

GM's E-Flex Program Enabling Energy Diversity

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Forward Looking Statements

In the following presentation and in related comments by General Motors management, we will use words like "expect," "anticipate," "estimate," "forecast," "goal," "project," "targets" and similar expressions to identify forward looking statements that represent our current judgments about possible future events. We believe these judgments are reasonable, but actual results may differ materially due to a variety of important factors.

Among other items, such factors might include: the pace of introductions and market acceptance of new products; relationships with our labor unions, changes in the competitive environment and the effect of competition on our markets, including on our pricing policies; price increases or shortages of fuel; and changes in laws, regulations or government policies affecting our vehicles.

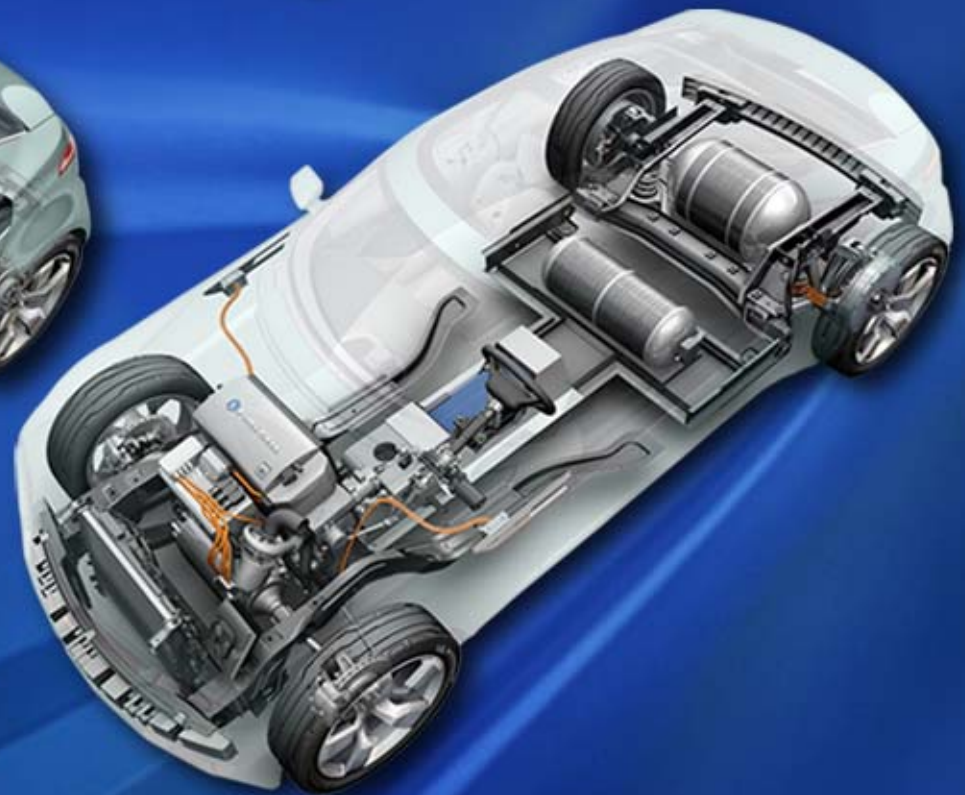
GM's most recent annual report on Form 10-K and quarterly reports on Form 10-Q provide information about these factors, which may be revised or supplemented in future reports to the SEC on Form 10-Q or 8-K.

We caution investors not to place undue reliance on our forward-looking statements. Except where expressly required by law, we undertake no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information, future events or other factors.

