

# EV Everywhere – Consumer Acceptance and Charging Infrastructure Workshop



U.S. DEPARTMENT OF  
**ENERGY**



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Under Secretary of Energy (Acting)

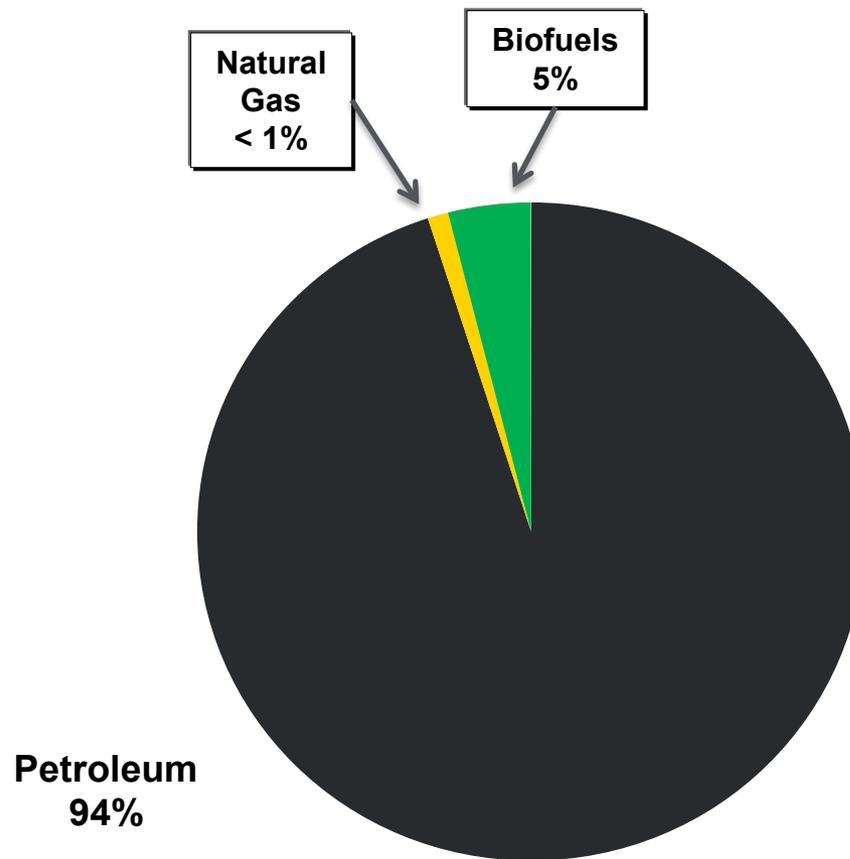
Assistant Secretary for Policy and International Affairs

U.S. Department of Energy

**Los Angeles**

**July 30, 2012**

# Transportation sector depends on oil



U.S. Transportation Fuel Share

# Gasoline prices are high

Current Avg. \$3.49 (as of July 23)\*

High gasoline prices are a burden on American families.



\*Source: EIA

# U.S. oil import bill is almost \$1 billion per day



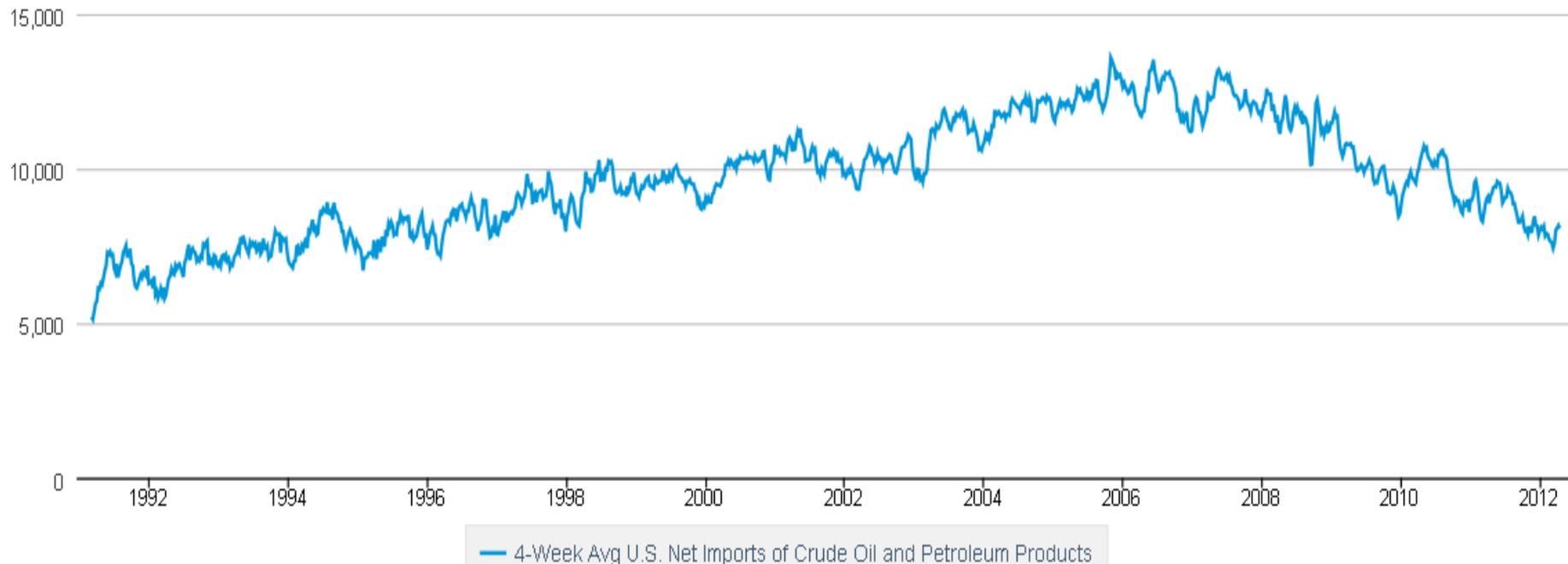
<http://www.eia.gov/petroleum/data.cfm#imports>

