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WSJ HOT TOPICS: DESIRÉE ROGERS

DECEMBER 5, 2008, 2:43 PM ET

Tesla Opposes Redirection of ATVM Funds

By Marisa Wong

The Tesla Roadster

The Competition update: You won't see Tesla Motors among the U.S. automakers currently groveling before Congress for a bailout. The Silicon Valley company, whose cars do not use gas at all, did, however, apply in mid-November for a grant from the Department of Energy's Advanced Technology Vehicle Manufacturing Incentive Program, known as ATVM. This is a $25 billion fund earmarked for makers of ultra-fuel-efficient cars that push technology beyond the internal combustion engine.

Congress established the program in December 2007, when it passed the Energy Independence and Security Act. It became a reality in September 2008—a month before sales of U.S. cars dove to near-record levels. When Detroit automakers began jostling for stop-gap cash, the ATVM funds caught their eye, and U.S. carmakers urged Congress to redirect the funds to prop them up.

Tesla—that rarity, a solvent American car company—opposes the redirection, which its Vice President for Business Development, Diarmuid O'Connell, calls an attempt to "pervert the intended purpose of the ATVM program." Now it's up to Congress to decide.
–M.G. Lord

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Airbus to drop lithium-ion batteries for A350 due to regulatory concerns

By Associated Press, Updated: Thursday, February 14, 6:44 PM

NEW YORK — Airbus is dropping lithium-ion batteries from its new A350 airplane because of uncertainty surrounding the technology that has led to the grounding of Boeing's 787.

The European planemaker said late Thursday that it has decided to revert to nickel-cadmium batteries for the A350. The plane is a wide-body jet rival to the 787 and is expected to make its first flight around the middle of the year.

Airbus says it does not expect the battery switch to delay the A350.

Federal officials grounded the 787 last month because of problems with its lithium-ion batteries that caused one fire and forced another plane to make an emergency landing.

Airbus says the A350 uses batteries in a different setup to the 787, making it unlikely that it would face the same problems.

Gallery

ANOTHER TESLA FIRE!

Apex Tribune

NATIONAL NEWS BUSINESS & FINANCIAL NEWS TECH & SCIENCE HEALTH & LIFESTYLE

TESLA MODEL S SPONTANEOUSLY COMBUSTED ON NEW YEAR'S

JANUARY 2, 2016 BY KELLY

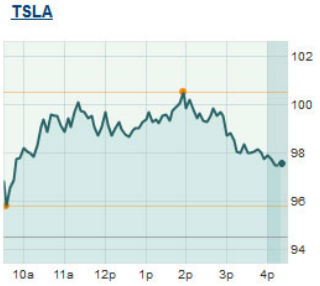
The biggest risk factor when putting out an electrical vehicle fire is that the lithium ion batteries in the machine will generally keep the fire going stronger than regular fires, and they can also blow up, throwing shrapnel.

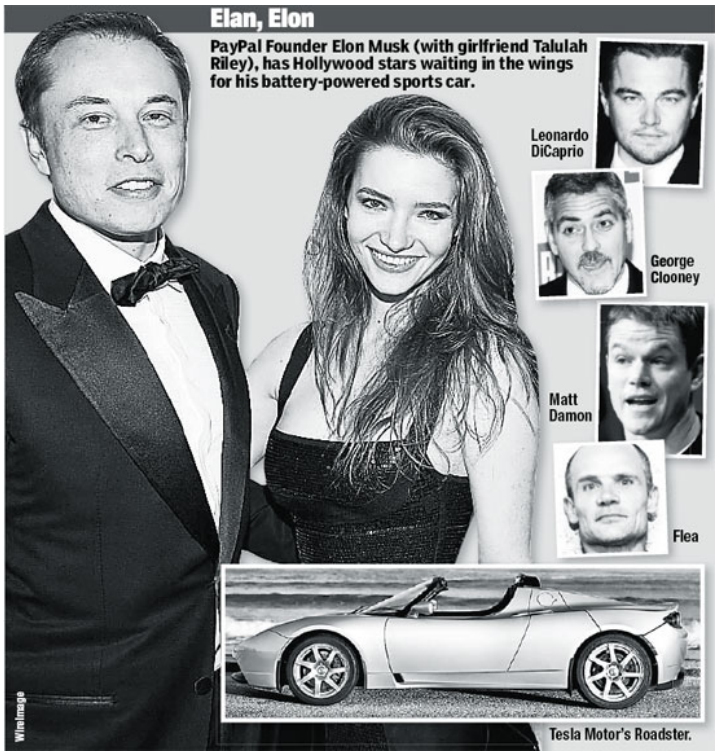
The biggest risk factor when putting out an electrical vehicle fire is that the lithium ion batteries in the machine will generally keep the fire going stronger than regular fires, and they can also blow up, throwing shrapnel.

