



# ENER1 INVESTOR PRESENTATION

SEPTEMBER 2008

# Safe Harbor Statement

**This presentation contains forward-looking statements within the meaning of the Federal Private Securities Litigation Reform Act of 1995 conveying management's expectations as to the future based on plans, estimates and projections at the time the statements are made. The forward-looking statements contained in this presentation and that may be made by the presenter involve risks and uncertainties, including, but not necessarily limited to: EnerDel's ability to succeed as a supplier of batteries to the hybrid electric vehicle and other markets; EnerDel's ability to deliver prototype, production samples and finished product to electric vehicle customers; the estimated future sales for EnerDel's EV batteries; the degree of competition in the markets for lithium battery, fuel cell and nanotechnology-based products and services, Ener1's history of operating losses, the lack of operating history for the development stage Ener1 businesses, the need for substantial additional capital, the dependency upon key personnel and other risks detailed in Ener1's annual report on Form 10-KSB as well as in its other filings from time to time with the Securities and Exchange Commission. These risks and uncertainties could cause actual results or performance to differ materially from any future results or performance expressed or implied in the forward- looking statements included in this release. Ener1 undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.**

# Ener1 Profile

<b>SYMBOL</b>	<b>AMEX : HEV</b>
<b>CORPORATE HQ</b>	<b>NEW YORK, NY</b>
<b>STOCK PRICE : 52 WEEK RANGE</b>	<b>\$1.68 - \$9.24</b>
<b>SHARES OUTSTANDING</b>	<b>107MM</b>
<b>MARKET CAPITALIZATION</b>	<b>704MM</b>
<b>AVERAGE VOLUME (3 MTHS)</b>	<b>537,632</b>
<b>INSIDER AND MANAGEMENT OWNERSHIP</b>	<b>60.4%</b>
<b>INSTITUTIONAL OWNERSHIP</b>	<b>28%</b>
<b>FULL-TIME EMPLOYEES</b>	<b>115</b>
<b>FISCAL YEAR</b>	<b>DECEMBER 31</b>
<b>ACCOUNTING FIRM</b>	<b>MALONE &amp; BAILEY</b>

# Presentation Overview

<b>1</b>	<b>Why are autos going electric?</b>
<b>2</b>	<b>What are the advantages of Li-ion over the existing technology?</b>
<b>3</b>	<b>How is EnerDel's technology differentiated from competition?</b>
<b>4</b>	<b>Business model advantages: end to end solutions provider</b>
<b>5</b>	<b>Current capacity and future expansion plans</b>
<b>6</b>	<b>Strategic relationships</b>
<b>7</b>	<b>The future</b>
<b>8</b>	<b>Financial summary</b>
<b>9</b>	<b>Management</b>

# **1. Why are autos going electric?**

# Demand-Pull from Auto Industry



*“Building cars powered by alternative fuels but that still use oil is “unsustainable.” I want a pure electric car. I don’t want a range extender. I don’t want another hybrid. It’s not going to be zero emissions in certain conditions. It’s going to be zero emissions.”*

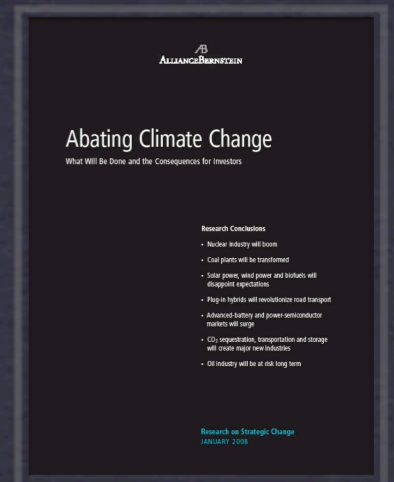
**Carlos Ghosn, CEO & President Renault Nissan, New York Times, July 2008**

*“We will introduce 16 new hybrids over the next four years, that’s an average of one every three months.”*

**Richard Wagoner, Chairman & CEO of General Motors Corp, CES, Jan 2008**

*“Currently, the annual automotive battery market is about \$9 billion and consists mainly of lead acid batteries. As new, more powerful lithium-based batteries are introduced, we expect the market to grow to over \$150 billion .”*

**Abating Climate Change Report, Saurin Shah, Alliance Bernstein, Jan 2008**



# Auto Industry

## HEV Planned Production



**ALL Major OEMs working on a lithium-ion battery**

**13 hybrid models in 2007**

**> 75 hybrid models in 2011**

# High Profile Development Programs



**Hybrid Electric Vehicles**

**Toyota Prius**

**Mercedes S400**

**Ford Escape**

**Plug-in Hybrid Electric Vehicles**

**Chevy Volt**

**Saturn Vue**

**Fisker Karma**

**Pure Electric Vehicles**

**Th!nk City**

**Tesla**

**Mitsubishi iMiEV**

# Mounting Political Tailwinds



*“For us to figure out how to create an electric car that operates effectively... that has to be a very high priority for our national security, as well as for our economy. I will be investing billions of dollars of federal government research money into doing that.”*

