will only come from outside the traditional automotive industry, four of the 2009 Green Car Vision Award(TM) finalists are products from major auto manufacturers. The fifth is from a new car company, Fisker Automotive, headed by Henrik Fisker, formerly director of Ford's Global Advanced Design Studio and before that president of BMW division DesignWorks USA.*

*Chevrolet's Volt is a range-extended, plug-in electric car with a scheduled introduction in late 2010. The Fisker Karma, to be shown in production form next month, is a plug-in hybrid luxury sedan that's set for sale in late 2009. The FCX Clarity, Honda's innovative hydrogen fuel cell sedan, is in very limited production and being leased to a small number of consumers now. The recently unveiled battery electric MINI E will be leased to 500 select consumers in three states. Mitsubishi i-MiEV electric cars are on the highway in a demonstration program with Southern California Edison and PG&E.*

*"The advanced technology vehicles now available at new car showrooms, like highly efficient gasoline-electric hybrids, are the result of visionary work that occurred years in advance of their introduction to the market," says Cogan. The five nominees for Green Car Journal's 2009 Green Car Vision Award (TM) are exceptional examples of innovation at work."*

*The award-winning Green Car Journal has focused on the intersection of automobiles, energy, and environment since its launch in 1992. As part of its mission, the magazine hosts events, produces ride-and-drives of advanced and clean fuel vehicles, and conducts various outreach efforts to educate consumers on better and more environmentally positive vehicle choices.*

*The 67th staging of the Washington Auto Show: The Automotive Seat of Power will bring more than 700 new cars, trucks, mini-vans and sport utility vehicles from over 42 domestic and import automakers to the Walter E. Washington Convention Center from Feb. 4 -- 8, 2009. Supporting its growing 'green' theme, a wide array of advanced technology and clean fuel vehicles will be displayed in a Green Car Pavilion and throughout the show floor. For more information visit the Washington Auto Show online at <http://www.washingtonautoshow.com/>.*

## Reader Comments (Page 1 of 1)



**Mobius\_1 7:20AM (12/22/2008)**

I vote Clarity. I would also like to nominate BMW Hydrogen 7 though, would be a good car to use during a period of mass transition from oil to hydrogen.





## OVERVIEW

### Attachment 3: Recent Press Releases

- Dec. 2, 2008: "Fisker Automotive's First Production Vehicle, the Fisker Karma, to be Showcased at the North American International Auto Show"
- Nov. 21, 2008: "Fisker Automotive Announces Intent to Source General Motors Components"
- Nov. 12, 2008: "Fisker Automotive and Valmet Automotive Have Signed Final Assembly Contract for the Fisker Karma"
- Nov. 10, 2008: "Fisker Automotive Announces Engineering and Development Center in Pontiac, Michigan"
- Sept. 8, 2008: "Fisker Automotive Raises \$65 Million in Series C Financing Round"



## Fisker Automotive's First Production Vehicle, the Fisker Karma, to be Showcased at the North American International Auto Show (NAIAS)

IRVINE, CA, Dec. 2, 2008: Fisker Automotive, Inc., a green American premium sports car company, today announced that its first production car, the Fisker Karma, will be showcased at the North American International Auto Show (NAIAS). With only minor design enhancements made to the exterior of the vehicle, the production Fisker Karma plug-in hybrid retains the extreme proportions and beautiful sculpture of the January 2008 Karma show car.

"We are very excited to be bringing the Fisker Karma back to NAIAS," said Fisker Automotive CEO Henrik Fisker. "In the year since we debuted the Karma, the reception we've received has been tremendous. I'm proud to announce at this time that we are already sold out on the car until mid-2010."

With a base price of \$87,900 (USD), the Fisker Karma is scheduled to begin delivery in November, 2009. Featuring the proprietary Q-Drive powertrain, the Fisker Karma will have an all-electric range of 50 miles (80km). After the all electric 50 miles, the gasoline engine turns a generator to charge the lithium ion battery. Once the 50-mile electric range has been exceeded, the Fisker Karma can be used as a normal hybrid vehicle. With this balance of electric and gas range, Fisker Automotive estimates that most Karma drivers who charge the Karma overnight and commute less than 50 miles per day will be able to achieve an average fuel economy of 100 mpg (2.4L/100km) per year.

The production model to be featured at the 2009 NAIAS will include an upper grill that is graphically enhanced, being slightly larger towards the outer corners. The lower air intake has been enlarged to allow for more airflow and underneath the rear bumper, an aerodynamic diffuser includes the integration of a cooling cover for the electric drivetrain.

To optimize cooling and aerodynamics, the exhaust pipe from the ICE engine is routed directly out behind the front wheels. A small functional side vent will release the hot air when the ICE engine is turned on. The Fisker Karma also features a complete flush B-pillar. The B-pillar is a safety feature and already fulfills the proposed 2012 rollover protection safety regulations.

Underneath the Karma is an all aluminum spaceframe made in cooperation with Norsk Hydro. The exterior body is a combination of aluminum panels and composite panels.

The Karma has a unique sustainable interior strategy. The design of the interior cabin is a luxurious tailored space for four adults. The interior will be unveiled for the first time in its final form at the 2009 NAIAS.

The vehicle's ride and handling is decisively sporty and includes very responsive steering. The Karma's long wheel base, wide track and low center of gravity provide excellent cornering and stability at highway speeds.

## NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949-242-4911  
Mobile: 714-925-6843  
Fax: 949-757-4320  
P.O. Box 241, Irvine, CA 92614  
[www.fiskerproduction.com](http://www.fiskerproduction.com)



The innovative powertrain, Q-drive, utilizes a large, powerful lithium ion battery and a powerful 2-liter direct injected turbo-charged 4-cylinder gasoline engine developing 260 hp, which enables the Karma to achieve a continuous top speed of 125 mph and a 0-60 of 5.8 seconds. The large powerful lithium ion battery provides 22.6 kWh, which has unique control software. The two powerful electric motors deliver a combined 408 hp.

Additional features of the Karma include:

#### **Karma Powertrain "Q Drive"**

##### **Powertrain Overview Description**

The Karma powertrain is a high performance, high efficiency, plug-in hybrid electric system comprised of three electric machines, three inverters, a turbo-charged 2.0 L high-feature DI gasoline engine and an advanced Lithium-ion technology battery pack. This hardware combination coupled with the innovative Q-Drive control system provides for a unique driving experience where energy, power, feel, and fuel economy are optimized to satisfy driver demands.