Tesla shares fall after Barron's article

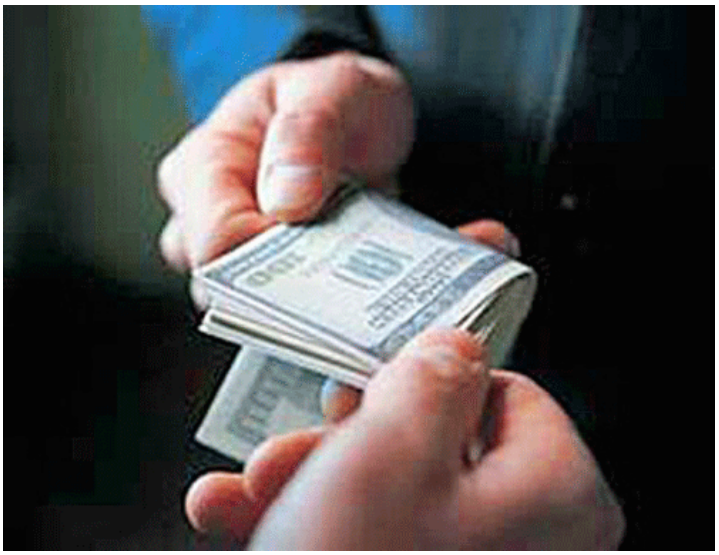
By Laura Mandaro

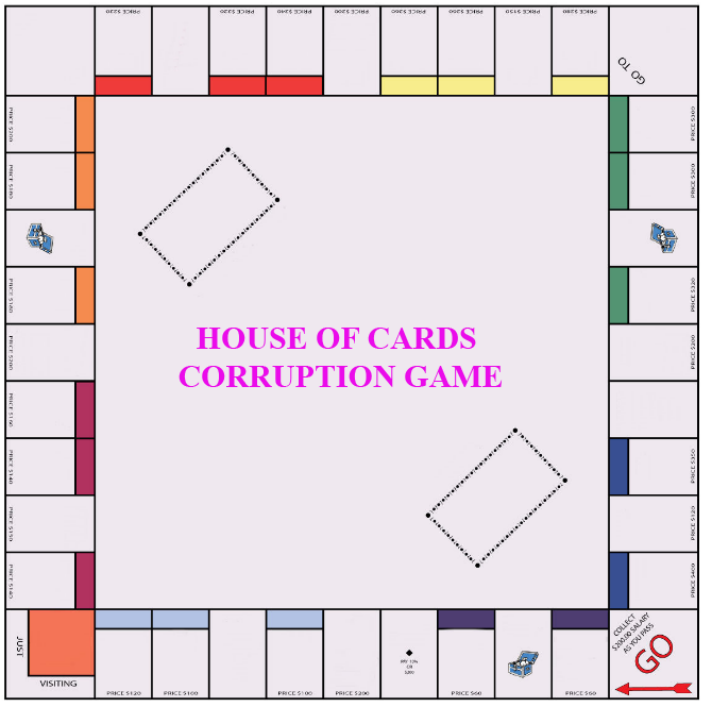
SAN FRANCISCO (MarketWatch) -- Tesla Motors Inc. TSLA +3.45% shares fell 3.2% premarket Monday, to $98.54, after Barron's featured the company in a cover story. The article noted that one big driver behind the stock's tripling in value this year was a powerful short squeeze. "With the shorts in retreat, Tesla should trade more in line with its fundamentals," notes the article. The author argues there will have to be a break-through in battery technology for sales to take off.





THIS IS AN ACTUAL BOEING BATTERY





George Clooney Tells Tesla: “Why am I always stuck on the side of the F*CKING road...make it work!”

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Harvard Law School
http://www.law.harvard.edu/faculty/mstephenson/
November 2015

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The Unofficial History Of Tesla Motors

By Rory Schneider & Pamela West

DRUNKS & Douche Bags Drive Teslas
Making crashes 50% more likely

We test-drove the Toyota 'future' car that Elon Musk hates ...
The Post takes a ride in the Toyota Mirai, the world's first mass-market, **hydrogen**-powered all-electric car named after the Japanese word for "future."
trp washingtonpost.com/blogs/the-switch/wp/2015/05/11/we-test-dr...

Test Driving the Hydrogen Car the Elon Musk Hates ...
You expect a certain sort of magic from a car like Toyota's Mirai, the world's first mass-market, **hydrogen**-powered all-electric named after the Japanese word for
realcleartechnology.com/2015/05/12/test_driving_the_hydrogen_car_...

Meet the fast-charging, affordable 'future' car that Elon ...
Toyota's **hydrogen**-powered sedan, an eco-friendly feat, ... Meet the fast-charging, affordable 'future' car that **Elon Musk hates** . Sign In. Subscribe.
trp washingtonpost.com/blogs/the-switch/wp/2015/02/25/meet-the-f...

Elon Musk thinks hydrogen cars are 'bullshit' | The Verge
Elon Musk does not think highly of **hydrogen** fuel cell cars. The entrepreneur and Tesla Motors co-founder discussed the technology during a recent speech to ...
theverge.com/2013/10/23/4946858/elon-musk-thinks-hydro...

Meet the fast-charging, affordable 'future' car that Elon ...
... affordable 'future' car that **Elon Musk hates**. ... But the green technology has found a surprisingly forceful critic in **Elon Musk**, ... But **hydrogen** fuel ...
chicagotribune.com/classified/automotive/chi-toyota-hydrogen...