**Senator Obama, Greensboro, North Carolina, March 2008**

*“I further propose we inspire the ingenuity and resolve of the American people by offering a \$300 million prize for the development of a battery package that has the size, capacity, cost and power to leapfrog the commercially available plug-in hybrids or electric cars... a small price to pay for helping break the back of our oil dependency”*

**Senator McCain, Fresno State University, California, June 2008**



# Mounting Political Tailwinds

**“America spends more than \$200,000 per minute on foreign oil -- \$13 million per hour...**

**America’s dependence on foreign oil is a threat to our national security and economy... we must reclaim our freedom and secure a cleaner, safer energy future by investing in american jobs. ”**

**NATURAL RESOURCES DEFENSE COUNCIL**

**2. What are the advantages of Lithium-ion over the existing Nickel-metal Hydride technology?**

# Old Technology vs. New

## EnerDel Li-ion vs. NiMH HEV Pack



50% reduction in size  
50% reduction in weight  
x2 available power  
x2 available density



**COST EFFICIENCY**

**3. How is EnerDel's technology differentiated from the competition?**

# EnerDel Cell Design - Advantages

Lithium Titanate / Lithium Manganese

**SAFETY**

**HIGH POWER  
(HEV)**



**COLD CRANKING**

**EXCELLENT  
C-RATE**

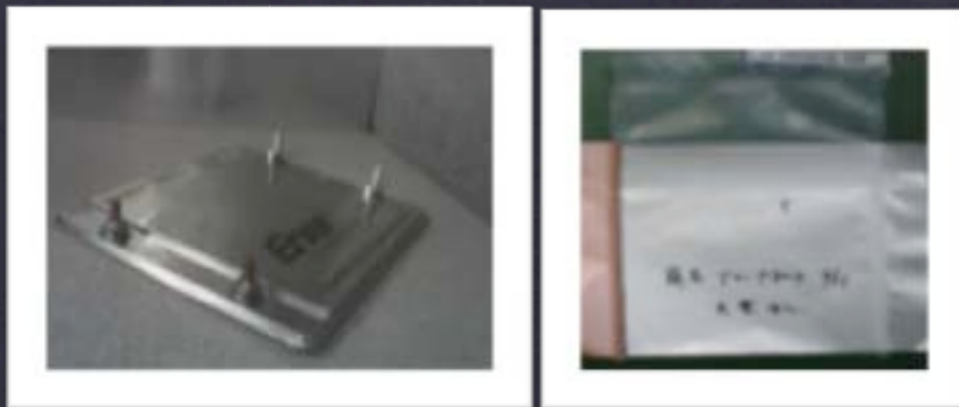
**PRISMATIC DESIGN - THERMAL SUPERIORITY**