##### **Energy Storage System**

The energy storage system incorporates an advanced lithium-ion chemistry battery pack with integrated control and safety systems that ensure safe and powerful operation throughout the operating life. The system has a maximum storage capacity of 22.6 kW-hrs and is capable of delivering a peak electric power of 200 kW (500 Amps at 400 Volts) throughout the charge depleting range of operation. The Advanced Lithium Power battery pack has been designed for the rigorous requirements of the automotive environment, and is a full "plug and play unit" utilizing all advanced vehicle communications software. The battery pack uses inherently safe cell chemistry and has been designed with multiple levels of software and hardware features to ensure optimal performance while providing the highest levels of safety features.

##### **Powertrain Electric Traction**

The power dense dual motor traction drive is capable of delivering a peak output mechanical power of 300 kW (408 hp) and a peak torque of 1300 Nm (959 Ft-lb) to the input of the differential. In Sport mode this provides for a high performance luxury sport sedan acceleration time of 0 to 60 mph (0-100 km/h) in less than 6 seconds. The sustained (electronic limited) top speed is 125 mph (200 km/h).

##### **Karma Powertrain Operating Modes**

##### **Stealth**

Stealth is the default mode of operation. In this mode of operation the Q-Drive continuously optimizes the system performance and efficiency around fuel economy and electric operation. The high efficiency traction system and stable battery pack operating characteristics provide for full no-compromise electric performance on the urban driving schedule. The total achievable all

## **NEWS**

Inquiries: Silvia Lopez-Navarro  
Telefons: 949-242-4911  
Mobile: 714-925-6843  
Fax: 949-757-4320  
EMAIL: [silvia@mgmna.com](mailto:silvia@mgmna.com)  
[www.fordvehicles.com](http://www.fordvehicles.com)



electric range of greater than 50 miles is realized while in Stealth mode. In this mode the maximum vehicle speed will be limited to 95 mph with slightly limited acceleration. When electric mode is exited, the charge sustaining low energy threshold has been reached. The Q-Drive system then transitions to HEV operation. In HEV mode, the Q-Drive still optimizes fuel economy.

#### **Sport**

Sport is a driver selectable feature allowing for enhanced vehicle performance operation. This mode takes full advantage of the peak traction system performance capability and delivers the peak on-demand power and torque in order to achieve a 0 to 60 mph time of 5.8 seconds and a top speed of 125 mph. At anytime the driver can switch between stealth and sport modes. Should the driver wish to change back to Stealth mode, the Q-Drive will transition the vehicle operation to the Stealth mode low energy operating threshold.

#### **HEV**

When in HEV or charge sustaining mode the Q-Drive control system operates the vehicle very much the same as a normal strong hybrid. This includes deceleration engine shutdown, zero speed engine-off, electric launch and auto-start capability, and charge sustaining while maintaining charge balancing throughout the customer drive cycle. When the driver is in Sport mode, the Q-Drive automatically transitions to the charge sustaining mode at a higher SOC level than when in Stealth mode. This ensures that sufficient energy is available to support driver demands. Should the driver transition from Stealth to Sport while in HEV mode; the Q-Drive will restore the higher low-energy threshold. This provides for a high performance, on-demand, no-compromise, vehicle operation.

#### **Fuel Economy & Energy Recovery**

The Q-Drive system in all modes of operation works synchronously with the regenerative braking system and optimizes the energy recovery around driving conditions, driver demands for downhill simulated engine braking, vehicle speed, and road conditions.

#### **Exterior Design**

##### **Eco Chic**

Low, wide and coupe-like in profile, sensually sculpted surfaces mix with dramatic and powerful proportions to give the Fisker Karma a "look" all its own. The Karma's dynamic stance is just as much a thing of beauty as it is a result of the car's proprietary technical layout. Standard 22-inch light alloy rims at all four corners make Karma a world-leader in the wheel to body relationship. Form and function go hand in hand at Fisker.

Furthermore, innovative and functional design features such as side-mounted charging indicators, state-of-the-art LED-Xenon lighting, unique external-mounted speaker covers and a one-piece solar glass roof work in harmony to express the new design aesthetic that is Eco-Chic.

## **NEWS**

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949 242-4911  
Mobile: 714-925-6643  
Fax: 949 757 4320  
©2005 Fisker Automotive, Inc. 05/05  
[www.fisker.com](http://www.fisker.com)



The exterior design of the production Karma is instantly recognizable and makes no compromises, with only minor changes from the 2008 Karma show car.

#### **Headlamps/Tail lamps**

The Karma headlamp combines a Bi-Xenon main lighting module with state-of-the-art LEDs making it one of the most energy-efficient headlamps ever offered. The distinctive bezel design is yet another example of the new Eco-Chic aesthetic.

The tail lamps features state-of-the-art LEDs for low energy consumption

#### **Solar Roof**

The Fisker Karma is unique in having the world's largest continuous formed glass solar roof panel on a car. The splayed solar cell array maximizes solar ray absorption under various lighting conditions. The graphic accent that runs between the solar cells gives the solar roof a unique and futuristic appearance.

#### **Solar Roof Functionality**

The Karma solar energy system converts radiated power from the sun into stored electrical energy. All energy gained from the sun supplants that of the batteries and fuel, effectively increasing the electric range of the Karma.

#### **Solar Power Modes**

During vehicle on mode and accessory mode, the electrical system will use all available solar power. For vehicle off mode, the driver may choose from 3 solar power strategies...

1. **Auto**—the Karma will use the solar power for optimal benefit and focus on system efficiency and reduced costs, including energy and longevity. The Karma will use this default strategy unless the driver selects otherwise, and the Karma resets to this strategy after each power-on.
2. **Climate**—the energy management system will utilize the solar power to ventilate the passenger compartment and reduce the effects of radiant heating. The driver can select this option from the solar menu.
3. **Charging**—the Karma will store as much energy as possible from solar power. The driver can select this option from the solar menu.

## **NEWS**

Inquiries: Silvia Lopez-Narvaro  
Telephone: 949-242-4911  
Mobile: 714-926-6643  
Fax: 949-757-4320  
Email: [info@fisker.com](mailto:info@fisker.com)  
[www.fisker.com](http://www.fisker.com)

#### **System Architecture**

The solar system architecture consists of a the solar panel and power conditioning devices which manage the power delivered utilizing maximum power point (MPP) tracking. The solar panel is comprised of 4 electrically separate zones, each consisting of 20 cells in series. Each of the 4 zones incorporates MPP tracking to maximize power output for various solar radiation angles and partial shading conditions.





