

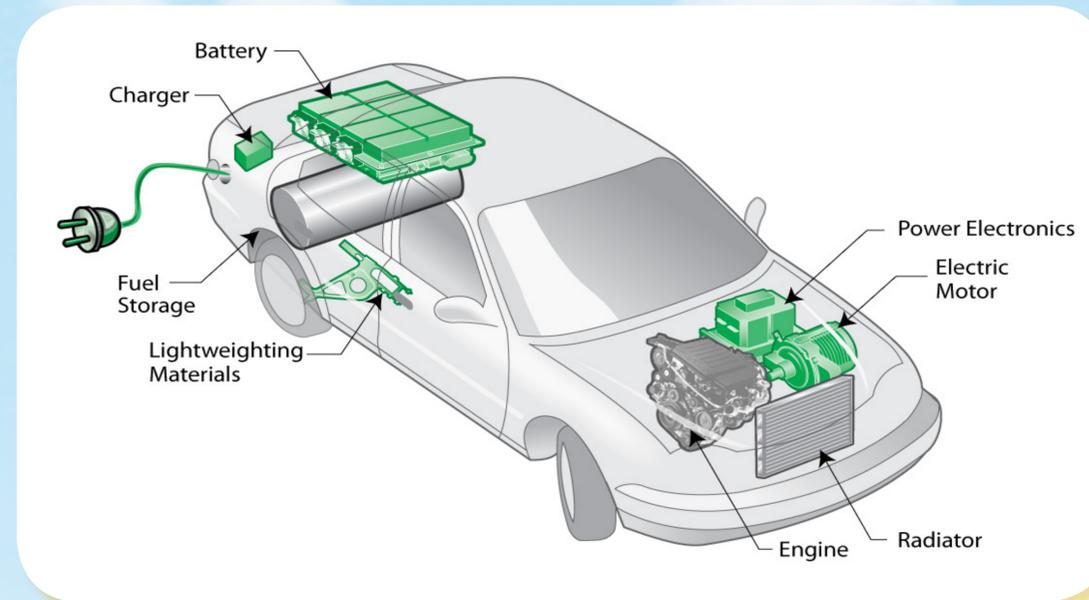
# Plug-in Hybrid Electric Vehicles (PHEVs) Coming Soon to a Driveway Near You

*Did you know...*

Plug-in hybrid electric vehicles (PHEVs) are the same as today's hybrids, but with much larger batteries and the ability to recharge by plugging into an electrical outlet.

## Opportunity

PHEVs may be the cars of the future, but they are still too expensive to make a big commercial splash with consumers. As these next-generation vehicles move from theory to production, automakers must find ways to make PHEV components more efficient and less expensive. These include batteries, power electronics, and control systems.



*This diagram shows some of the key PHEV components Argonne is working to improve.*



*Argonne engineers are looking at combining ultracapacitors with lithium-ion batteries to improve energy storage and performance in PHEVs.*

## Argonne's Solution

Argonne's Advanced Powertrain Research Facility (APRF) is the U.S. Department of Energy's lead laboratory for research in hybrid powertrains and fuel efficient technologies. APRF researchers are evaluating electric drivetrain components to improve performance and lower manufacturing costs so PHEVs can become more affordable to the general public.

## Potential Benefits

By shifting demand from gasoline to domestically-produced electricity, PHEVs will have a huge impact on lessening our dependence on foreign oil.

## Industry Partnerships

Argonne is working with battery manufacturers, Ford, General Motors, and other PHEV conversion companies on new drivetrain technologies.



Visit [www.transportation.anl.gov](http://www.transportation.anl.gov) to learn more!

INVENTING THE FUTURE. *efficient. clean. safe.*



Research funding provided by the U.S. Department of Energy's Vehicle Technologies Program.