**PRISMATIC DESIGN - PACKAGING ADVANTAGES**

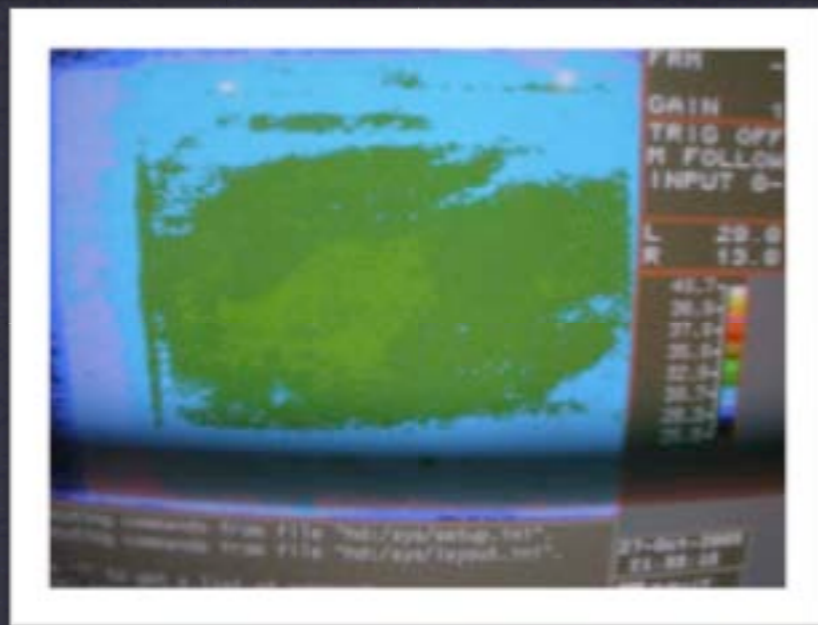
# Prismatic vs. Cylindrical Cell Design

## Superior Thermal Performance of EnerDel's Prismatic Cell Design vs. Contemporary Cylindrical Technology

### ENERDEL CELLS



### COMMERCIAL LI-ION CELLS



**80A CONTINUOUS DISCHARGE 2AH**  
**33°C**



**30A CONTINUOUS DISCHARGE 2.3AH**  
**66.7°C**

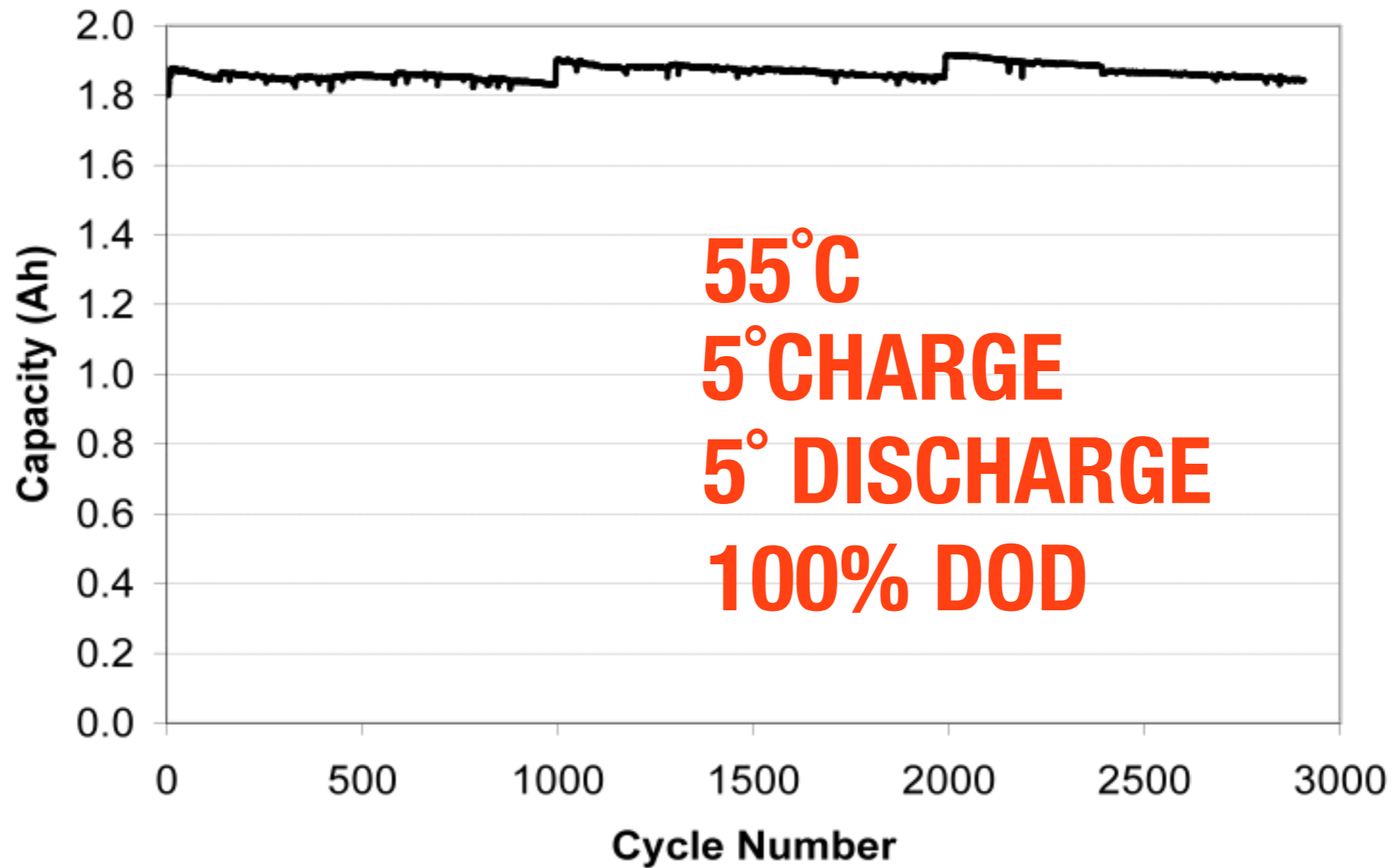
# USABC Classifications for HEV Chemistry

## United States Advanced Battery Consortium (USABC)

CATHODE GROUP	Group A (Nickel Base)	Group B (Iron Base)	Group C (Mn Base)	Group C-1 (Mn Base) - Gen 1	Group C-2 (Mn Base) - Gen 2
<b>Cathode</b>	LiNiCoxO	LiFePO4	LiMn2O4	LiMn2O4	LiMn2O4
<b>Anode</b>	Graphite	Graphite	Graphite	Hard Carbon	LTO
<b>Advantage</b>	Capacity	Safety Cost	Cost Power	High Power Longevity Low Temp. Safety	High Power Longevity Low Temp. Safety Cold Temp.
<b>Disadvantage</b>	Safety Price Cold Temp.	High Temp. Voltage Cold Temp.	High Temp. Longevity Cold Temp.	Low Temp	Slightly Lower Energy
<b>Company</b>	Competitor	Competitor	Competitor	EnerDel	EnerDel