As a subsystem, it serves as an integral part of the vehicle onboard energy management strategy to continuously optimize and manage on board vehicle energy.

#### Technical Specifications

- 0.5 kWh/day
- 130 W

#### Charging Port

- Locking charging port with lid for 110V and 220V charging on driver's side rear quarter panel (analog to fuel filler on passenger side)

#### High-Performance Space-Frame Body Structure

Embodied in the Fisker Karma is a high-performance light-weight aluminum space-frame - developed by the most experienced body structure engineers in the automotive industry. The Karma aluminum spaceframe fulfills high stiffness targets for bending and torsion while fulfilling all current crash standards. The strong aluminum spaceframe allows the driver of the Fisker Karma to experience a new level of body rigidity and damping. The resulting steering feel and the driving dynamics will be unmatched in the 4-door sports sedan class.

The side glass "DLO" appears as one smooth, unbroken curved surface that incorporates a flush b-pillar. Due to the strong b-pillar, the Fisker Karma easily fulfills the proposed 2012 rollover protection rules.

#### Vehicle Architecture

The Fisker Karma's vehicle architecture layout features the lithium ion battery packaged into the tunnel enabling a very low center of gravity in the middle of the vehicle - perfect for best driving dynamics and safety. A further advantage of this architecture is the completely closed and rigid body shell that surrounds the driver and the passengers between the front and the rear of the vehicle.

#### Interior

The final production interior will be unveiled in Detroit at the NAIAS on January 15, 2009.

## NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949-242-4811  
Mobile: 714-925-8843  
Fax: 949-757-4320  
press@fisker.com  
600 W. Bakersfield Blvd., Torrance, CA 90501

#### Chassis – Suspension:

Designed to match the unique driving experience of the Fisker Karma's electric driveline, the suspension system balances attributes of a grand touring sedan with the fun-to-drive characteristics of a legitimate sports car. Using a systems integration approach to the complex tradeoffs of an all new plug-in hybrid platform, engineers were able to meet rigorous functional targets that are competitive with other luxury sports sedans. The design result takes advantage of Karma's low center of gravity, wide track, and long wheelbase to deliver a unique driving experience with a blend of response and comfort.



Both front and rear suspensions feature a "short long arm" (SLA) architecture with a short spindle height. Similar to that found in many sports cars, the compact package of the SLA suspension is compatible with Karma's low overall hood height and a dramatic rear end styling.

All suspension components including control arms, knuckles and sub frame are made from lightweight cast aluminum. The liberal use of aluminum in many chassis components reduces the overall weight, including un-sprung weight, to improve agility and ride performance.

The Karma is controlled at each of four wheels with mono-tube shock absorbers that are specifically tuned to improve the level of roll damping, giving a sense of flat cornering with little body roll. The rear shock absorbers are load-leveling, so the vehicle maintains its showroom stature at any loaded condition.

Fundamental to the driver interface, the steering is a hydraulically power-assisted rack and pinion. The hydraulic power unit is electrically driven and tuned for optimum steering feel with a programmable servo assist feature. Steering ratio is 14 to 1, with 2.7 turns lock-to-lock giving remarkable steering responsiveness. Specific focus has been also given to balancing highway responsiveness with reduced parking efforts, giving a sense of an overall smaller and more nimble vehicle.

#### Brake Actuation System

- Electro-hydraulic brake boost unit with integral chassis control functions:
  - Brake proportioning
  - ABS
  - Traction control
  - Stability control
  - Electrically regenerative brake blending with friction braking

- Parking Brake

- Electrically actuated parking brake, bi-directional switch operation

## NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949-242-4911  
Mobile: 714-925-6643  
Fax: 949-757-4320  
[news@ford-automotive.com](mailto:news@ford-automotive.com)  
[www.ford-automotive.com](http://www.ford-automotive.com)

#### Chassis – Wheels & Tires:

- Tires
  - Front: 245/35R22 Michelin Pilot Sport PS2 with optimized rolling resistance
  - Rear: 265/35R22 Michelin Pilot Sport PS2 with optimized rolling resistance



### Overall Vehicle Specifications

- Acceleration ('sport' mode)
  - 0-60 miles/hour = 5.8 seconds (0-100 km/h in 6 seconds)
  - Top speed (continuous) = 125 miles/hour (200 km/h)
- Weight
  - curb weight = 4,650 lbs
- Range
  - Electric Only Range = 50 miles EPA city cycle
  - Total Range = Over 300 miles
- Exterior Dimensions
  - Overall Length = 4987 mm
  - Overall Width = 1984 mm
  - Overall Height = 1330 mm
  - Front Overhang = 913 mm
  - Rear Overhang = 914 mm
  - Wheelbase = 3160 mm
  - Front Track = 1689 mm
  - Rear Track = 1720 mm

### Power-Train Specifications:

- Rear Wheel Drive
- Performance:
  - Stealth Mode = max 95 mph – battery only
  - Performance Mode = max 125 mph (ICE & battery-combined)
  - Drive Motor(s) Power = 2 x 150 kW (408 hp)
- Battery Size
  - Dimensions = 1870 mm L x 205 mm W x 360 mm H
  - Energy Capacity = 22.6 kW hours
- ICE Power-Train = 2.0 Liter DI Turbo Ecotec

### NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 848-242-4911  
Mobile: 714-925-6643  
Fax: 848-757-4320  
E-mail: [sk@skerc.com](mailto:sk@skerc.com)  
[www.skerc.com](http://www.skerc.com)



- Exhaust System Location = Engine Bay
- Transmission = Not Required

The Fisker Karma will be assembled by Valmet Automotive in a highly automated assembly facility. Valmet Automotive is currently producing the Porsche Boxster and Porsche Cayman. The first Fisker Karma will be delivered to customers in November 2009. Yearly volume is anticipated to reach 15,000 cars per year.

A total of 40 retailers for the U.S. will be established by October 2009. Fisker Automotive will announce 20 of their Retailers in January 2009. European pricing will be announced at the International Geneva Motor Show in March, 2009.

#### **Fisker Automotive, Inc.**

Fisker Automotive is a privately owned car company with Henrik Fisker as the CEO. Fisker Coachbuild, LLC will be the exclusive design house for Fisker Automotive through the entire range of product development. The company has backing from Kleiner Perkins Caufield & Byers, Palo Alto Investors and Qatar Investment Authority.

