10 TALKING POINTS FOR PLUG-IN HYBRIDS

Why plug-in hybrids?

Today's hybrids are efficient because they don't idle, they recapture braking energy into a battery, and they use smaller engines. They're a great step forward—but they're still 100% gas-fueled. Use a larger, rechargeable battery and you add a second cleaner, cheaper, domestic energy source: **electricity.**

Spend less time—and money—at the pump

A plug-in hybrid (PHEV) is like having a second fuel tank you always use first. Fill up at home from an ordinary 120-volt socket, at a cost equivalent to **under \$1/gallon.**

No gas for short trips—same full range

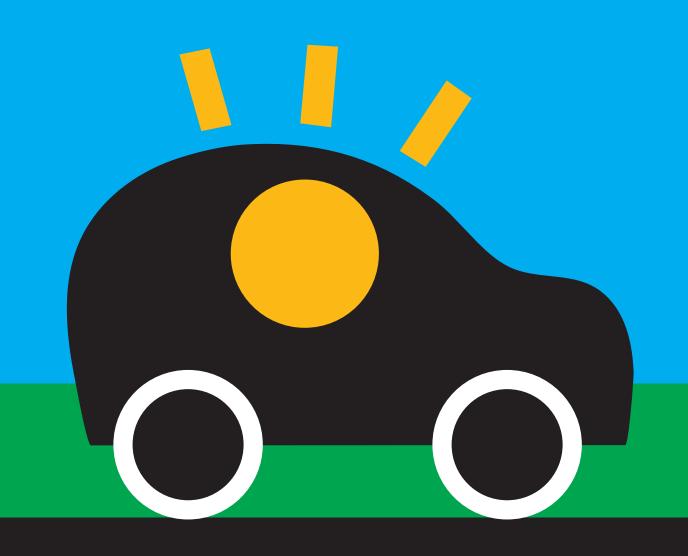
If your batteries have a longer range than your commute, you'll almost never need gas. But if you forget to plug in, or take a longer trip, you have the **same range as always** from a gas engine—but in a clean, efficient hybrid.

Neo-cons and greens agree

PHEVs have been endorsed by an alliance of environmentalists and conservatives who see it as the **best way to cut our foreign "oil addiction."** Republicans and Democrats, endorsing the DRIVE Act, former cabinet members Shultz and Woolsey, and President Bush in his Advanced Energy Initiative have endorsed PHEVs. Use E85 and 100+MPG PHEVs become "flex-fuel" PHEVs getting **500 MPG** of gasoline (+ electricity + cellulosic ethanol).

Keep the earth cool

Even though coal powers half the nation's electricity, driving electrically produces 50+% lower greenhouse gases than a gas-only car. This will only improve as utilities use cleaner, renewable energy.



Lead car-makers out of the wilderness

US car-makers missed the boat on hybrids; now they're playing catch-up. Seven car-makers are interested; GM plans 2 prototypes; Toyota intends to be first—but none have timetables. **PHEVs** offer one company the chance to leapfrog its competitors. We need commitments to production. Today's batteries are "good enough;" for PHEVs; they will improve and get cheaper by the time car-makers are ready for mass-production of Version 2.0 PHEVs.

PHEVs are already here

For 15 years, Dr. Andy Frank at UC Davis has converted **Ford/GM** cars and SUVs. **Daimler** is testing PHEV versions of the **Mercedes Sprinter** van. In 2004, non-profit CalCars.org converted the first Prius PHEV; others followed with dozens of cars. Not-yet-available conversions for consumers will cost \$10-\$20,000. That's why we need Toyota, GM and other carmakers to sell them!

Save money in the long run

In high volumes, car makers could sell PHEVs for under \$2,000-\$5,000 more than current hybrids. Just as car buyers pay for large engines or leather seats without expecting a return on investment, early adopters will pay extra for the PHEV "green feature." The bonus projections based on experience from electric car fleets show PHEVs have a lower lifetime cost of ownership than any other vehicle.

Send car battery power the other way

Recharged at night, PHEVs can send power to utilities in what's called "vehicle to grid" (V2G). PHEVs can be mobile generators to emergency centers and homes after disasters and outages, providing low-emission 120-volt back-up power for days. Pair rooftop solar with cars for backup!

Deploy the fleet

Plug-In Partners is a national campaign for a large fleet buy. Incentive programs can help buy down initial costs and additional warranties can reduce battery risk factors. CalCars is working to find ways to get demonstration fleets of "good enough to start" PHEVs on the road—followed by 10,000-100,000 vehicles.

WWW.CALCARS.ORG

Drive cleaner, cheaper, domestic