# although U.S. oil imports are lowest in almost 15 years

## 4-Week Avg U.S. Net Imports of Crude Oil and Petroleum Products



Thousand Barrels per Day



— 4-Week Avg U.S. Net Imports of Crude Oil and Petroleum Products

<http://www.eia.gov/petroleum/data.cfm#imports>

# China has a rapidly growing car market

*Millions passenger vehicles and trucks*

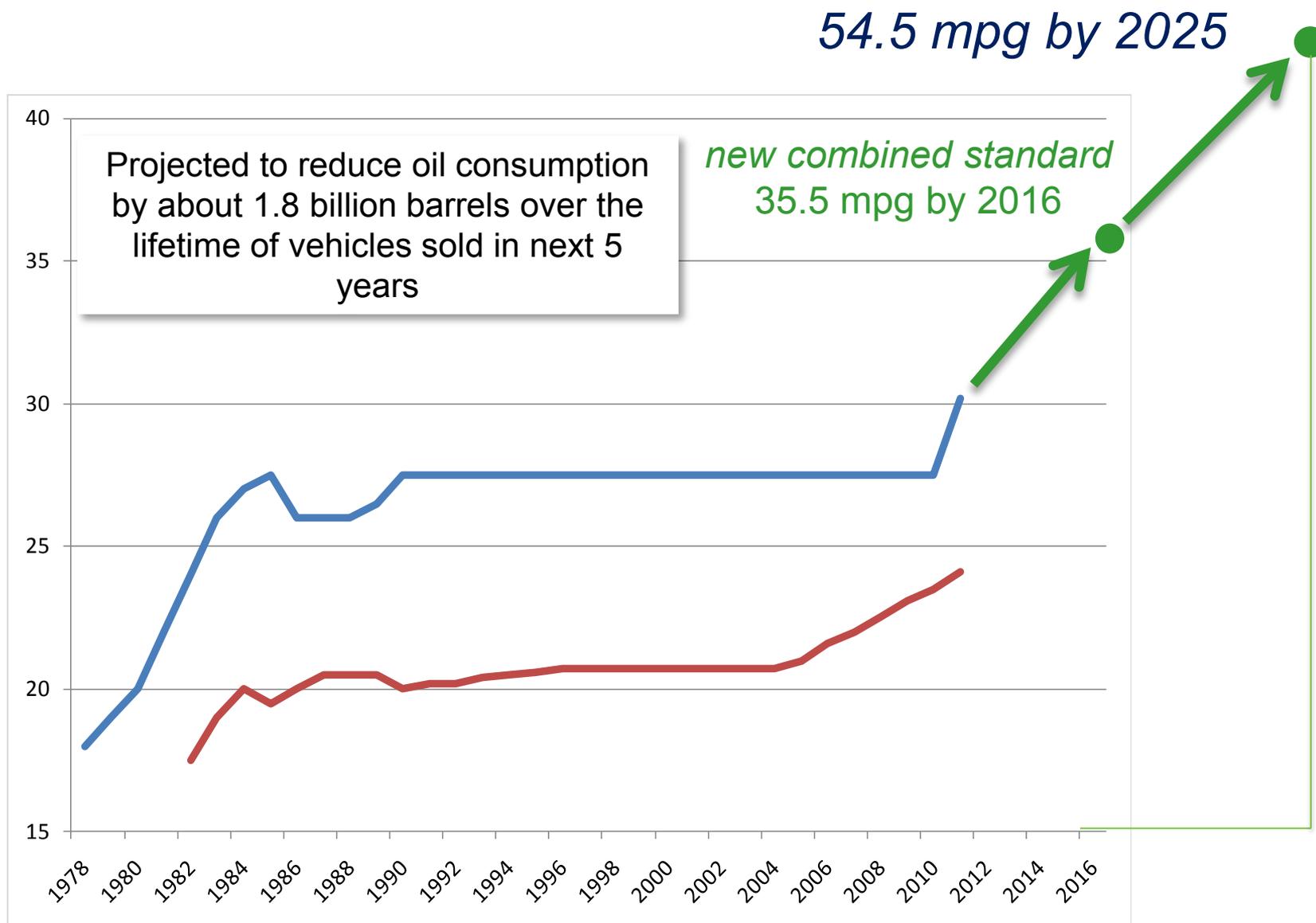


**China**  
**75m**

# The President's Plan



# New Fuel Economy Standards

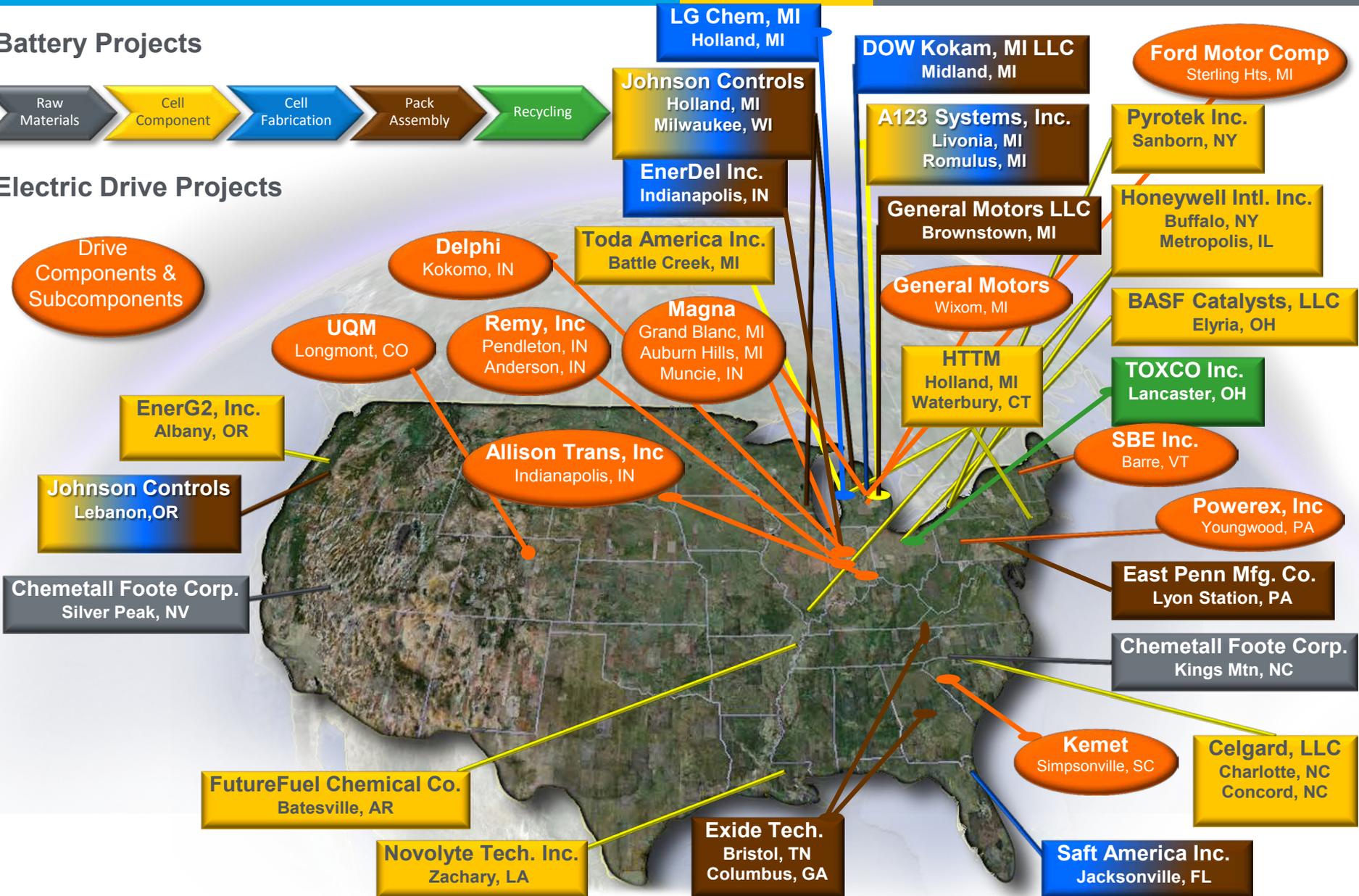


# Recovery Act – Battery and Electric Drive Award Distribution

## Battery Projects



## Electric Drive Projects



# Recovery Act – Transportation Electrification

## *The largest deployment of charge infrastructure in history*

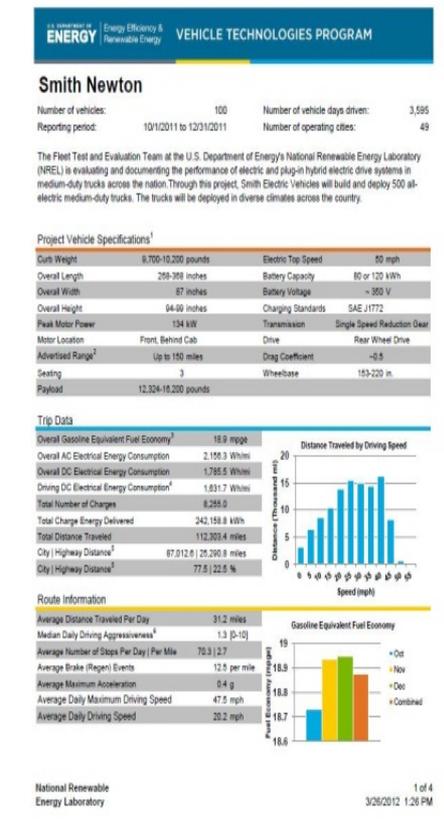
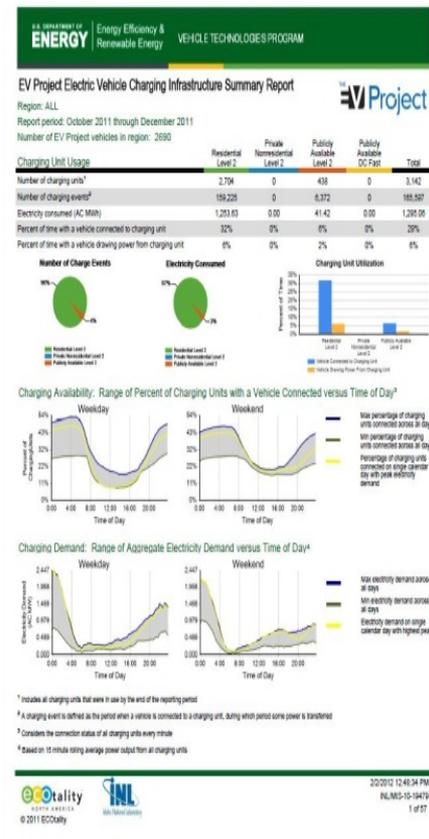
- Goal: Deployment of over 20,000 charging stations supporting 13,000 plug-in vehicles