###

## **NEWS**

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949-242-4811  
Mobile: 714-925-6843  
Fax: 949-757-4320  
CRAZY@FISKER.COM  
WWW.FISKER.COM



## FISKER AUTOMOTIVE ANNOUNCES INTENT TO SOURCE GENERAL MOTORS COMPONENTS

IRVINE, CA, November 21, 2008: Fisker Automotive Inc., a green American premium car company, today announced that General Motors has been selected to supply, through its on-highway integrator Powertrain Integration LLC, the gasoline engine that will be used in the Fisker Karma, Fisker Automotive's new Extended Range Hybrid Electric Vehicle. GM's Powertrain organization will supply the gasoline engine that generates electricity when the driver has exceeded the 50 mile electric-only range. The 2.0 direct injection, turbo-charged 4-cylinder Ecotec gasoline engine will deliver 260 horsepower. Fisker Automotive is also considering the purchase of several additional GM vehicle components to enhance the Karma.

"Given General Motors global leadership in the parts and accessories space, the fact that it is already engineering parts for extended range electric vehicles, and its commitment to helping the environment, it was clear that this was the right partner for us," said Fisker Automotive Inc. CEO Henrik Fisker. "We are confident that this is the beginning of an important partnership between GM and Fisker Automotive in developing the most desirable fuel efficient vehicles of the future."

"GM is proud that Fisker Automotive has selected one of the world's best powertrains for installation into the new Karma", said Tom Stephens, Executive Vice President of GM Powertrain and Global Quality. "The advanced design of this engine offers a superior performance-to-weight ratio that makes it the right choice for the Fisker Hybrid Electric Vehicle. As a leader in the automotive industry in the development of fuel efficient and energy diverse powertrains, GM sees significant opportunity in working with Fisker Automotive, a visionary company developing products that embody both exciting vehicle design as well as technology friendly to our environment."

Initial domestic deliveries of Fisker Automotive's first vehicle, the Karma, will commence in the 4th quarter of 2009 with planned deliveries to the U.S. and Europe. Fisker Automotive's annual production is projected to reach 15,000 vehicles.

### Fisker Automotive, Inc.

Fisker Automotive is a privately owned car company with Henrik Fisker as the CEO. Fisker Coachbuild, LLC will be the exclusive design house for Fisker Automotive through the entire range of product development. The company has backing from

## NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 849-242-4911  
Mobile 714-925-6643  
Fax: 849-757-4320  
press@fiskerautomotive.com  
www.fiskerautomotive.com



Kleiner Perkins Caufield & Byers and Palo Alto Investors and an affiliate of Qatar  
Investment Authority.

## #

## NEWS

Inquiries: Sylvia Lopez-Navarro  
Telephone: 949-242-4911  
Mobile 714-925-6643  
Fax: 949-757-4320  
E-MAIL: [cl@kleinerperkins.com](mailto:cl@kleinerperkins.com)  
[www.kleinerperkins.com](http://www.kleinerperkins.com)



## FISKER AUTOMOTIVE AND VALMET AUTOMOTIVE HAVE SIGNED FINAL ASSEMBLY CONTRACT FOR THE FISKER KARMA

IRVINE, CA November 12, 2008: Fisker Automotive, Inc., a green American premium car company, today announced that they have signed the final assembly contract with Valmet Automotive to manufacture the Fisker Karma in Finland. Valmet Automotive will be the engineering and manufacturing supplier for Fisker Automotive.

The Fisker Karma is a new four-door plug-in hybrid sports sedan and its production is planned to start in the fourth quarter of 2009. The first vehicles will be delivered in fourth quarter 2009 with an annual production projected to reach 15,000 vehicles.

For the production of the Fisker Karma, a new body welding line will be built at Valmet Automotive. The painting and assembly process can be easily adapted to the production of electric and hybrid cars.

"The agreement is very significant for us and our employment situation in the years to come", says Ilpo Korhonen, President of Valmet Automotive. "With the planned full production volume the cooperation with Fisker Automotive will employ some 500 blue collar workers at Valmet Automotive."

"Fisker Automotive and Valmet Automotive make a great, professional team. The schedule is demanding, but I'm confident that with good cooperation the production will start on schedule. A hybrid drive train, battery technology and a new body design with light weight materials is a great challenge to our engineering and production teams. Our supplier quality management team is also involved in the project," said Ilpo Korhonen, President of Valmet Automotive."

"We are pleased with the current progress in this working relationship and know that we have the team that will help us meet our production goal," said Fisker Automotive COO, Bernhard Koehler.

"We are very pleased to have the final contact signed and are looking forward to a long business relationship with Valmet," said Fisker Automotive CEO, Henrik Fisker.

### Fisker Automotive, Inc.

Fisker Automotive is a privately owned car company with Henrik Fisker as the CEO. The company has backing from Kleiner Perkins Caufield & Byers, Palo Alto Investors and QIA. The company is based in Irvine, California.  
[www.fiskerautomotive.com](http://www.fiskerautomotive.com)

### Valmet Automotive

Valmet Automotive is a provider of automotive engineering and manufacturing services of premium cars. In nearly 40 years the company has produced over 1,000,000 high-quality vehicles in Finland. The cars have been delivered worldwide. Today Valmet Automotive manufactures Porsche Boxster and Porsche Cayman for Porsche AG. The company is a part of Metso Corporation.  
[www.valmet-automotive.com](http://www.valmet-automotive.com)

Inquiries: Sylvia Navarro

Telephone: 949-242-4911

Fax: 949-757-4230

[press@fiskerautomotive.com](mailto:press@fiskerautomotive.com)

[www.fiskerautomotive.com](http://www.fiskerautomotive.com)

## NEWS

###



## FISKER AUTOMOTIVE ANNOUNCES NEW ENGINEERING AND DEVELOPMENT CENTER IN PONTIAC, MICHIGAN

*34,000 Square Foot Facility to House up to 200 Engineers and Designers*

IRVINE, CA. November 10, 2008: Fisker Automotive, Inc., a green American premium car company, today announced the opening of a new Engineering and Development Center in Pontiac, Michigan. The 34,000 square foot facility will house up to 200 engineers and designers, who will support the development and production program of Fisker Automotive's first production car, the Fisker Karma.

"The available talent, supplier base and infrastructure in Michigan will help us reach our production goal," said Fisker Automotive COO Bernhard Koehler. "While Fisker Automotive will continue to be headquartered in Irvine, California, the new facility will allow us the opportunity to collaborate with our Michigan supplier base and have everyone under one roof."