Elon Musk Calls Hydrogen Fuel Cell Cars 'Bullsh*t' | WIRED
There's an old joke about **hydrogen** power: It's the fuel of the future, and always will be. **Elon Musk** doesn't just agree, he called out **hydrogen** fuel cell ...
wired.com/2013/10/elon-musk-hydrogen/

Why Elon Musk and John Doerr hate hydrogen more than anything ...
Why **Elon Musk** and John Doerr **hate hydrogen** more than anything on Earth!There are an extraordinary number of media references about how much these two **hate** ...
executivepresidentorg.wordpress.com/2015/06/25/why-elon-musk-and-john-doerr-h...

Tesla founder Elon Musk says 'fuel cell is so bullsh*t ...
At a speaking engagement in Munich, Germany recently, Tesla CEO **Elon Musk** called **hydrogen** "fuel cell so bullsh*t."
digitaltrends.com/cars/tell-me-how-you-really-feel-tesla-fo...

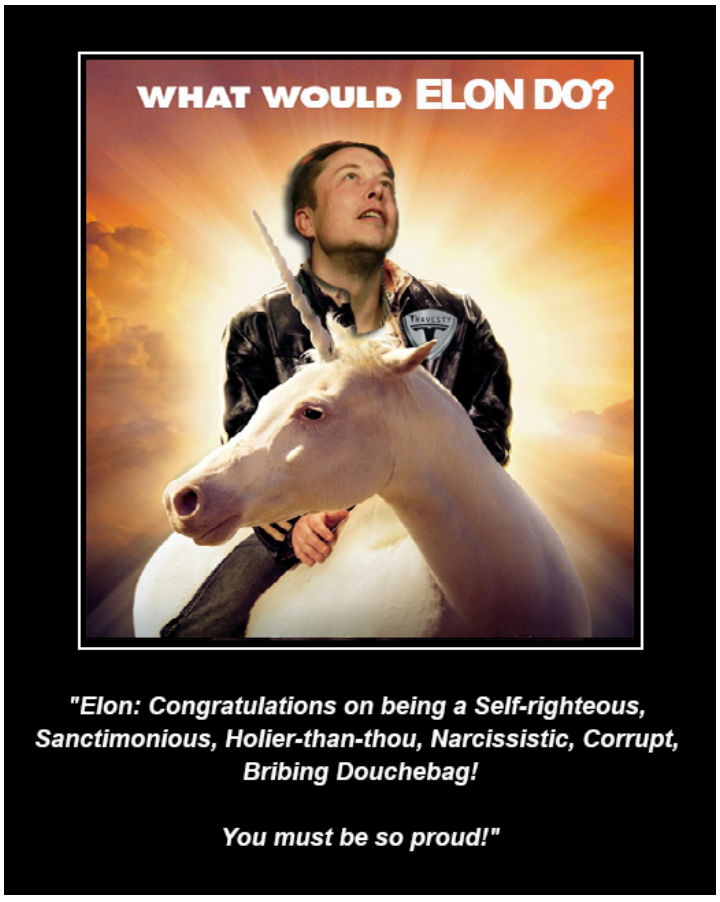
Toyota is taking on the hydrogen car haters — including Elon ...
Elon Musk doesn't have a high opinion of the **hydrogen**-fuel-cell-powered car. Back in 2013, in Germany, he infamously called the technology "so bullshit."
businessinsider.com/toyota-is-taking-on-the-hydrogen-car-hate...

We test-drove the Toyota's Mirai, the car that Elon Musk ...
We test-drove the Toyota's Mirai, the car that **Elon Musk hates**
dailyherald.com/article/20150519/business/150519485/

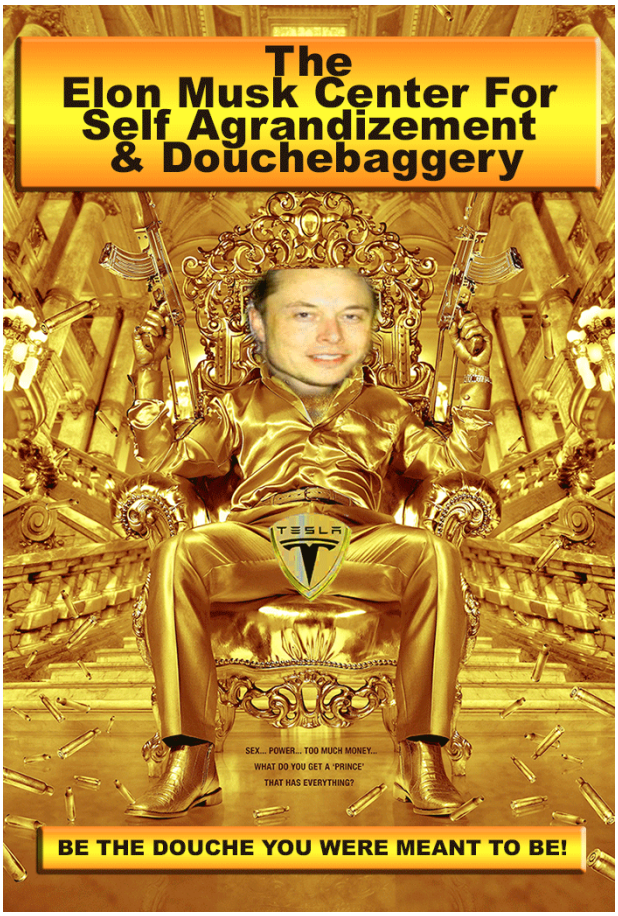
We test-drove the Toyota 'future' car that Elon Musk hates
We test-drove the Toyota "future" car that **Elon Musk hates**. By The Washington Post ... Tesla founder **Elon Musk**, who has called **hydrogen** fuel cells "extremely ...
dailyrepublic.com/business-and-real-estate/we-test-drove-th...