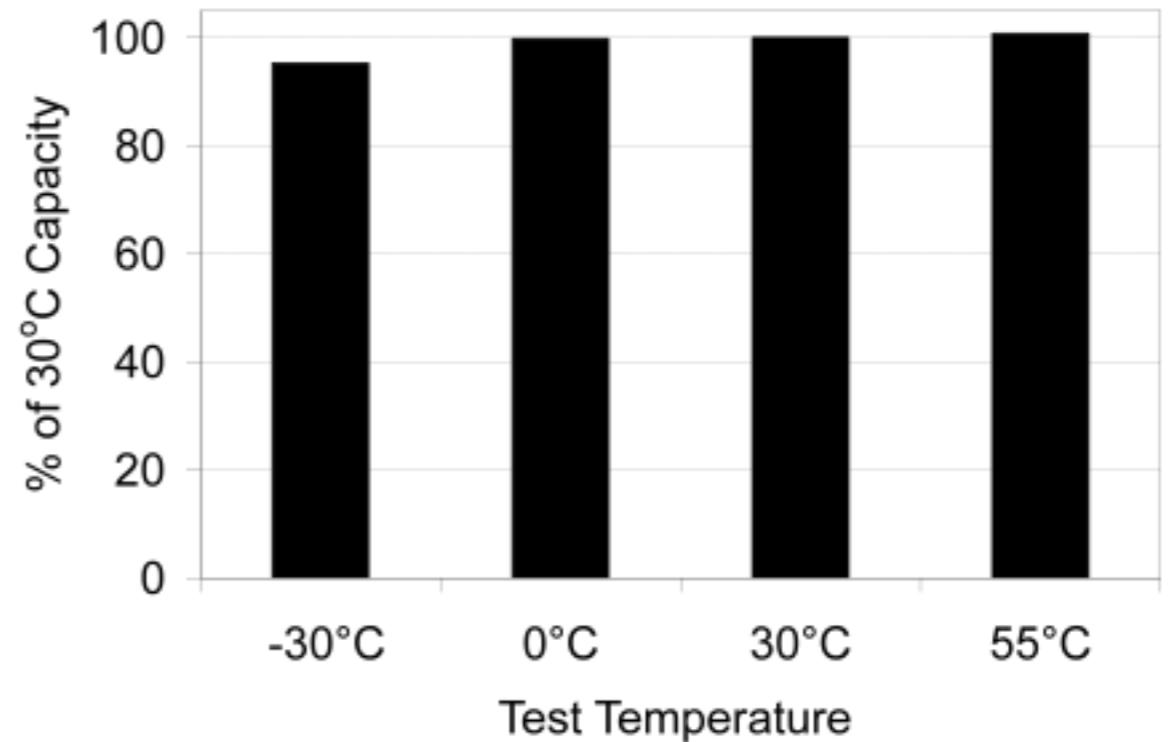
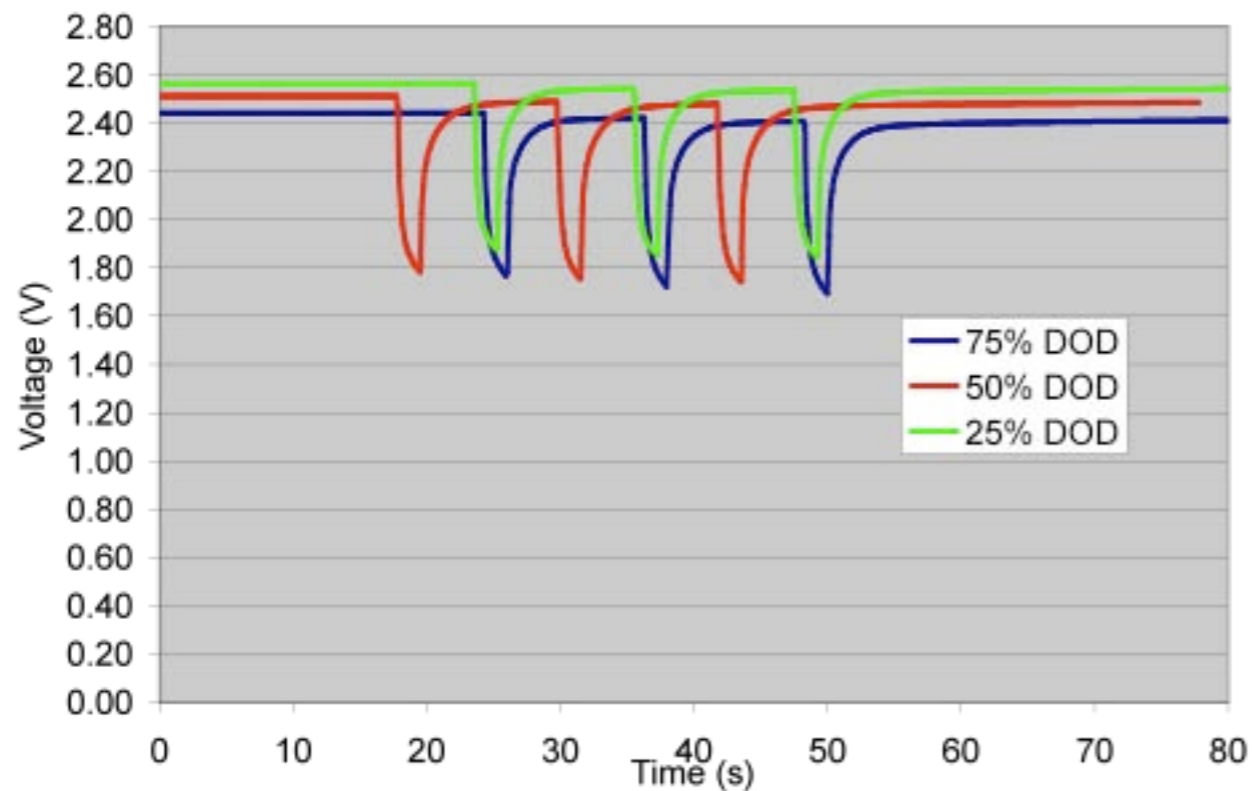
# Severe Cycle Life Test Under High Temp.