The opening of the facility comes on the heels of Fisker Automotive's recent announcement that it prevailed in a lawsuit brought against the company by Tesla Motors Inc.

With 50 miles of electric range and more than 350 miles of total range, the Fisker Karma with its proprietary Q-DRIVE powertrain developed by Quantum Technologies, will have the potential for a fuel economy of over 100 miles per gallon (MPG) on extended drives. Boasting a top speed of 125mph and 0-60 acceleration in less than 6 seconds, the Fisker Karma is poised to be the world's first true luxury plug-in hybrid sports car.

Initial domestic deliveries of the Fisker Karma will commence in the 4th quarter of 2009 in North America with planned delivery to the U.S. and Europe. Fisker Automotive's annual production is projected to reach 15,000 vehicles by 2011.

## NEWS

Inquiries: Sylvia Navaro  
Telephone: 949-242-4911  
Fax: 949-757-4230  
press@fiskerautomotive.com  
888-414-8888 ext. 5000

### **Fisker Automotive, Inc.**

Fisker Automotive is a privately owned car company with Henrik Fisker as the CEO. The company has backing from Kleiner Perkins Caufield & Byers, Palo Alto Investors and QIA. The company is based in Irvine, California.

[www.fiskerautomotive.com](http://www.fiskerautomotive.com)





**About Quantum Technologies (NASDAQ: QTWW):**

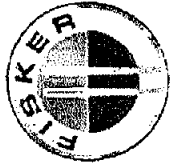
Quantum is a publicly traded, world leader and OEM supplier of state-of-the-art clean propulsion technologies, fuel and energy storage technologies and services including propulsion systems for hydrogen fuel cell vehicles, hydrogen internal combustion engine vehicles, compressed natural gas vehicles, liquid petroleum vehicles, hybrid electric vehicles and plug-in hybrids based on advanced electronic control systems and Lithium Ion batteries developed by Quantum's strategic alliance partner. Quantum also provides engineering services including vehicle development and homologation.

[www.qtwv.com](http://www.qtwv.com)

##

**NEWS**

Inquiries: Sylvia Navarro  
Telephone: 949-242-4911  
Fax: 949-757-4200  
[press@quantumtechnologies.com](mailto:press@quantumtechnologies.com)  
[www.quantumtechnologies.com](http://www.quantumtechnologies.com)



## FISKER AUTOMOTIVE RAISES \$65 MILLION IN SERIES C FINANCING ROUND

IRVINE, CA, Sep. 8, 2008: Fisker Automotive, Inc., a green American premium sports car company, today announced that the company has completed its Series C financing round. The funding was completed on the 4<sup>th</sup> of September, 2008 with a total investment of \$65 million. The round was led by a new investor, an affiliate of Qatar Investment Authority (QIA). Existing investors Palo Alto Investors and Kleiner Perkins Caufield & Byers also participated.

The money raised will be used to support the development of Fisker Automotive's first production car, the Fisker Karma. The first-of-its-kind four-door plug-in hybrid premium sports car was unveiled in January at the North American International Auto Show (NAIAS). Featuring cutting-edge plug-in hybrid technology, penned as *Q DRIVE*, developed by Quantum Fuel Systems Technologies Worldwide, Inc. exclusively for Fisker Automotive, initial deliveries of the Karma are expected to commence in the 4th quarter of 2009 with annual production projected to reach 15,000 automobiles.

"We are extremely pleased to have closed our C financing round at this time, particularly in light of the current market conditions," said Henrik Fisker, CEO, Fisker Automotive, Inc. "This shows once again that Fisker Automotive has a solid business plan and a globally experienced automotive team with very strong investors behind the company."

The close of Series C financing for Fisker Automotive comes on the heels of the January announcement that Kleiner Perkins had made a multi-million dollar investment in the company, building on the initial investment by Palo Alto Investors.

### Fisker Automotive, Inc.

Fisker Automotive is a privately owned car company with Henrik Fisker serving as the CEO. Fisker Automotive was founded in 2007 by Quantum Fuel Systems Technologies Worldwide, Inc. (NASDAQ: QTWW) and Fisker Coachbuild, LLC.

• # # #

## NEWS

Inquiries: Sylvia Navarro  
Telephone: 949-242-4909  
Fax: 714-888-4266  
press@fiskerautomotive.com  
www.fiskerautomotive.com

FISKER AUTOMOTIVE INC.  
APPLICATION FOR PROJECT # 1 –  
ENGINEERING INTEGRATION FOR FISKER KARMA

TAB 1A: CERTIFICATION

*Certification of Eligibility for ATVM Loan*

Section 611.101(a)

*(a) A certification by the applicant that it meets each of the requirements of the program as set forth in statute, the regulations in this part, and any supplemental requirements issued by DOE;*

Fisker Automotive Inc. hereby certifies, to the best of its knowledge and ability, that Fisker Project # 1 (Engineering Integration) satisfies the requirements of the program as set forth in Section 136 of the Energy Independence and Security Act and in the interim final regulations issued hereunder, as codified at 10 C.F.R. Part 611 and published in the Federal Register on November 12, 2008.

The analysis supporting this certification is set forth in response to Section 611.101(c) of the regulation. See Tab 2 of this application.

Signed:



Henrik Fisker  
Chief Executive Officer  
Fisker Automotive Inc.

Application of Fisker Automotive Inc.  
ATV33 Loan Program  
Fisker Project # 1 - Engineering Integration for "Fisker Karma"

**FISKER AUTOMOTIVE INC.**

**APPLICATION FOR PROJECT # 1 --  
ENGINEERING INTEGRATION FOR FISKER KARMA**

**TAB 1B: PROJECT DESCRIPTION**

*Description of Nature and Scope of Proposed Project* CONFIDENTIAL  
(IN PART)

*Attachment 1: Body Module Presentation* CONFIDENTIAL

*Attachment 2: Chassis Design Summary* CONFIDENTIAL

*Attachment 3: Interiors* CONFIDENTIAL

*Attachment 4: Safety* CONFIDENTIAL

*Attachment 5: Thermal Management* CONFIDENTIAL

**CONFIDENTIALITY NOTICE**

Documents marked as "Confidential" contain proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

## PROJECT DESCRIPTION

Response to 10 C.F.R. § 611.101(b)

*"A description of the nature and scope of the proposed project for which a loan or award is sought under this part, including key milestones and location of the project;"*

### Project Description

Fisker Automotive is requesting a loan of \$145.3 million for engineering integration in the United States related to the building of the world's first high-end premium performance plug-in hybrid electric vehicle ("PHEV") named the Fisker Karma.