E-Flex System Consists of Two Propulsion Variants Sharing Common Architecture

**Range Extending
Electric Vehicle (Plug-in)**

 **FUEL CELL**

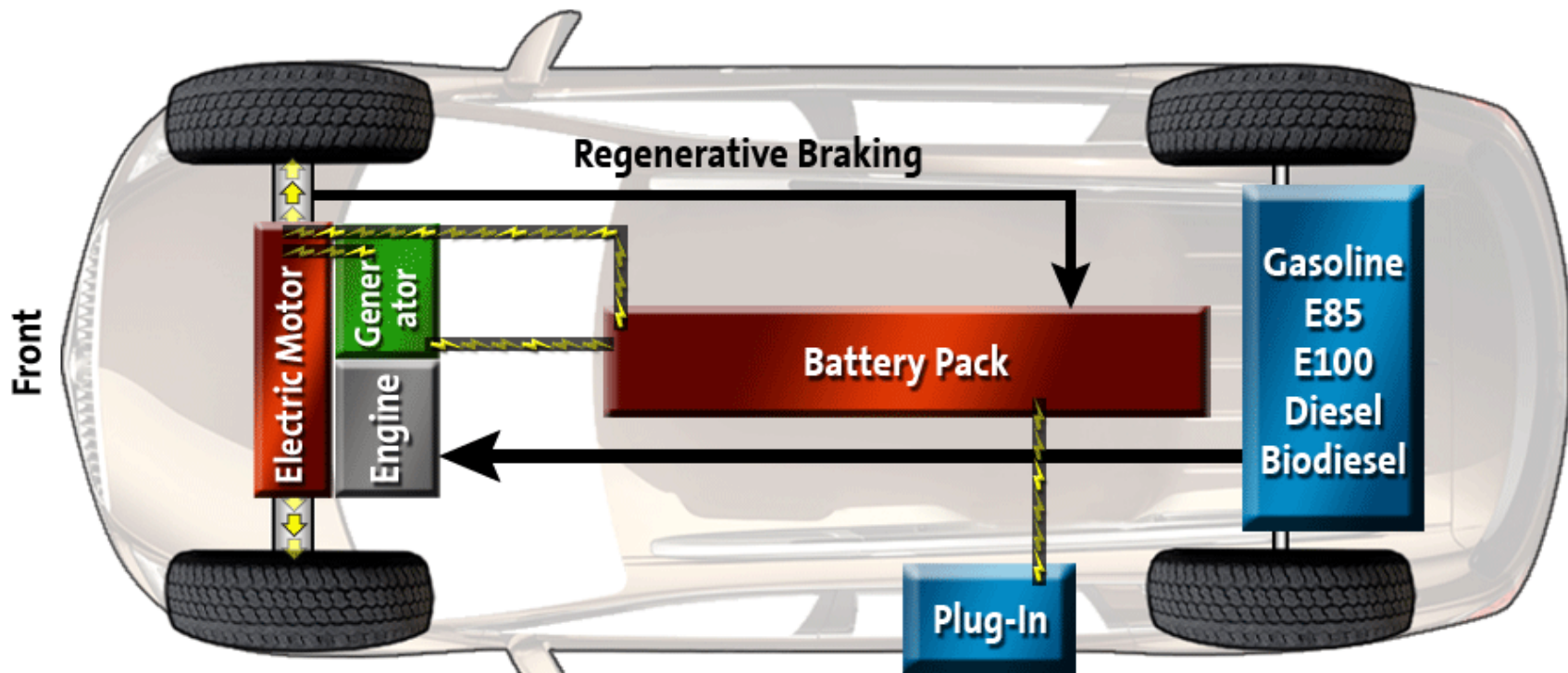


E-Flex Program Status



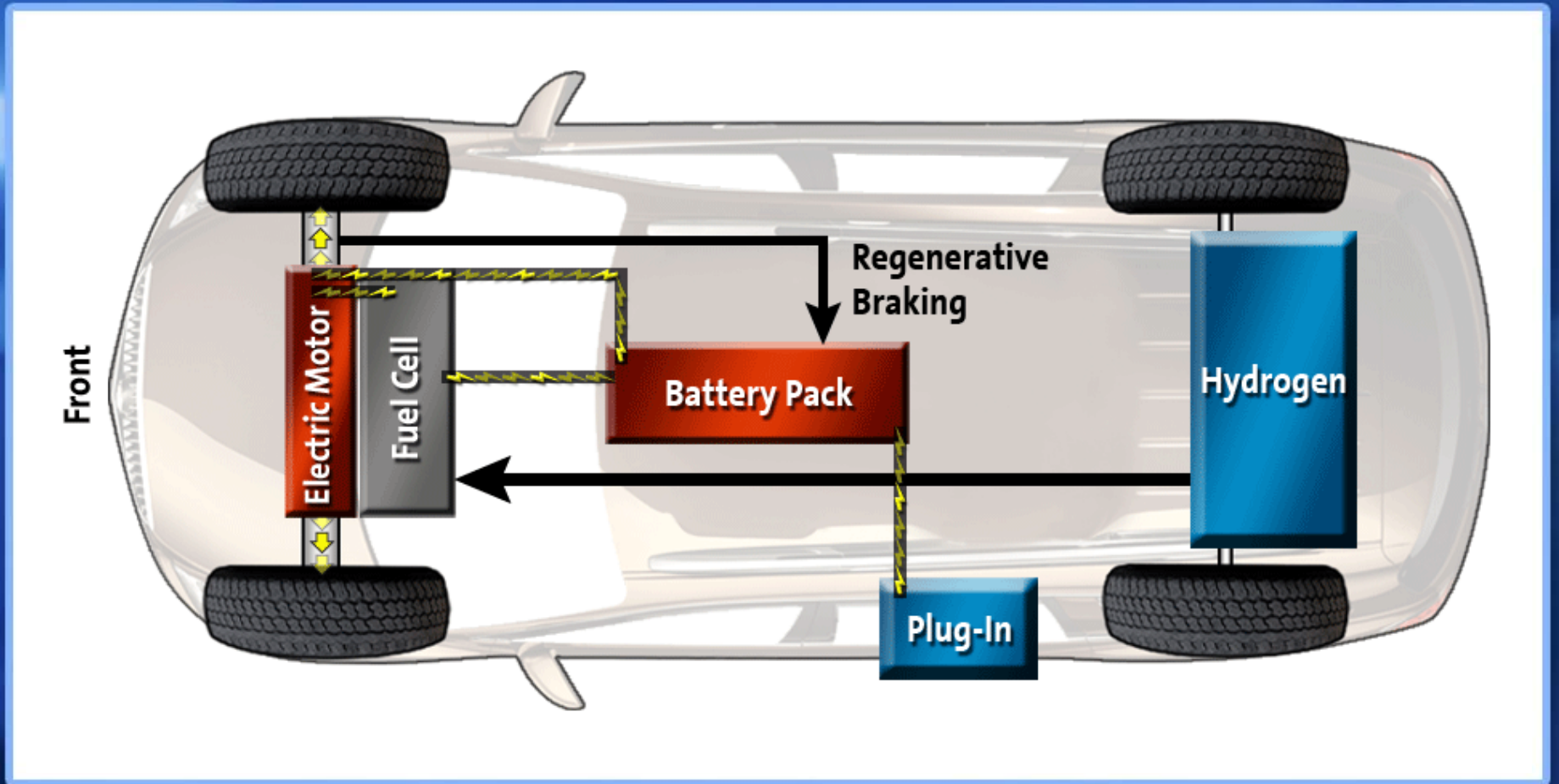
- Engineering development for range-extender EV and fuel cell E-Flex variants underway
- These propulsion systems being co-developed with production intent leveraging the future global compact vehicle architecture and body styles
- Team is in place, program funded and leadership is engaged through E-Flex Leadership Board
- E-Flex represents: 1) advanced propulsion system, 2) vehicle architecture and 3) product program

E-Flex System: EV w/Engine-Generator



**Represents 40 miles of full-range EV driving
@ 1-2 cents/mile utilizing the electric power grid (plug-in)**

E-Flex System: Hydrogen Fuel Cell EV



Chevrolet Volt Concept – Customer Benefits

Customer	Drives 40 Miles (64 km) Per Day	Drives 60 Miles (96 km) Per Day
Annual Miles	15,000 (24,000 km)	21,000 (34,000 km)
Miles Per Gallon*	No Fuel Required	150 MPG (1.57L/100 km)*
Annual Savings Gasoline/Petroleum (Compared to 30 MPG/ 7.8L/100 km Vehicle)	500 Gallons (1,900 Liters)	570 Gallons (2,200 Liters)
Net Cost Savings** (Annually)	\$900	\$1,068
CO₂ Avoided (Annually from Tailpipe)	4.4 Metric Tons	5.02 Metric Tons

* 40 miles/day (64 km) electric & 20 miles/day (32 km) ICE @ 50 mpg (4.7L/100km) EPA City adjusted & European standards

** \$0.02/mile cost for electricity vs. \$0.08/mile cost for gasoline

E-Flex Program Future Plans

- Aggressive PR/Media and Public Policy campaign continues (resonates with stakeholders)
- Establish key partnerships (particularly w/electric power companies) creating competition
 - Off-peak grid can handle millions of plug-in vehicles
 - Pursue monthly “energy contract” or lease payment for battery, etc. (< monthly cost for gas)
- Work key program issues around technological innovation and cost structure for 1st generation (battery is key)
- Leverage future leadership position for additional support and funding (government, etc.)