## Implications for Warranties



# Performance Under Different Temperatures

## High Power and Full Discharge Capacity at Low Temperatures



**COLD CRANKING  
(AT VARIOUS STATES  
DISCHARGE)**

**OVER 90% OF CAPACITY  
OVER WIDE  
TEMPERATURE RANGE**

**4. Business model advantages: EnerDel  
as an end to end solutions provider**

# End to End Solutions Provider

## EnerDel Manufactures Cells, Modules and Assembles Battery Packs In-House

**HEV**

**EV**

**CELL**

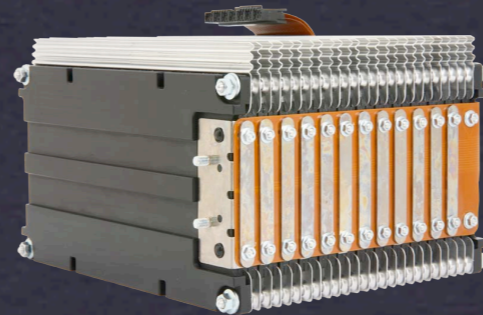
**5AH 2.5V**



**20AH 3.7V**

**MODULE**

**5AH 60V**



**120AH 30V**

**PACK**

**5AH 120V**



**120AH 240V**

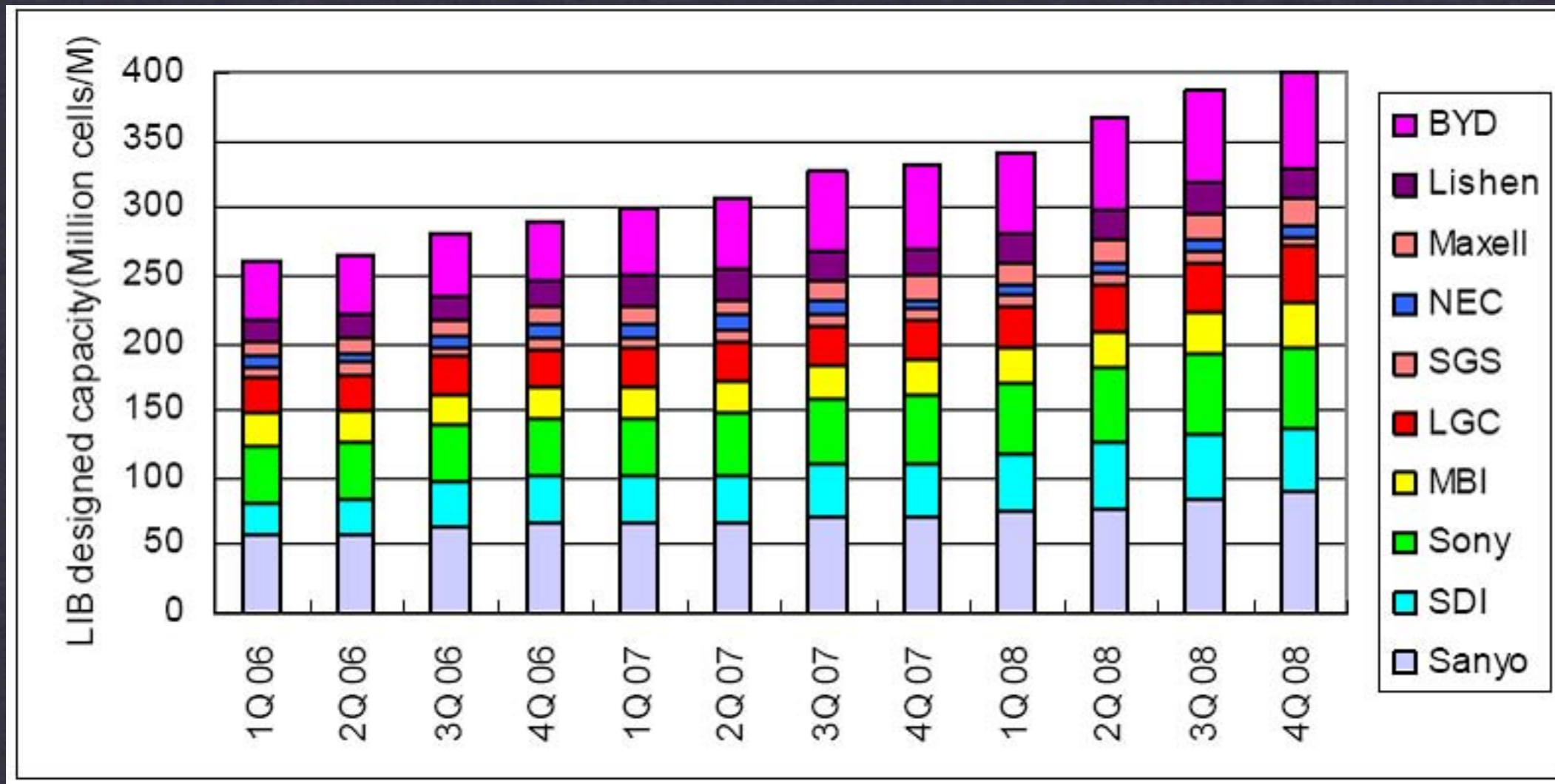
**0.6 KWH**

**26 KWH**

## **5. Current capacity and future expansion plans**

# Existing Capacity

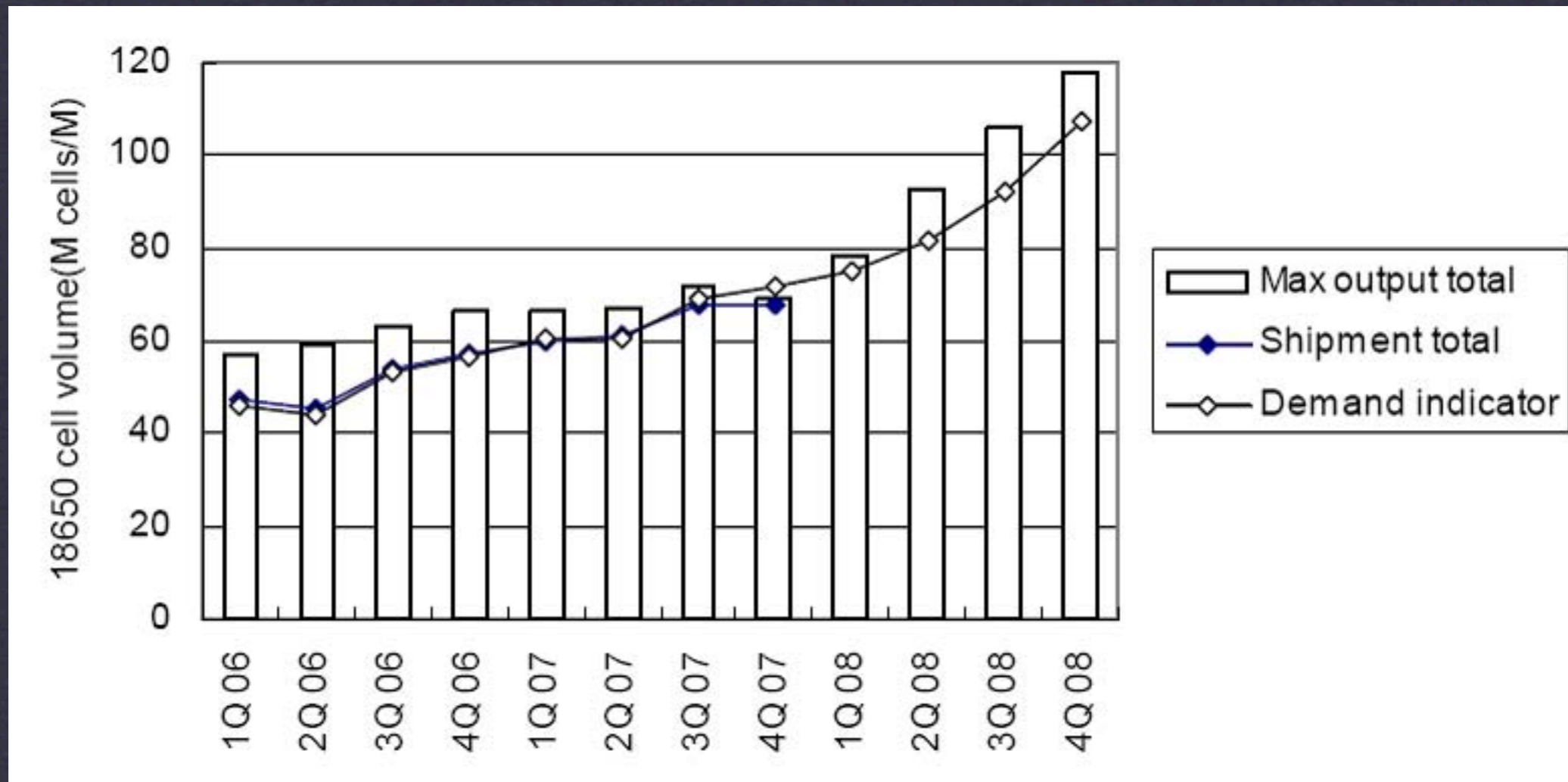
**Worldwide Built-out Capacity for Lithium-ion Battery Production (source Institute of Information Technology)**