- Approximately 11,000 EVSEs and nearly 7,000 vehicles as of mid-June, 2012



# Recovery Act – Transportation Electrification

## Data collection and analysis on thousands of vehicles and EVSEs

- Detailed data analysis provides insight regarding real-world PEV usage, charge infrastructure utilization, and grid impacts
- 113,000 PHEV/EV miles and 4,430 charging events documented *per day*
  - Vehicle data: GPS, odometer, battery state-of-charge, fuel consumption
  - EVSE data: connect/disconnect time, begin-charge/end-charge time, average power, peak power, total energy transferred



# President Obama Announces New Initiatives

## National Community Deployment Challenge

- \$1 billion for 10 to 15 community alternative vehicle programs
- Builds on \$8.5 million in community readiness grants announced by DOE in 2011 to accelerate installation of EV infrastructure



*President Obama announces Deployment Challenge*

## Advanced vehicle tax credit

- Allow transfer credit to dealer or financier, allowing consumers to benefit at point-of-sale
- Remove cap on the number of vehicles per manufacturer and phase out credit at end of decade
- Increase maximum amount from \$7,500 to \$10,000

The President's FY13 Budget includes \$650 million to further vehicle and battery technology development at the Energy Department

## A Clean Energy Grand Challenge

- Invest in breakthrough R&D for advanced **batteries**, electric **drivetrain** technologies, **lightweight** vehicle structures, and **fast-charging** technology.
- Bring together America's best and brightest scientists, engineers, and businesses to produce electric vehicles at **lower cost**, with an **improved vehicle range** and an **increased fast-charging** ability



# THANK YOU