The Karma is designed as a high-end performance automobile with a suggested base retail price of \$87,900 and will compete with conventional high-end vehicles from Mercedes Benz, BMW, and others. Fisker has seen significant public interest in the Karma, as the company has already received over 1000 pre-orders with down payments in the United States (see Tab 1G for additional marketing and sales information).

The Fisker Karma PHEV will compete with performance sedans in style, comfort, and performance while providing fuel efficiency superior to today's leading hybrids (see Tab 1C for a discussion of fuel economy). The Karma will have excellent performance in electric only mode as it will be capable of 0-60 in 7.5 seconds and a top speed of 95 mph from battery power alone. The Karma will have an all-electric range of 50 miles allowing the Karma to meet the driving profile of approximately 80% of drivers in the United States without a need for gasoline or other liquid fuel provided the car is re-charged each night.

Fisker's Karma project should be understood as part of Fisker's broad goal to reestablish the United States as a world leader in automotive technology and a manufacturer of competitive performance automobiles. To that end, Fisker plans to engineer and manufacture future models based on a derivative of the Fisker Karma in the United States (see Fisker Project # 2 - Manufacturing Facility). Initially, Fisker will outsource production of the Karma to Valmet Automotive in Finland, as this is the fastest route to market for the Karma. To that end, Fisker will have cars in production in the fourth quarter of 2009 for sale in the United States.

Engineering integration for the Karma will take place in Pontiac, Michigan with support from Fisker's headquarters in Irvine, California.

### Technology & Engineering Integration

Fisker has designed the Karma from the ground up. Broadly speaking, Fisker is making technology improvements to PHEV components in (i) electromagnetic compatibility, (ii) efficiency, (iii) weight, and (iv) features. First, Fisker is focused on electromagnetic compatibility because of the challenges posed by electrical component operation in close proximity to high voltage systems. Second, Fisker is working to extend the range of electric vehicles by increasing the energy efficiency of components and systems. Third, Fisker is looking closely at component weight and using new designs of materials in order to decrease the

Application of Fisker Automotive Inc.  
ATVM Loan Program  
Fisker Project # 1 - Engineering Integration for "Fisker Karma"

weight of the vehicle, increase its fuel efficiency, and extend its range. Finally, Fisker is exploring distinctive features, such as a solar roof, that will allow a PHEV to successfully compete on features and style with conventional performance sedans.

Fisker's engineering integration project in the United States involves the (i) powertrain, (ii) suspension, steering, and brakes, (iii) interior, (iv) body closures, (v) exterior, (vi) information and controls, and (vii) electrical.

#### Powertrain

The Karma powertrain is a high performance, high efficiency, plug-in hybrid electric system comprised of three electric machines, three inverters, a turbo-charged 2.0 L high-feature DI gasoline engine and an advanced Lithium-ion technology battery pack. This hardware combination coupled with the innovative Q-Drive control system provides for a unique driving experience where energy, power, feel, and fuel economy are optimized to satisfy driver demands.

The high voltage battery used by Fisker is the first to truly make extended-range electric transport viable. It has: (i) advanced chemistry that improves energy density (by weight and by volume) and temperature performance; (ii) improved cell construction to prevent thermal runaway; (iii) advanced electronics and control systems to maximize utility and longevity; and (iv) a new thermal management system to reject heat effectively to allow sustained high current performance.

Fisker's thermal system is the first of its kind and will be able to conserve energy by transferring waste heat to the vehicle and its components during cold conditions. This reduces the energy consumption of the vehicle by supplanting energy that would have been consumed by the dedicated heater.

#### Suspension, Steering & Brakes

Fisker is integrating new or advanced suspension, steering and braking systems into the Karma. For example, Fisker is using electric hydraulic power steering

[REDACTED] In addition, new suspension, shocks, leveling systems, stabilizer bars, links, mounts, and wheel bearings are necessary to support the weight of an electric powertrain. Finally, Fisker is optimizing performance and safety through the integration of regenerative braking systems and conventional braking systems.

#### Interior

Fisker has redesigned the interior to optimize the performance and style of the Karma. The Karma will use low draw LED lighting to minimize electrical use, safety and restraint systems using an advanced electrical interface not found in

<sup>1</sup> CONFIDENTIALITY NOTE: The bracketed text is confidential. This text includes proprietary information that Fisker Automotive Inc. requests not be released to persons outside the Government, except for purposes of review and evaluation.

conventional vehicles, and environmentally friendly wood recovered from California forest fires.

#### **Body Closures**

Fisker uses infrared reflective glass to reduce heat load by 30% compared to conventional laminated glass. In addition, Fisker uses lightweight panels for the decklid assembly and front fenders that are 35% lighter than steel equivalents.

#### **Exterior**

Fisker uses infrared reflective paint that reduces heat load by up to 30% in darker colors. Fisker offers customers six (out of eight) dark color options. In addition, Fisker uses infrared reflective glass for the windshield and rear glass to reduce heat load by 30% compared to conventional laminated glass.

#### **Information & Controls**

PHEVs can pose a threat to pedestrians when operating silently in electric mode. The Karma will enhance its acoustic signature with an exterior sound system to address this problem. This is the first system of its kind. It will project sound, as necessary, at a minimum level for pedestrian safety and to minimize noise pollution. In addition, Fisker is integrating a system to address noise vibration unique to electric vehicles, as well as, a touch screen to provide information on the battery, solar roof, and vehicle range.

#### **Electrical**

Fisker is incorporating a number of items into the electrical system of the Karma. First, a DC-DC converter will allow for powering of the low voltage electrical system without starting the internal combustion engine, thus reducing fuel consumption. A traditional vehicle performs this task with an alternator which runs only when the engine is running. The bi-directional functionality also allows for storage of solar energy in the high voltage battery. All solar energy stored displaces fuel consumed. Second, the Karma will have a VCM used to coordinate all the electrical systems of the vehicle in an efficient and safe manner. Third, Fisker uses a bridge (shifter) with shift-by-wire functionality. Finally, Fisker will integrate safety sensors and state of charge monitors that are necessary for PHEVs.

Each of the components shown above is necessary for the development of the Fisker Karma as a leading PHEV.

#### **Project Location**

The engineering integration will take place at an existing facility in Pontiac, Michigan, with support from Fisker Automotive headquarters in Irvine, California.