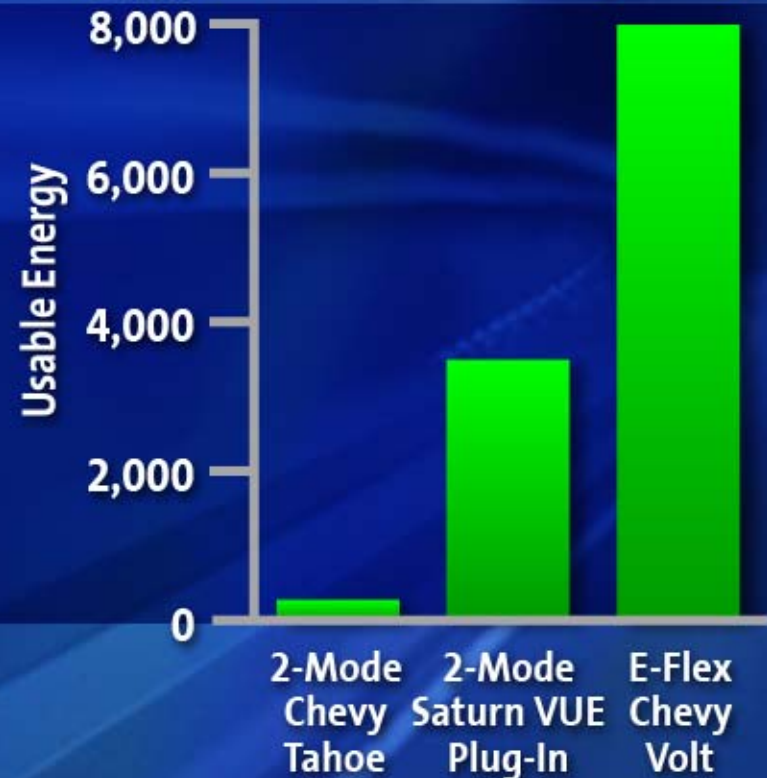
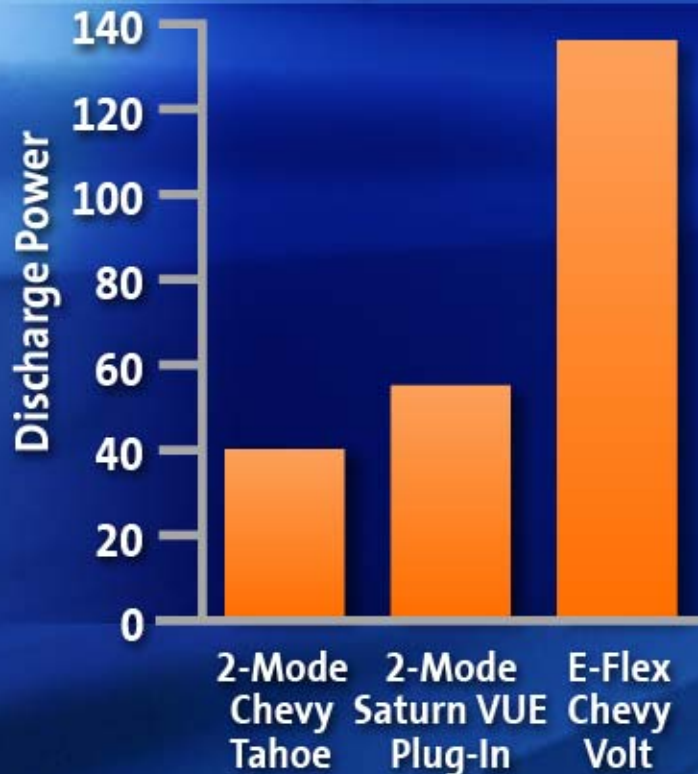
E-Flex Battery Pack Challenge

The Key Battery Challenge for the RE-EV/Volt is the Combination of:

High Power

&

High Energy



E-Flex RE-EV Battery Technical Risks

- **Battery that fits vehicle package**
 - Fits allocated volume with enough power and usable energy
 - Meets crashworthiness requirements
- **Battery life vs. performance over time**
 - Balance 10-year life against EV range, acceleration (modeling + testing)
 - Battery low temperature performance
 - Allowable degradation
- **Battery thermal management**
 - Mainstream liquid cooled
 - Cabin air cooled considered but may not work for large pack with given volume
- **Need (3) battery learning cycles as critical path to production program assuring integrity**

Bringing E-Flex Products to Market ***Multi-Phase Process to Develop New Battery Solutions***



Challenge:

Expeditious yet rigorous engineering and program launches of battery technology concurrent with vehicle development