We test-drove the Toyota 'future' car that Elon Musk hates
We test-drove the Toyota "future" car that **Elon Musk hates** ... Tesla founder **Elon Musk**, who has called **hydrogen** fuel cells "extremely silly," fool cells" and ...
therepublic.com/focus/f-news/3288927/posts

Why hydrogen-powered cars will drive Elon Musk crazy
Why **hydrogen**-powered cars will drive **Elon Musk** crazy. Written by Todd Woody. Obsession Energy Shocks. March 14, 2014. Ready for take-off: The Honda FCEV Concept.
qz.com/186432/why-hydrogen-powered-cars-will-dri...




RIDE THE ELON MUSK
BS EXPRESS


The
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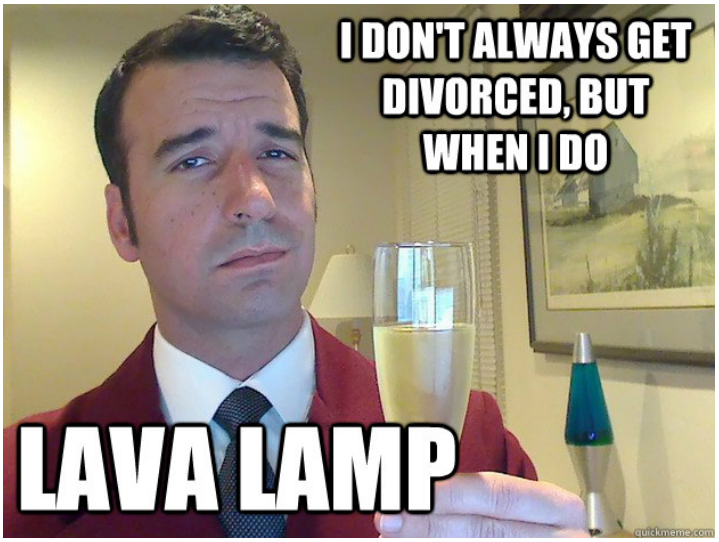
& Douchebaggery
SEX... POWER... TOO MUCH MONEY...
WHAT DO YOU GET A 'PRINCE'
THAT HAS EVERYTHING?
BE THE DOUCHE YOU WERE MEANT TO BE!


I DON'T ALWAYS GET
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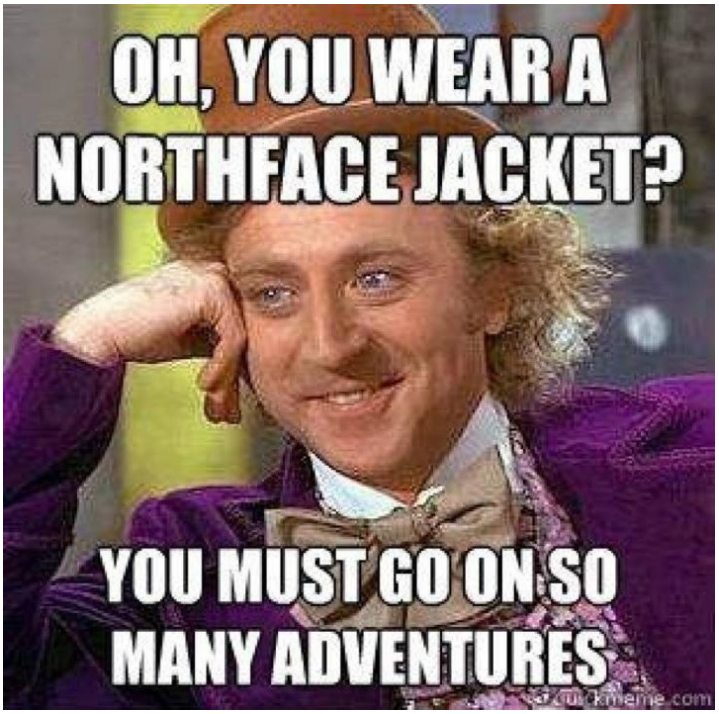
"ahh, Ya know, women are like disposable underwear. Once you get 'em dirty you gotta toss 'em out!"



