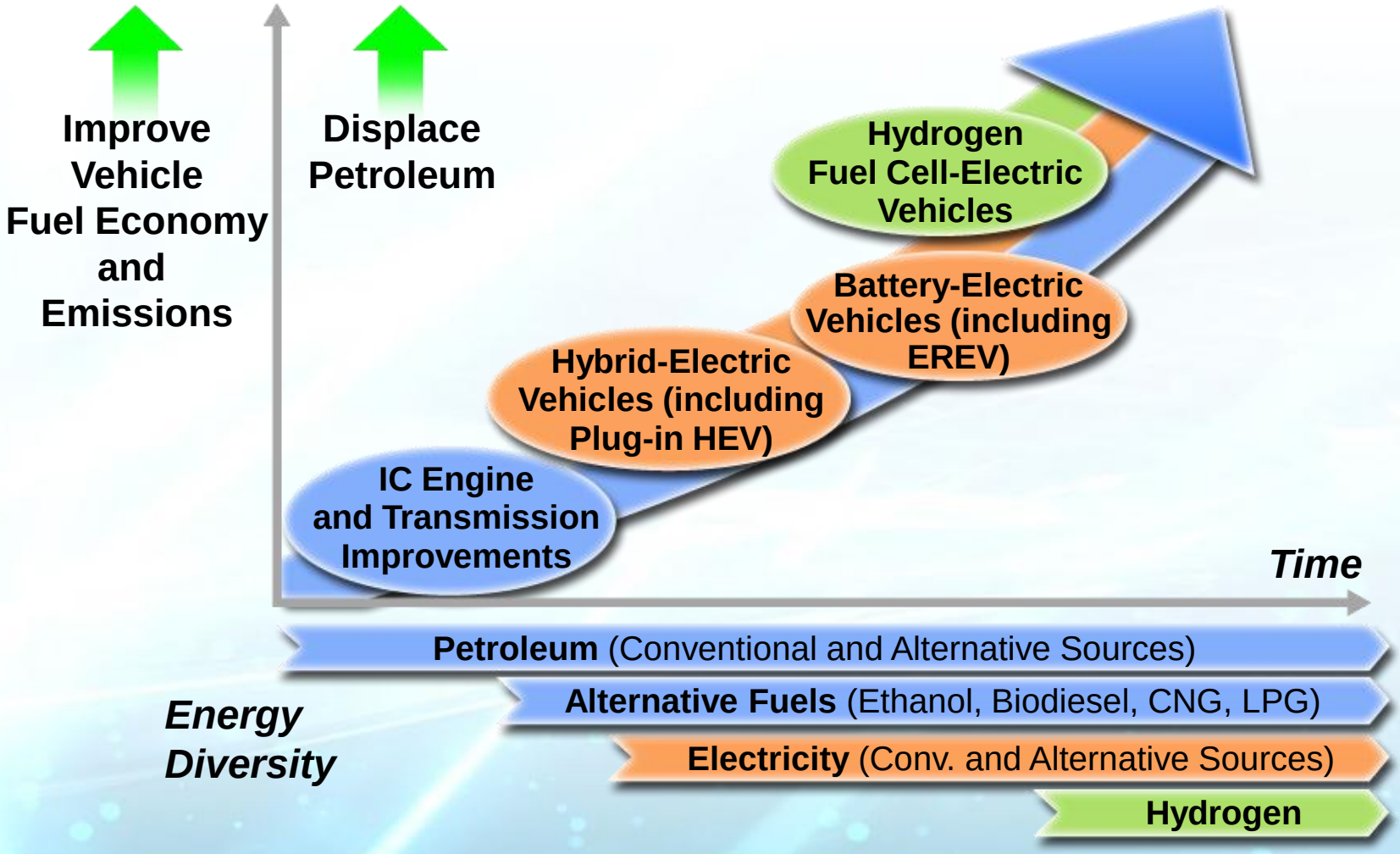
EV101

February 23, 2011

Chevrolet's Electric Volt

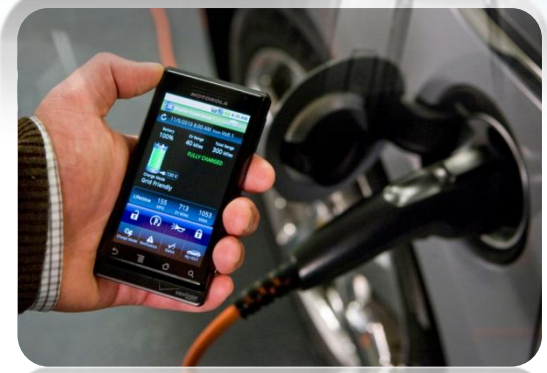
Alex Keros
Infrastructure Commercialization