Application of Fisker Automotive Inc.  
ATVM Lean Program  
Fisker Project # 1 – Engineering Integration for “Fisker Karma”



**Key Milestones**

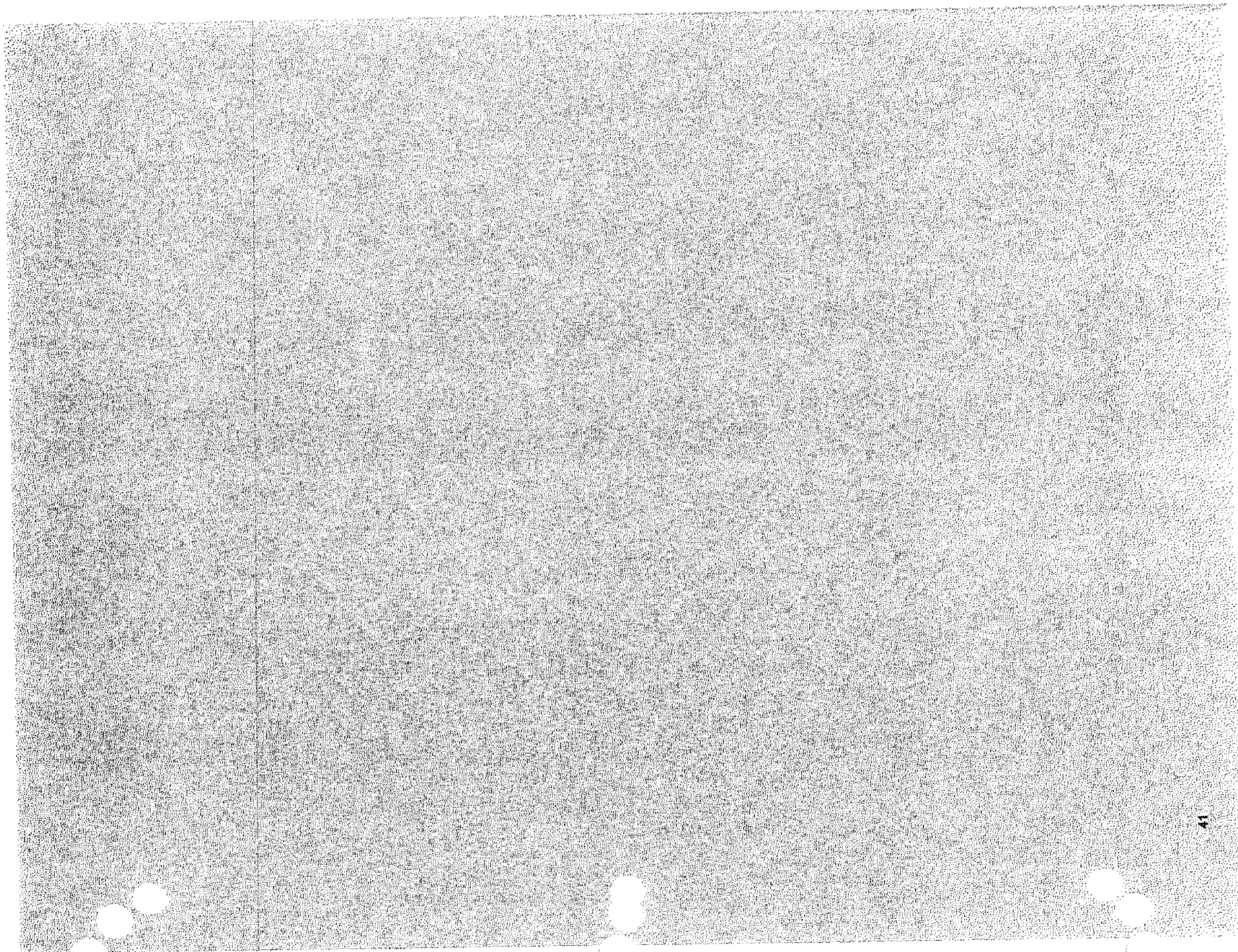
Fisker has five key milestones for engineering integration on the path towards production beginning in the fourth quarter of 2009.

Milestone	Location	Date
Production-ready 4-door sedan complete with drivable powertrain in place	Pontiac, MI	
Tooling specifications approved, purchase orders issued, cash outlays begin	Pontiac, MI	
Design verification plan approved with all legal requirements defined	Pontiac, MI	
Mule vehicle testing complete (steering, brakes, seating, powertrain, electrical, crash, packaging, structure, airbags)	Pontiac, MI	
Materials delivered to Valmet automotive assembly plant		

