CalCars
THE CALIFORNIA
CARS INITIATIVE

SUBJECT: A partnership for Ford to take the lead on innovation in plug-in hybrids

May 8, 2006

William C. Ford
Chairman of the Board, Chief Executive Officer
Ford Motor Company

Dear William Ford:

We have been hoping -- and still hope -- that the Ford Motor Company will soon announce an initiative to take the global automotive technology lead in reducing petroleum use and greenhouse gases.

That initiative involves taking a first step to offer consumer plug-in hybrid vehicles (PHEVs). As we describe below, we have made specific proposals for Ford's involvement.

We're big fans of Ford. We want this company to continue to inspire its drivers, its communities, its employees and their union. We applaud its green ambitions and we honor its century-long tradition of innovation. We admire the five years of dedicated work your team put in to put the first hybrid SUV on the road.

We have been emphasizing PHEVs' benefits: how they can contribute to reducing dependence on imported oil, reduce greenhouse gas emissions, and offer economic benefits to buyers, companies and society. We think PHEVs make sense for Ford. As the company works to expand its hybrid program ten-fold, PHEVs offer the opportunity to go much further. And though other companies show signs of plans to build PHEVs, we believe Ford can still take the lead in this technology.

Over 10 years ago, the modern plug-in hybrid was born in Professor Andy Frank's garages at UC-Davis. Dr. Frank has converted Ford Taurus, Sable, Explorer and other internal combustion vehicles to PHEVs. He has developed innovative technologies and holds intellectual property relating to plug-in hybrids and transmissions. And almost two years ago, the California Cars Initiative (CalCars.org) converted a Toyota Prius into a PHEV "PRIUS+." CalCars' goal was to show what's possible using existing technology plus an extension cord. These two efforts, recognized and endorsed by many others, have helped make the PHEVs a serious player in the world of automotive solutions.

Plug-in hybrids continue to gain support. One-third of the nation's 50 largest cities have signed on to Plug-In Partners' program for "soft" fleet buy orders. A strong bi-partisan Congressional coalition promotes PHEVs. President Bush put PHEVs at the center of his Advanced Energy Initiative. The Department of Energy has just sponsored its first national Freedom Car workshop on PHEVs, bringing together auto-makers and other stakeholders. There's ever-increasing attention in consumer and business media -- a Los Angeles Times editorial just concluded that PHEVs are the "car of the future."

More than six months ago, we began a serious, sustained dialogue about PHEVs with high-level technical and business managers at Ford. We proposed a way for Ford to facilitate a program with the Ford Escape Hybrid (FEH) that would not interfere with the company's other plans. We have been hoping ever since for a "permission slip" to start to convert a small fleet of FEHs, with access to your engineers and your sales and service support. We have also proposed the involvement of William McDonough and his team working on your Piquette Project for the renewable vehicle of the future.

We have been hoping for a response so we could officially begin with Ford. Given recent favorable public comments by Ford executives about PHEVs, we hope you can announce this program in the immediate future -- ideally around the time of your May 11 Shareholders Meeting. Specifically, we are asking Ford Motor Company to say:

> "A consortium that includes UC Davis engineering Prof. Andy Frank and the non-profit California Cars Initiative is starting a project to demonstrate the potential of the Ford Escape Hybrid to operate as a plug-in hybrid. There's a growing national interest in this technology, especially among fleet buyers, to further reduce oil consumption and greenhouse gases.
> While Ford focuses on expanding the adoption of hybrid technology throughout our line, we applaud their choice of the Escape as a development platform, and we will support this independent, innovative effort. We delegate Ford advisor and designer/architect William McDonough to participate in this project."

Next week, May 16-18, we have arranged for the first public appearance of a PHEV in Washington, DC. With the co-sponsorship of the Set America Free coalition, Senators, Representatives and journalists will ride and drive CalCars' demonstration car (a Prius that EnergyCS converted) and will hear about commercial aftermarket conversions. They will see a concrete example of a vehicle that car-makers could build now to get 100+MPG of gasoline plus electricity. While we wish this prototype could have been a Ford, we hope Ford's announcement can precede this event.

If your decision has not yet been made at that time, we hope you will be able to announce it around the time of your meeting with the President on Thursday, May 18. From news reports we understand that the Big Three will focus on the need for an expanded E85 infrastructure. That's helpful but it's not enough. Ford could be in a position to show how fueling the commuter miles with electricity can shrink the requirement for ethanol to power the automotive fleet from 140 billion gallons/year to only 40 billion gallons/year for range extension.

After the Auto Summit, unless our efforts are superseded by announcements by one or more auto-makers, we expect to begin the next phase of our independent conversion efforts, with a team headed by Dr. Frank. Since many third parties are approaching Prof. Frank, we will evaluate the option of working on other automotive platforms. However, we still prefer to use the Ford Escape Hybrid as an initial platform and would hope in the future to demonstrate useful solutions for both small and large Ford vehicles. We

emphasize how much we want to do this with Ford. But if we have to do it without, we are prepared to begin on our own, in hopes of gaining your cooperation later.

We will then also accelerate public efforts to gain attention and support for the national Plug-In Partners campaign and will explore beginning citizen petition days at fuel pumps across the nation.

On a technical level, we have already begun the groundwork: we have instrumented an FEH and developed initial specifications. Our goal: to show how an American SUV can become a flex-fuel PHEV, getting 500+MPG of gasoline plus electricity and ethanol.

We understand that Ford continues to have doubts about first, the technology and second, the market potential. With your cooperation, we can address both issues. Once we have your authorization, our project can evolve into operating as Ford's Qualified Vehicle Modifier (QVM) for PHEVs to engineer the conversions and line up buyers.

Most technical concerns involve batteries. We and others (including the DaimlerChrysler/ EPRI prototype program) already demonstrate that today's nickel-metal hydride and lithium batteries can produce exemplary PHEVs. Over time, we will gain new data on these components. And we know that they'll get far better as much improved batteries in late stages of development by many leading manufacturers become available. We've been in contact with numerous suppliers eager to demonstrate their components with road tests leading to qualification procedures and mass production, and we intend to provide them with a platform.

Who will be the first buyers for these vehicles? We see an immediate fleet and early adopter market for 10-100,000 cars. Our project's customers for our first dozens of vehicles will center in California. Utilities, companies, foundations, government agencies, mayors and elected officials and the Hollywood entertainment community have already conveyed their interest in getting PHEV FEHs for evaluation, demonstration and everyday use.

Our entire focus is on facilitating your decision to commercialize PHEVs. If at any point, you conclude that Ford wants to design, build and sell PHEVs itself, we will applaud that decision. We will work with you in whatever ways make sense, and we will continue efforts to gain public and private incentives for the vehicles.

Thank you again for your demonstrated commitment to renewable, economically and environmentally sustainable automotive solutions.

Sincerely,

Prof. Andrew A. Frank, Director, Hybrid Electric Vehicle Research Center, UC Davis
Felix Kramer, Founder, The California Cars Initiative