Douchebag Report Rating System

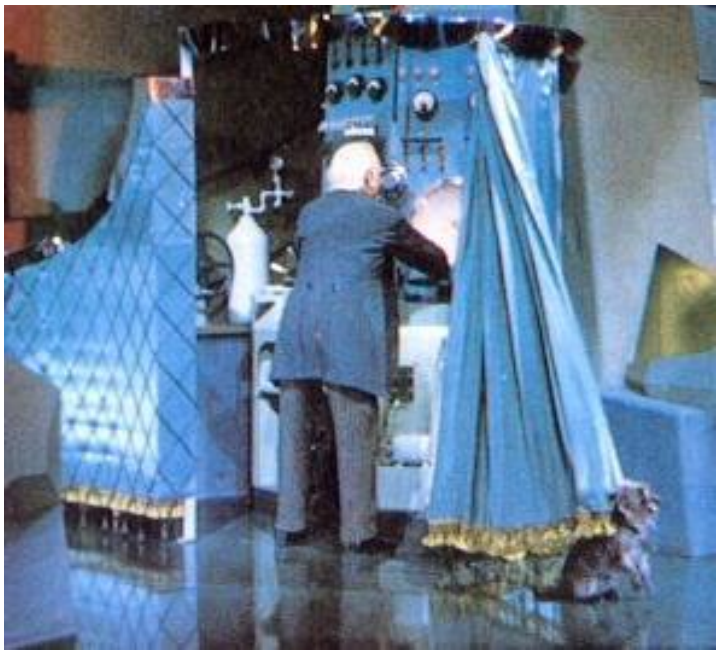
Level 5: A passing blip on the radar. Harmless today, gone tomorrow.

Level 4: Harmless but annoying... and unlikely to be going anywhere soon.

Level 3: Minorly influencial... and hell-bent on being a douchebag.

Level 2: Has a lot of potential to make societal change for the worse, either through personal influence, or by precedent.

Level 1: Douchebag of the highest order. Not only a complete douchebag, but powerful and influencial nationally or globally. Generally reserved for heads of state or large corporations/organizations.



Elon Musk, a billionaire, has now received billions of free taxpayer dollars in out-right cash hand-outs, tax waivers, free or low-cost resources, stock pumps and federal NASA contracts. Musk's companies would not exist today if not for taxpayer hand-out cash. No other living person has received this much taxpayer money from the Obama administration. No other living person has given so much money to the Obama administration through his companies, investors and partners, like Google. No other living person has had the Obama administration sabotage, terminate or rule against so many of his competitors. Federal records demonstrate this to be one of the most overt examples of a political campaign kick-back scheme in this decade. In Musk's carefully orchestrated, self-aggrandizing, media campaigns, all mention of his true financial connections, extensive fraud lawsuits, and employee distrust is carefully expunged.

Elon Musk's Space Dream Almost Killed Tesla

By Ashlee Vance | FOR BLOOMBERG

Illustrations by The Red Dress

SpaceX started with a plan to send mice to Mars. It got crazier from there.

In late October 2001, Elon Musk we
Jim Cantrell, a kind of international
Although Musk had tens of millions
and they were planning to buy a refu
sending a plant or some mice to Ma

"He can be a downright liar ..." SPACE X STAFF

Ressi, a gangly eccentric, had been thinking a lot about whether his best friend had started to lose his mind, and he'd been doing his best to discourage the project. He peppered Musk with links to video montages of Russian,

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ELON MUSK CAUGHT FUNNELING CASH FOR SILICON VALLEY KICKBACKS

Elon Musk's growing empire is fueled by $4.9 billion in government subsidies

During an event at Tesla's design studio in Hawthorne, Elon Musk introduces a line of batteries for homes and businesses. (Jerome Adamstein / Los Angeles Times)

By JERRY HIRSCH
contact the reporter

DON'T MISS


ELON MUSK: A RAT IN SPACE


MUSK
"WORSHIP ME"


TESLA


GET DIVORCED
NOT BROKE
ELONMUSK.COM
DIVORCE
AND Keep Your Money Too!
WHY CAN'T CHRISTIANS STAY MARRIED?

Should Management Spy on **Employees**? - CBS News

The story, according to Valleywag, goes like this: ... Elon **Musk** is now spying on everyone. ... What do you think? Should management spy on **employees** to stop media leaks or for any other reason? Come to think of it, ...

cbsnews.com/news/should-management-spy-on-employees/

Leaks: Tesla CEO in Digital Witch Hunt - Gawker

Life for the **employees** at Tesla Motors has got more depressing over the last few months. Elon **Musk** is now spying on everyone. The inquisition began after an engineer named Peng Zhou revealed the company's perilously low $9 million cash balance to Valleywag last October. **Musk** ordered a ...

gawker.com/5164035/tesla-ceo-in-digital-witch-hunt

Elon **musk** - Valleywag

Elon **Musk** Turned Into Unwitting Hair Transplant ... On Monday former **employees** of SpaceX, Elon **Musk**'s own private ... The mysterious 'collector' who spent $866,000 on the James Bond Lotus submarine from The Spy Who Loved Me was none other than billionaire investor and Tesla CEO Elon **Musk** ...