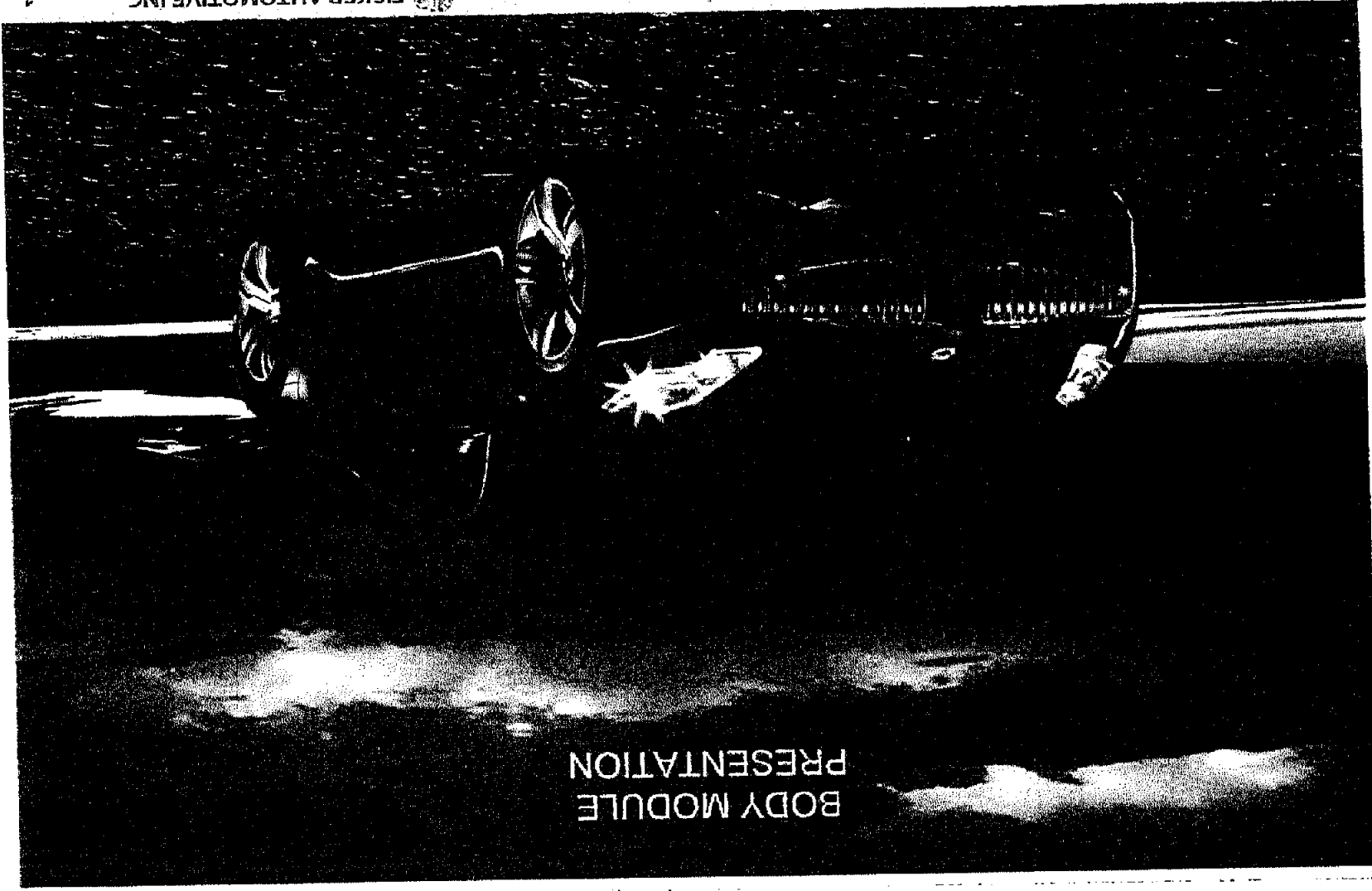
Additional information on the Fisker Karma development timeline is included in the Tab 1F "Business Plan."

"

Application of Fisker Automotive Inc.  
 ATVM Loan Program  
 Fisker Project # 1 – Engineering Integration for "Fisker Karma"



FISKER BODY MODULE



BODY MODULE  
PRESENTATION

CONFIDENTIAL



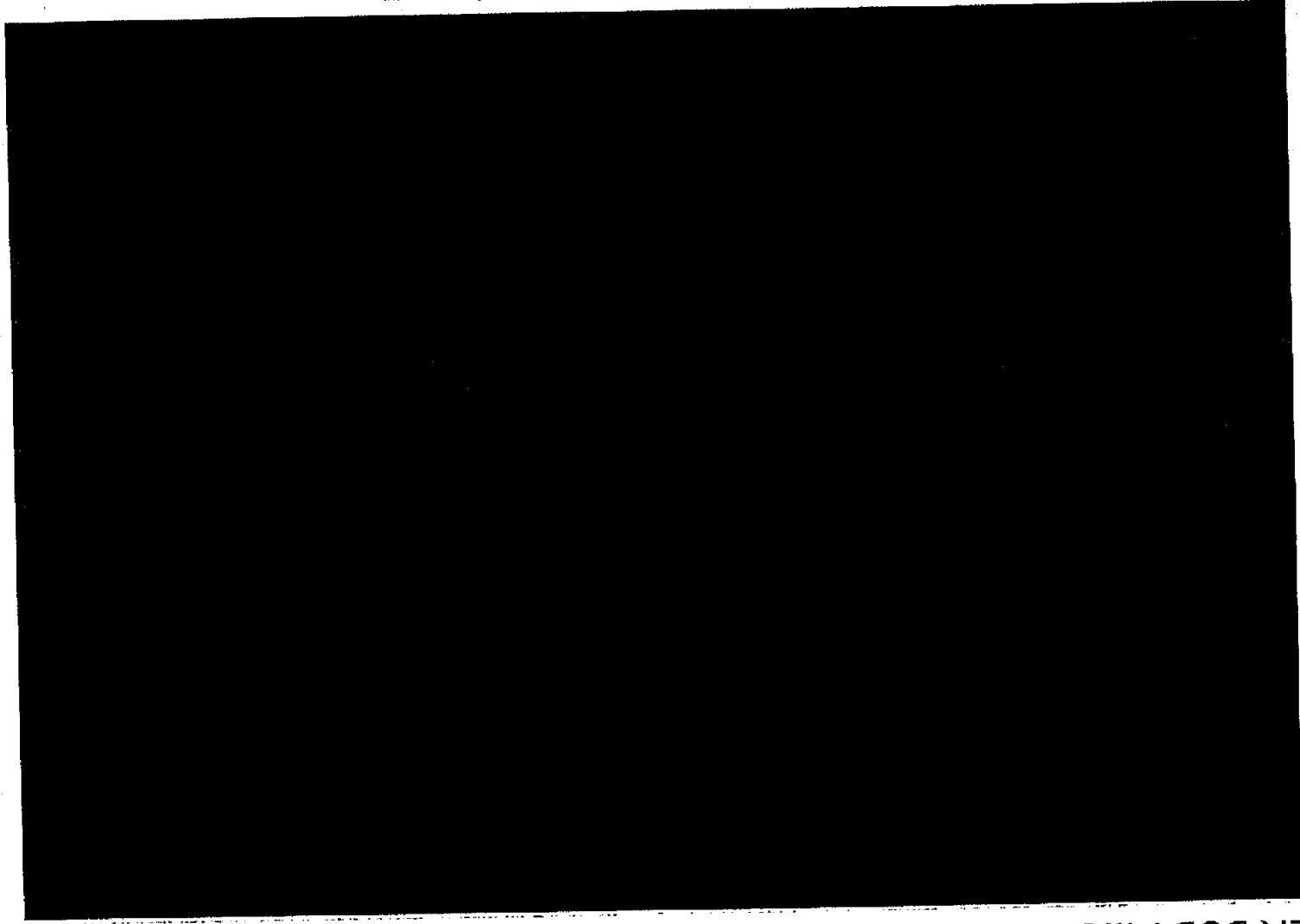
CONFIDENTIAL

43

FISKER AUTOMOTIVE INC



2



FISKER BODY MODULE

SPACEFRAME