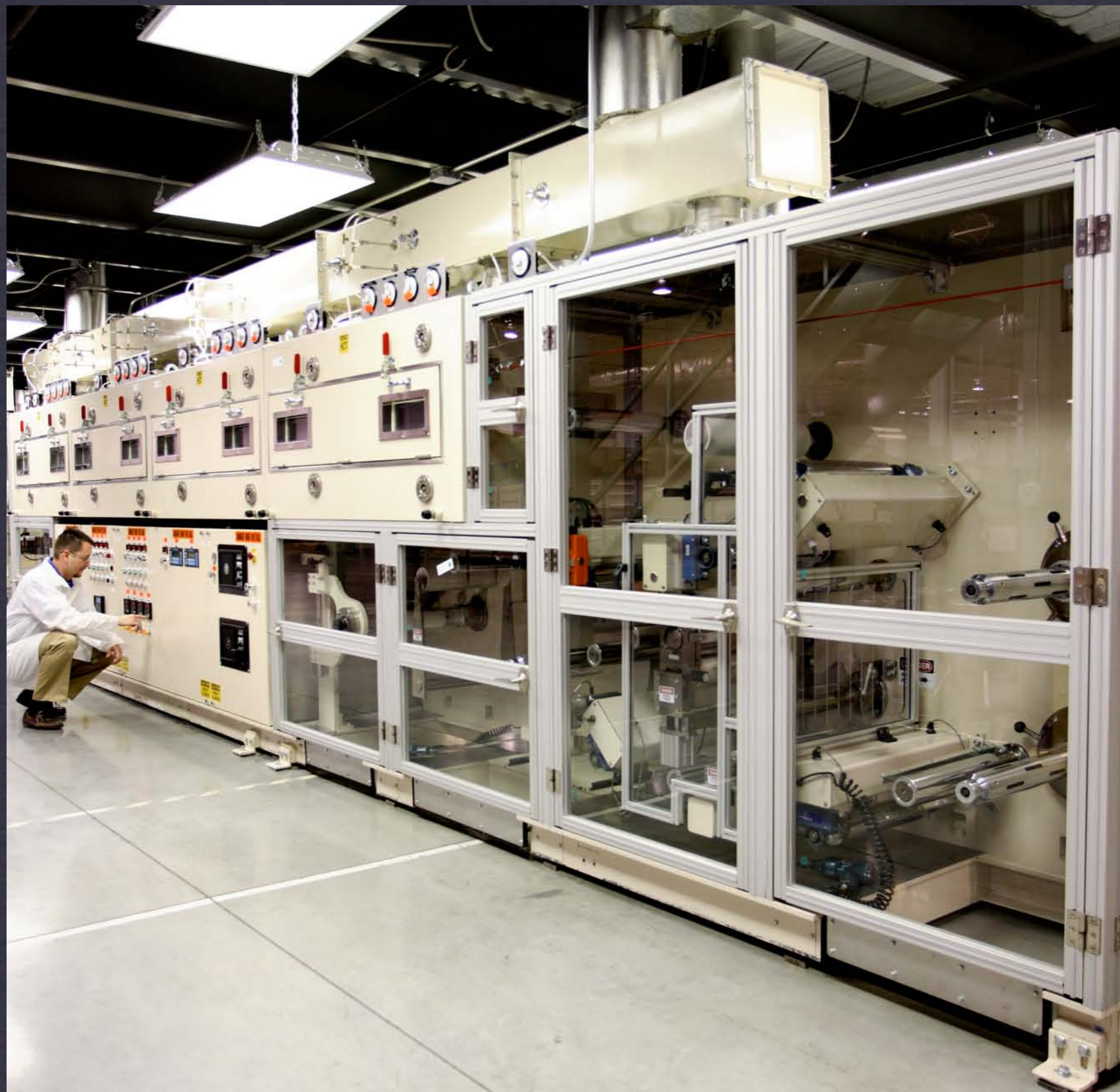
**- includes prismatic (PDA, cell phones, laptops)**

# Existing Capacity

**Worldwide Built-out Capacity for Lithium-ion Battery Production (source Institute of Information Technology)**



**- 18650 cells only**



**75 EMPLOYEES**



**92,000 SQ FEET**

# Hague Road Production Facility, Indianapolis

# Current Capacity and Expansion Plans

With additional capex, Hague Road facility has capacity to produce 300k HEV battery packs per year



ULRIK GRAPE, CEO OF ENERDEL AND MITCH DANIELS,  
GOVERNOR OF INDIANA

EnerDel to receive up to \$7MM in performance based tax credits for expansion plans in Indianapolis and Noblesville - third manufacturing location in Indiana to be disclosed in near future

**ESTIMATE FOR EVERY \$1 CAPEX =  
\$4-6 ANNUAL REVENUES**

## **6. Strategic relationships**

# Strategic Partners : R&D, Manufacturing



*EnerDel's technology was originally pioneered with the assistance of Argonne National Laboratory, the nation's first national laboratory bringing together the world's brightest scientists and engineers. EnerDel and ANL were recently awarded the R&D100 Award for excellence in technology and innovative design*



*As a long term strategic partner and current investor in Ener1, ITOCHU also creates value as the largest global reseller of manufacturing equipment for Lithium-ion battery production, providing us with unique access to the Asian equipment and material markets*

