## PHEVs: The Missing Pieces to Success

The people in this room (and those we know) can create the pre-conditions to mass production and ensure successful commercialization



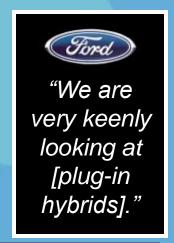
Cascadia "Jump Start" Conference 7 May 2007
Felix Kramer, Founder, The California Cars Initiative

info@calcars.org

THE CALIFORNIA CARS INITIATIVE

# 7 Carmakers interested; 2 intend to be 1<sup>st</sup>; no timetables (CalCars Carmakers tracks statements)









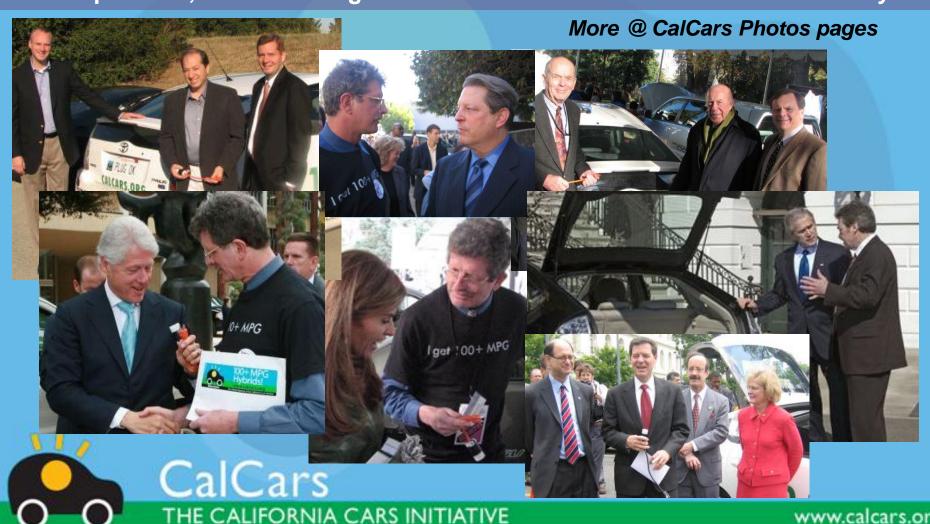
"GM has begun work on a Saturn Vue PHEV ... I can't give a production date."



Interest from Nissan, Honda, Visionary Vehicles (China)



"A coalition between the tree-huggers, the do-gooders, the sod-busters, the cheap hawks, and the evangelicals." - former CIA Director James Woolsey



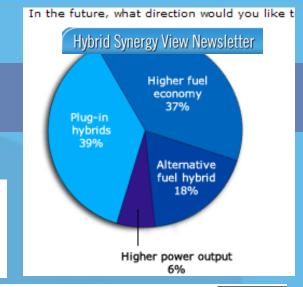
#### **PHEVs: The Missing Pieces to Success**

#### Recent growing momentum



The legendary CEO says he's become a big fan of the hybrid cars that Toyota has been marketing for years. Plug-in

hybrids are the wave of the next five years, Iacocca predicts.



#### Special Report: The Truth About Plug-in Hybrid Cars





- . BACK STORY: PM's Reporter on Hybrid Skepticism
- · QUIZ: Test Your Plug-in Smarts!
- COMPARISON: How Much Are Hybrids Saving You?
- HOW IT WORKS: GM's Volt Concept (with Animation)

# **Popular Mechanics**Cover Story May 2007



CalCars THE CALIFORNIA CARS INITIATIVE

### **VentureBeat**

BE PART OF Get the fa

**BY MATT MARSHALL 05.2.07** 





Google's for-profit foundation Google.org has given a \$200,000 grant to CalCars.org, a group that advocates the adoption of plug-in hybrid electric cars.

Plug-in hybrids are cars you can plug into an electricity outlet to recharge their batteries, and national automakers have been slow

to develop them. PG&E and GM plan to enter the market over the next couple of years.



CalCars' Felix Kramer (left) is the guy you'll see driving a car around Palo Alto, Calif. that he claims gets 100+ MPG. The Google grant comes seven months after plans by Google to support plug-in hybrids first leaked in a NYT story. However, that piece was speculative and didn't provide too many

#### Key theme: we can't wait, must start now

- Cleaner, cheaper domestic: response to 3 crises
- Electric transportation: <u>CO2 "wedge"</u> we can do now
- "Good enough" line extension PHEVs with today's batteries
- After Pearl Harbor, we didn't wait for "perfect" planes & tanks
  - Differentiate between demo fleet & consumer expectations
  - Far better <u>batteries</u> will arrive along with mass production
  - As the power grid gets cleaner, PHEVs and EVs get cleaner
  - Range extension liquid fuels will evolve -- we don't pick winners!
  - Lightweighting and other <u>optimization</u> in the future
- Version 1.0 demo fleets will help Version 2.0 cars succeed
- Conversions fuel the campaign & give OEMs free research



#### Roll out the red carpet: CA WA TX MN NY DC Canada...

- Make OEMs an offer so good they can't refuse with:
  - Our challenge to package <u>incentives and credits</u>
  - Suspend <u>100-150K regulations</u> for demo fleets AND/OR
  - Position battery as replacement part with <u>3rd party warranties</u>
     From: utilities, corporate employee benefit, government
     "interesting concept, difficult to put in place"-- GM's Beth Lowery
- V2G demonstration projects with OEM/conversion cars
- Use "Cash-Back PHEV" <u>revenues</u> as one funding source
- Broad involvement in <u>standards</u> development
- Ensure successful <u>commercialization</u> strategies
- Build realistic public expectations for market success

### CalCars: a resource for this broad campaign

#### Watch News Archive/Carmakers Statements pages

05/02/07: CalCars Receives Google.org Grant to Promote Plug-In Hybrid Vehicle Educatio

05/02/07: Three Major PHEV Events in May: Seattle/Austin/Wenatchee: Sign Up for 1 or 2

05/01/07: A123Systems Reveals 2008 Conversion Plans; Senate Finance Committee is F

04/29/07: International Live Call-In Show Monday on Hybrids/PHEVs

04/27/07: James Woolsey's Brilliant Congressional Testimony

04/26/07: Popular Mechanics Cover Story on PHEVs

04/26/07: A/V Catchup: Lee Iacocca/Tom Friedman/Step It Up/V2G/Sherry Boschert

04/26/07: PHEV News Catchup: Buses/Phoenix/Hymotion Acquisition?/DIY Diesel/Sprinte

Study

04/24/07: Battery Development: US Energy Dept: \$14M; Nissan/NEC joint venture: \$4M

04/23/07: PHEVs Emerge as Nearest Technology in Long-Awaited ZEV Tech Review by Ai

Board of CA

04/14/07: Malcolm Bricklin on His PHEV Plans: Business Week Interview

04/13/07: GM: Saturn Vue PHEV by end of '09? Plus Conflicting Reports on Volt

04/13/07: Wall St. Journal Highlights US-Japan Competition for PHEV Batteries; Shows A1

Make sure you're on Partners page

Send people to Jobs page

Subscribe to

CalCars-News

View/print PDFs from Downloads page

Donate!