GM Advanced Propulsion Technology Strategy



Chevrolet Volt

Electric Vehicle (with a Range-Extender)



Industry awards and recognitions include:

- 2011 North American Car of the Year
- *Motor Trend* 2011 Car of the Year
- *Car and Driver* 10 Best for 2011
- *Ward's AutoWorld* 10 Best Engines for 2011
- *Green Car Journal* 2011 Green Car of the Year
- *AUTOMOBILE Magazine* 2011 Automobile of the Year
- 2010 Breakthrough Technology, by *Popular Mechanics*

Chevrolet Volt

Electric Vehicle (with a Range-Extender)

Designed for 40 miles

BATTERY

Electric Drive

(typically 25-50 mile EV range)

+

Designed for over 300 miles

EXTENDED RANGE

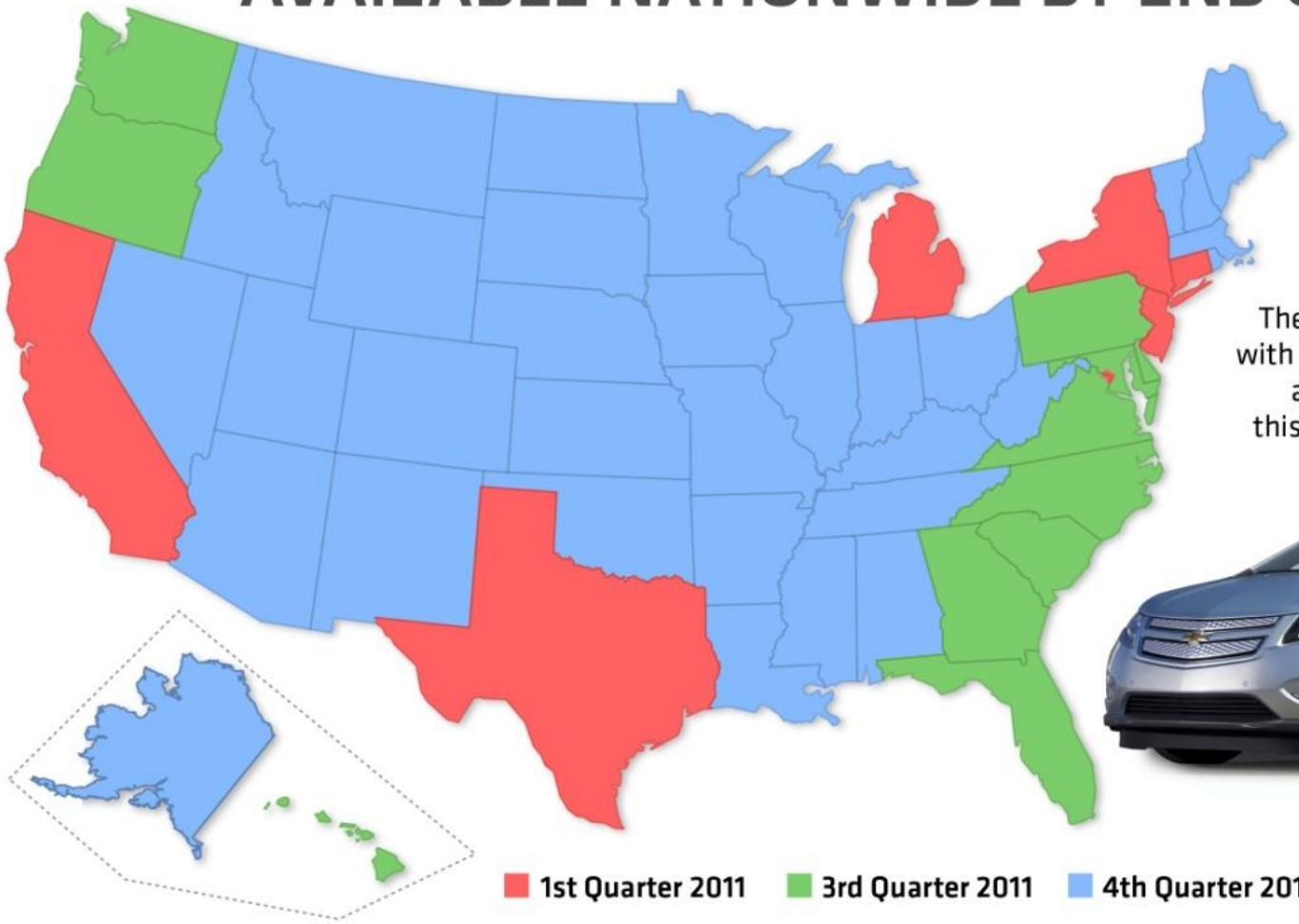
Driving on Gasoline

New EPA label: EV @ 93mpg (35 miles) + Gas @ 37mpg comb (344 miles) = Overall 60mpg (379 miles)