valleywag.gawker.com/tag/elon-musk

Elon **Musk** - Page 2 - Tesla Motors Club

Elon **Musk**; Tweet. If this is your first visit, ... Elon Spying on all **Employees** Leaks: Tesla CEO in Digital Witch Hunt. 2009-03-04, 09:23 AM #14. DRM. View Profile ... and the majority of the negative ones seem to stem from valleywag/gawker.

teslamotorsclub.com/showthread.php/1830-Elon-Musk/page2

Tesla Death Watch 35: **Musk** Outs Zhou | The Truth About Cars

Which is fair enough. God knows TTAC has its **spies** friends throughout the industry. And the fact that

Tesla CEO in Digital Witch Hunt

Owen Thomas
Filed to: LEAKS 3/04/09 9:30am

29,228 2 ★

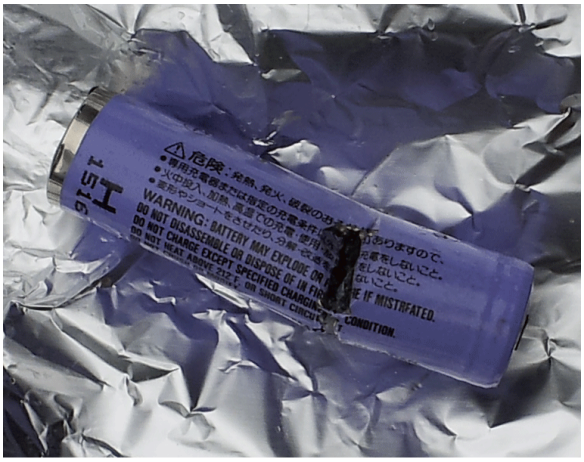
Enraged by leaks at his troubled Silicon Valley electric carmaker, CEO Elon Musk cooked up a sophisticated electronic scheme to catch the blabbers. It backfired hilariously on the brilliant entrepreneur, who's a bit blabby himself.

Tesla Motors is an icon of the new Silicon Valley, which is placing its bets on clean, green technology. Its $109,000 Tesla Roadster runs wholly on electricity and accelerates from 0 to 60 miles per hour in less than four seconds. But the company is in deep financial trouble, and is betting its future on government loans that may not materialize. Musk, the company's lead investor, took over as CEO last fall. But his reign has been marked by constant and, as Musk himself had admitted, deadly accurate disclosures of Tesla's parlous condition.

A tipster writes:

> *Life for the employees at Tesla Motors has got more depressing over the last few months. Elon Musk is now spying on everyone.*

FISKERS CARS THAT BLEW UP AND BURST INTO FLAMES JUST BECAUSE THEIR LITHIUM ION BATTERIES GOT WET



THIS IS ONE OF TESLA'S BATTERIES. EACH TESLA HAS OVER 7000 OF THEM. A CRACK THIS SMALL CAN RELEASE POISON GAS AND BLOW UP YOUR TESLA

Millions of dollars of lithium ion electric cars that exploded because they got wet!

CAR NEWS

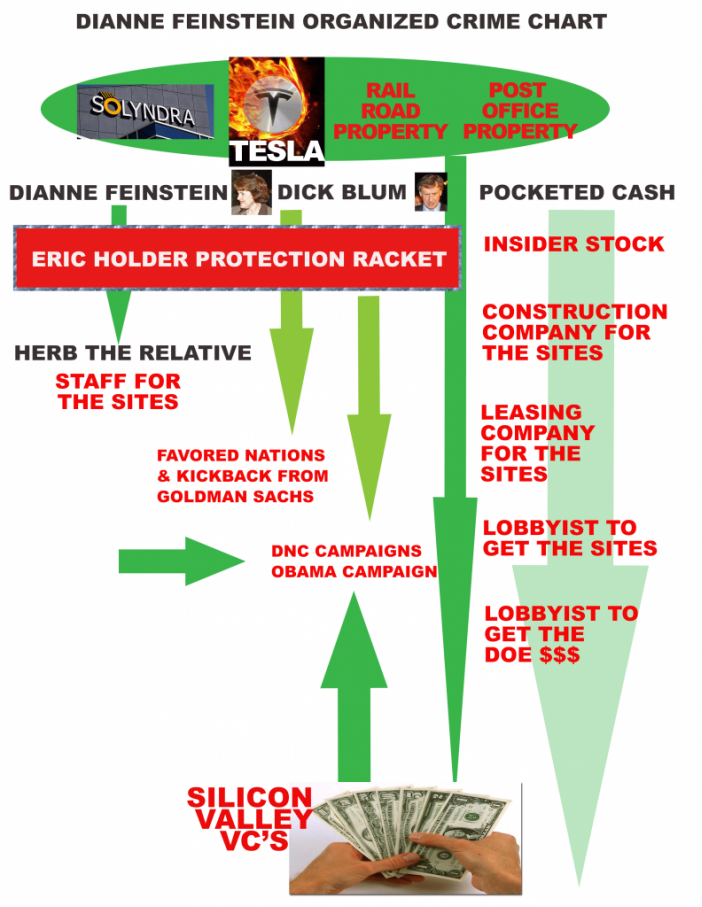
Tesla Model S Burns To The Ground At Norway Supercharger

