**DOCKET** 

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# Driving Growth Through Innovation Overview for California Energy Commission September 9, 2009

## Smith's Newton Fleet is Road Ready and Moving into US Neighborhoods TODAY!!!





#### **About Us:**

#### **HERITAGE**

•Almost 90 years of experience in building commercial Electric Vehicles (EV's) around the globe

#### **EXPERIENCE**

- Hundreds of current customers
- •Thousands of electric vehicles manufactured

#### **RELIABILITY**

•Integrated service network

•Approximately 1,000 employees worldwide

•Main facilities:

UK

USA

Asia & South Pacific



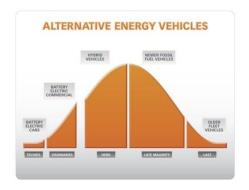


# Smith History: 80 Years of Leadership in Electric Vehicles



## **Smith Mission**

#### Visionaries take the Driver's Seat



Technology & Legislation are driving costs down



EV Volume Grows – Battery Costs Plummet





#### **Vehicle Applications**

- Vehicles that start and end their day at a central location
- •Vehicles that do less than 100 miles per-day
- Operating in congested areas
- Typically inner city and urban areas
- Lots of starts and stops significant idle time
- Multiple drops/collections
- Customer Cost SavingsAnalysis: A solution is needed

- Food Distribution
- Parcel Delivery
- Chilled Food Distribution
- Short Haul
- Utilities
- Airport Operations
- Public Sector









#### Better for the Environment with Bottom line Benefits

#### **Low Operating Cost**

- Eliminate Fuel Costs
  - ✓ No Price Volatility
  - √ < \$.12/mile
    </p>
- Reduced Maintenance Costs
  - Fewer Moving parts
  - No Clutch or Transmission
  - Sealed Electric Motor
  - No Cooling System

## Perfect for Urban Deliveries

- Low Noise
- No Vibration
- Quick Acceleration

#### **Zero Emissions**

- o Nil PM's
- Over 50% CO<sub>2</sub> Reduction

#### **Energy Security**

Low volatility in electricity cost



THE NEWTON

## HUGE PAYLOADS. ZERO EMISSIONS.



- Up To 16,060 LB. Payload
- 150+ Miles On One Charge
- 50 MPH Top Speed
- Faster 0-30MPH Than Diesel
- No Noise
- Low Fuel Costs



## Smith Newton: Engineered to Perform

Motor 120kw induction

Controller Vector Control AC system with regenerative braking

Batteries Lithium-Ion Iron Phosphate

Charger Fully automatic – cable included

Cab All steel, two door with hydraulic tilt, zinc coated

panels with wax filled cavities and thermal insulation

Interior Drivers seat, dual passenger seat, Sony stereo CD

Steering Hydraulic PAS monoblock

Suspension Front & Rear, parabolic springs with transverse

torsion bar stabilizer, hydraulic, double acting shock

absorbers



## Smith Newton: Engineered to Perform

Brakes Dual Circuit, air brake system with WABCO ABS, air

dryer parking brake, fail spring operated park brake

to rear axle

Chassis Ladder type, cold riveted and bolted with U section

side members and open profile cross members-steel

Wheels 17.5 x 6.00 steel rims (16, 535-23,148 lbs),

245/70R17.5 tires on 17.5 x 6.75 steel rims. 8 screws

fixing (26,455 lbs) 215/75R 17.5

Tires 215/75R 17.5

Warranty 36 months bumper to bumper, 60 months drive train

Service & Training

Fully supported training and platinum service model



## Commitment to Service

Warranty 3 Years, 36,000 Miles on Chassis

5 Years, 60,000 Miles on Drivetrain & Batteries

Life Expectancy 7 - 10 Years (Battery); 15+ Years (Motor & Drivetrain)



## Smith Newton Environmental Impact

**Model: Smith Newton** 

50 Mile In-City Trip			Annual CO2 Savings (Gallons) based on 12k travelled/yr:
	Diesel 9tn (9mpg)	Smith Newton (9tn)	
Diesel Used	4.55 gallons		9,240 Gallon
(28.6lbs CO2/gal	lon)		
CO2 Emitted	130.13 lbs	37.5 lbs	
CO2 Reduction		<b>72</b> %	
Cost for 50 miles	\$15.06	\$5.50	Total CO2 Savings (Gallons) based on 60K mls over 5 yrs:
Cost Reduction		64%	
			46.200 Gallons



#### TRANSIT CONNECT

## 0% EMISSIONS. 0% NOISE. 100% SMART BUSINESS MOVE.



- 70 MPH Top Speed
- 100 Miles On One Charge
- Up To 1,600 LB. Payload
- Faster 0-30 MPH Than Diesel
- No Shifting
- Easy Cargo Access Design
- Low Fuel Costs



### Transit Connect: Engineered for Urban Setting

The All Electric Ford Transit Connect is engineered for the unique demands of light duty urban tasks.