# Development and Supply Contracts

**Ener1 has development and supply agreements in each of the three verticals: HEV, PHEV with USABC**



USABC  
UNITED STATES ADVANCED BATTERY CONSORTIUM



*United States Advanced Battery Consortium (USABC) is an umbrella organization for collaborative research among Chrysler LLC, Ford Motor Company and General Motors Corporation*

# Development and Supply Contracts

Ener1 has a \$70MM commercial contract with Think Global of Oslo, Norway



Think City Battery Options

Supplier	Mes-Dea	A123 Systems	EnerDel
Type	Sodium nickel chloride (Zebra)	Li-ion (doped Nanophosphate)	Li-ion (layered manganese oxide)
Capacity kWh	28	19	26
Storage System Density (Wh / kg)	114.3	73.1	100
Range (km / miles)	170 / 106	130 / 81	180 / 112
Nominal Voltage (V)	370	370	370
Weight (kg)	245	260	260

# USABC Lithium-ion Shortlist

## Auto Industry “Shopping List”

<b>Contract Developer</b>	<b>Focus Chemistry</b>	<b>Manufacturing Location</b>
<b>EnerDel</b>	<b>LMO / LTO</b>	<b>USA</b>
<b>Johnson Control / Saft</b>	<b>LNO / Graphite</b>	<b>France</b>
<b>A123 Systems</b>	<b>FePO4 / Graphite</b>	<b>China</b>
<b>Compact Power</b>	<b>LMO / Graphite</b>	<b>Korea</b>

# Industry Landscape

## Existing Partnerships and Agreements

<b>Company</b>	<b>HQ</b>	<b>Factory</b>	<b>Partner</b>	<b>Customer</b>
<b>A123</b>	<b>US</b>	<b>China</b>	<b>GE</b>	<b>Think</b>
<b>AESC (NEC)</b>	<b>Japan</b>	<b>Japan</b>	<b>Nissan</b>	<b>Nissan, Subaru</b>
<b>BYD</b>	<b>China</b>	<b>China</b>	<b>n/a</b>	<b>BYD</b>
<b>GS - YUASA</b>	<b>Japan</b>	<b>Japan</b>	<b>Mitsubishi Motor</b>	<b>Mitsubishi</b>
<b>Hitachi</b>	<b>Japan</b>	<b>Japan</b>	<b>Hitachi, Shinkobe</b>	<b>GM</b>
<b>LG</b>	<b>Korea</b>	<b>Korea</b>	<b>Compact Power</b>	<b>n/a</b>
<b>Panasonic EV</b>	<b>Japan</b>	<b>Japan</b>	<b>Toyota</b>	<b>Toyota</b>
<b>Saft</b>	<b>France</b>	<b>France</b>	<b>Johnson Control</b>	<b>GM, Ford, Daimler</b>
<b>Samsung</b>	<b>Korea</b>	<b>Korea</b>	<b>BOSCH</b>	<b>n/a</b>
<b>Sanyo</b>	<b>Japan</b>	<b>Japan</b>	<b>Continental</b>	<b>Honda, VW</b>
<b>SK</b>	<b>Korea</b>	<b>Korea</b>	<b>n/a</b>	<b>n/a</b>
<b>Toshiba</b>	<b>Japan</b>	<b>Japan</b>	<b>n/a</b>	<b>Honda</b>

# 7. The future

# Strategic Planning : EnerDel

## Primary Focus



## AUTOMOTIVE

HEV, PHEV, EV  
Bus & Truck

## Secondary Market



## SPECIALITY

aviation,  
aerospace, military  
& government

## Future Market



## INDUSTRIAL

stationary power  
for commercial &  
utilities

## **8. Financial Summary**

- 1. May 8 : Listed on AMEX**
- 2. Aug 13 : Ener1 gains 100% ownership EnerDel**
- 3. No debt, \$34MM cash and liquidity (as of June 30)**
- 4. With add'l capex, capacity for \$450 MM revs from current capacity Hague Road, Indianapolis**
- 5. Revenue Visibility : potential for \$70MM minimum next 2yrs from Think Global, additional x2 development contracts to be signed by year end**

# Corporate Structure

**Ener1 leverages the R&D synergies of its other subsidiaries into EnerDel, the Lithium-ion battery subsidiary**

<b>EnerFuel</b>	<b>NanoEner</b>	<b>EnerDel Japan</b>
<p><b>Our fuel cell company is developing technologies and products that advance the safety, reliability and performance of fuel cells</b></p>	<p><b>Our nanotech company is developing new, cutting-edge methods of material deposition and thin films</b></p>	<p><b>EnerDel Japan is working on material and cell chemistry and manufacturing processes for lithium batteries</b></p>

## **9. Management**

**Charles Gassenheimer, Chairman & Chief Executive  
Officer Ener1**

**Peter Novak, President & Chief Technology  
Officer Ener1**

**Ulrik Grape, Executive VP Ener1, CEO & President EnerDel**

**Naoki Ota, Chief Operating Officer Ener1**

**Gerard Herlihy, Chief Financial Officer Ener1**