2011 MY Purchase Price: $33,500
includes $7,500 federal tax credit
Lease Price: $350 per month
Available in California, New York,
Michigan, Connecticut, Texas,
New Jersey, and Washington, D.C.
Production Capacity
2011: 10,000
2012: 45,000 – 60,000
VOLT

VOLT

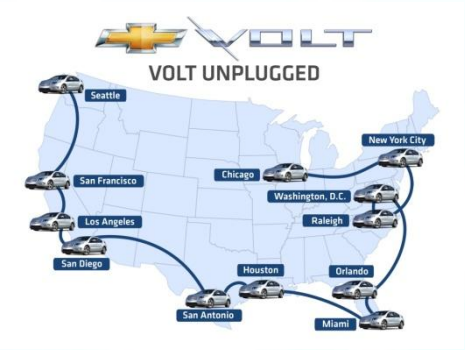
AVAILABLE NATIONWIDE BY END OF 2011



The Chevrolet Volt electric vehicle with extended range will be available across the U.S. by the end of this year – six months sooner than originally planned.

Chevrolet Volts are here!

Public Education and Outreach



12 Cities
6,300 Participants

Began November 2010
- Customer driven events at GM Tech Centers in Los Angeles
- Stakeholder outreach to support decision making on infrastructure

Dealer Preparation and Training

40+ sessions & 150+ dealers
1,500+ attendees

Began October 2010
All markets
www.chevrolet.com
- From vehicle details to SPX
- How will new infrastructure impact customer's experience

First Responder Training

National Safety Training Program with NFPA

- **GM First Responder Website**
https://www.gmstc.com

- **GM and NFPA partnership for training/education**
www.evsafetytraining.org

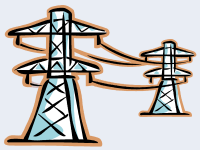
Charging and Infrastructure

Home Charging Installation | GM Teams with SPX

- **SPX is required to ensure national coordination of home installation** and to provide a program that is integrated with local government and utility company activities, services and programs
  - SPX will ensure a consistent and coordinated customer experience that meets our common objectives (safe, simple, fast, low cost and satisfying experience) on a national basis
  - GM is collaborating with SPX and utilities to frame a direct working relationship around requirements and degree of involvement

- **SPX to incorporate *4,400* Coulomb and ECOtality home chargers** *(DOE Awards)*
  - Applies to specific geographies, including Southern California
  - Charger H/W costs are covered, installation cost reimbursement is location specific
- **SPX will manage the City of Los Angeles (LADWP / ECOtality) Program for customers**

EVSE | Installation Process

Online Pre-Installation Survey	Home Electrical Site Survey	Permit & Inspection	Standard Installation (240V)	2nd Utility Meter Installation (Optional)	Ready to Charge (240V)
					
	SPX SERVICE SOLUTIONS	SPX SERVICE SOLUTIONS	SPX SERVICE SOLUTIONS		
Volt Customer				**Utility Company**	**Volt Customer**
• Customer Completes Online Pre-installation Survey	• SPX contacts customer and completes home electrical survey • Customer / SPX contact utility • SPX provides options/quotes to customer	• SPX secures permit for installation (on behalf of customer)	• SPX schedules and completes installation • SPX schedules inspection • Inspector approves install	• Local electric utility company installs and activates 2nd utility meter (if required)	• Customer ready to charge Volt at home

EVSE = Electric Vehicle Supply Equipment

PEV Readiness | Enabling an Early Market

Coordination and Cooperation

Consider a Task Force organized around key issues

Simplify

Complexity is inherent with so many stakeholders – strive for simplicity wherever possible relative to the consumer experience

"Walk before you run"

Avoid burdening the system in the near term with long term considerations

Permitting	Inspector Outreach	Stakeholder Coordination
Evaluate options: • Is the cost of your city's permits going to be a barrier? • Can you simplify your city's processes (e.g. online permitting)?	**Support familiarity with:** • NEC Article 625 • EVSE Specifications • Installation methods • 2nd Meter / TOU options • Utility requirements	**Ensure valuable discourse:** • Utility Programs & Processes • Contacts with OEMs & Installers • How to help customers • Forum to get questions answered


VOLT