- Highly Maneuverable
- Quick and Easy to Drive
- Diverse Applications

•	Overall	Length	180.7"
			<b>±00.</b> 7

•	Wheel	Base	114.6	"
	~ ~ · · · · · · · · · · ·	DUJU	<b>441.0</b>	

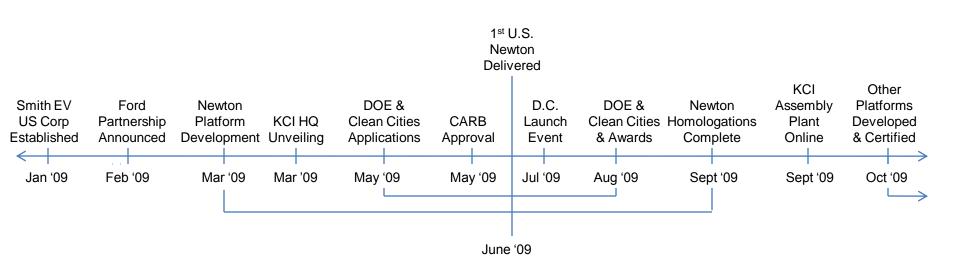
- Overall Height 79.3"
- Ground Clearance 7.9"
- Max Cargo Height 59.1"
- Max Cargo Length 81.0"
- Floor Width at Wheelhouse

48.0"

Max Cargo Volume 135.3(cu. ft)

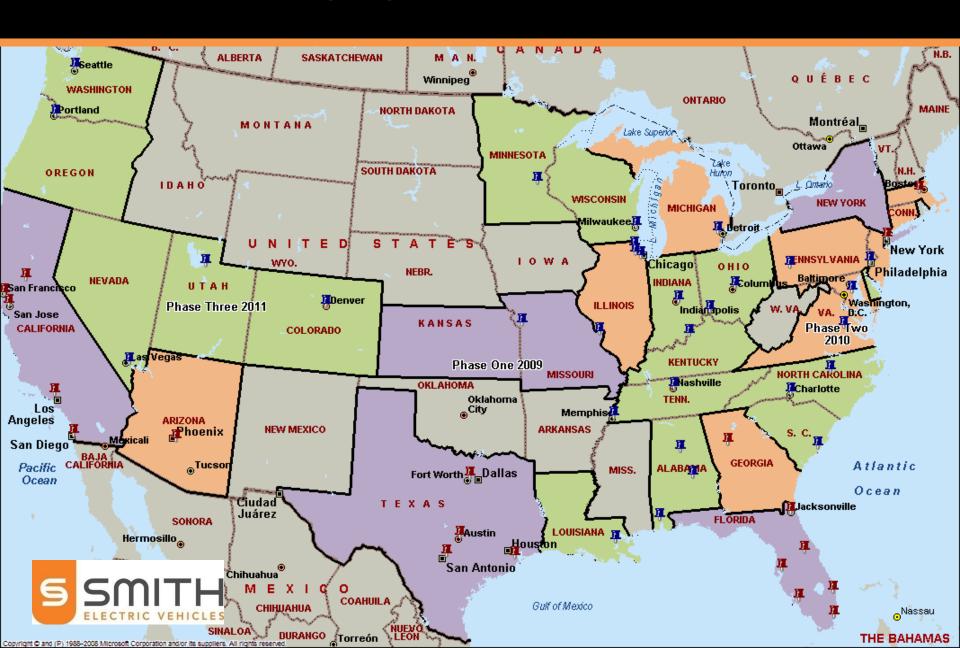


### Deployment – Timing





### Deployment – Markets



## **Smith Mission**

U.K. Facility



U.S. Facility



- A Fresh American
   Perspective to Electric
   Vehicles
- Built on Over 8 Decades
   of European Success
- Leading EV Suppliers
- Long -Term Partnerships
  - ✓ Ford Motor Company
  - ✓ Optare



## **Incentive Opportunity**

#### **Federal Incentives:**

The current federal tax credit for plug-in EVs is up to \$7,500 for vehicles up to 14,000gvw. There is no incremental credit for the Newton.

Rep. Levin just introduced a bill that would provide a \$12,000 credit for the Newton.

#### **State Level Incentives:**

Currently in NY, CA, TX, CO































City of Santa Monica















































































## Thank You





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