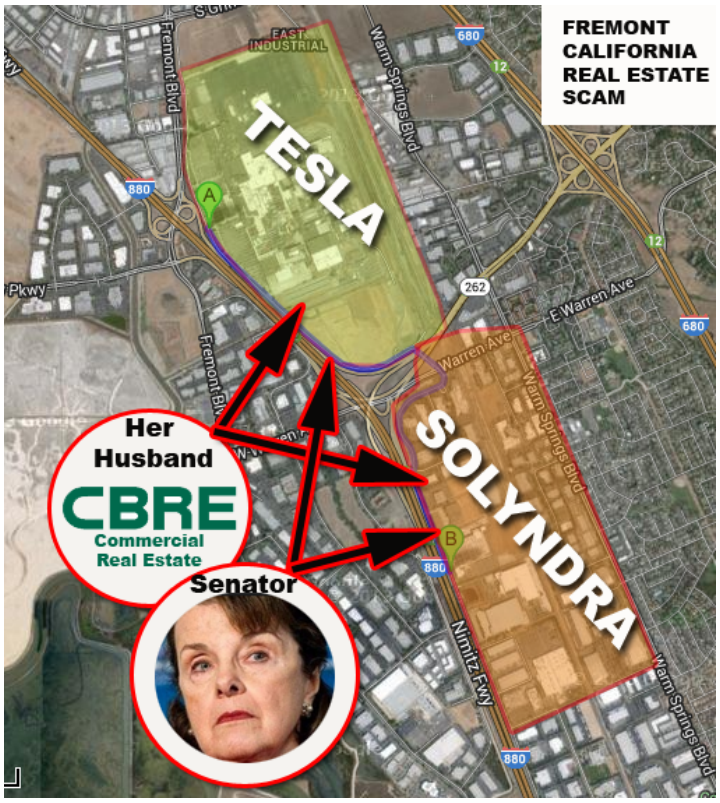
by Paulo Acoba 2d ago
FOLLOW @MYLIFEISJDM

TWEET SHARE 14 COMMENTS

A Tesla Model S hooked up to a Supercharger in Norway suddenly caught fire and burnt to a fiery crisp while the owner was away.

This is probably not the way Elon Musk planned to start his New Years morning but it looks like he'll have his hands full with dealing with the latest fire scandal to hit the all-electric car maker. Earlier Friday morning according to ***Fædrelandsvennen*** a Tesla Model S burst into flames while charging at a supercharger station. Fortunately, the owner was nowhere near his car when the fire caught.

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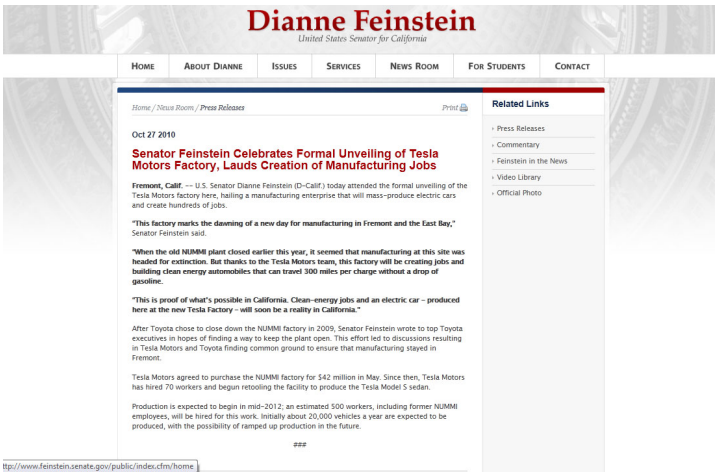
TESLA



Dianne Feinstein
United States Senator for California

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Oct 27 2010

Senator Feinstein Celebrates Formal Unveiling of Tesla Motors Factory, Lauds Creation of Manufacturing Jobs

Fremont, Calif. — U.S. Senator Dianne Feinstein (D-Calif.) today attended the formal unveiling of the Tesla Motors factory here, hailing a manufacturing enterprise that will mass-produce electric cars and create hundreds of jobs.

"This factory marks the dawning of a new day for manufacturing in Fremont and the East Bay," Senator Feinstein said.

"When the old NUMMI plant closed earlier this year, it seemed that manufacturing at this site was headed for extinction. But thanks to the Tesla Motors team, this factory will be creating jobs and building clean energy automobiles that can travel 300 miles per charge without a drop of gasoline.

"This is proof of what's possible in California. Clean-energy jobs and an electric car – produced here at the new Tesla Factory – will soon be a reality in California."

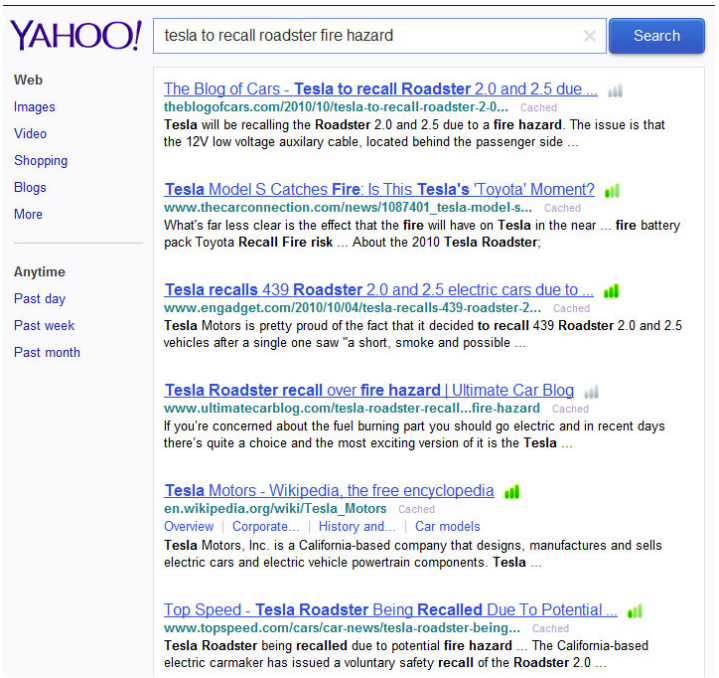
After Toyota chose to close down the NUMMI factory in 2009, Senator Feinstein wrote to top Toyota executives in hopes of finding a way to keep the plant open. This effort led to discussions resulting in Tesla Motors and Toyota finding common ground to ensure that manufacturing stayed in Fremont.

Tesla Motors agreed to purchase the NUMMI factory for $42 million in May. Since then, Tesla Motors has hired 70 workers and begun retooling the facility to produce the Tesla Model S sedan.

Production is expected to begin in mid-2012; an estimated 500 workers, including former NUMMI employees, will be hired for this work. Initially about 20,000 vehicles a year are expected to be produced, with the possibility of ramped up production in the future.

###

http://www.feinstein.senate.gov/public/index.cfm/home



YAHOO! tesla to recall roadster fire hazard — Search

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The Blog of Cars - **Tesla to recall Roadster** 2.0 and 2.5 due ...
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Tesla will be recalling the **Roadster** 2.0 and 2.5 due to a **fire hazard**. The issue is that the 12V low voltage auxilary cable, located behind the passenger side ...

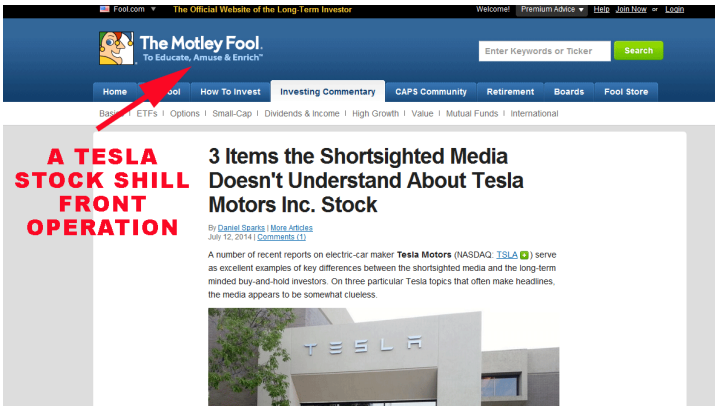
Tesla Model S Catches **Fire**: Is This **Tesla's** 'Toyota' Moment?
www.thecarconnection.com/news/1087401_tesla-model-s... Cached
What's far less clear is the effect that the **fire** will have on **Tesla** in the near ... **fire** battery pack Toyota **Recall Fire risk** ... About the 2010 **Tesla Roadster**;

Tesla recalls 439 **Roadster** 2.0 and 2.5 electric cars due to ...
www.engadget.com/2010/10/04/tesla-recalls-439-roadster-2... Cached
Tesla Motors is pretty proud of the fact that it decided **to recall** 439 **Roadster** 2.0 and 2.5 vehicles after a single one saw "a short, smoke and possible ...

Tesla Roadster recall over **fire hazard** | Ultimate Car Blog
www.ultimatecarblog.com/tesla-roadster-recall...fire-hazard Cached
If you're concerned about the fuel burning part you should go electric and in recent days there's quite a choice and the most exciting version of it is the **Tesla** ...

Tesla Motors - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Tesla_Motors Cached
Overview | Corporate... | History and... | Car models
Tesla Motors, Inc. is a California-based company that designs, manufactures and sells electric cars and electric vehicle powertrain components. **Tesla** ...

Top Speed - **Tesla Roadster** Being **Recalled** Due To Potential ...
www.topspeed.com/cars/car-news/tesla-roadster-being... Cached
Tesla Roadster being **recalled** due to potential **fire hazard** ... The California-based electric carmaker has issued a voluntary safety **recall** of the **Roadster** 2.0 ...



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A TESLA STOCK SHILL FRONT OPERATION

3 Items the Shortsighted Media Doesn't Understand About Tesla Motors Inc. Stock

By Daniel Sparks | More Articles
July 12, 2014 | Comments (1)

A number of recent reports on electric-car maker **Tesla Motors** (NASDAQ: TSLA) serve as excellent examples of key differences between the shortsighted media and the long-term minded buy-and-hold investors. On three particular Tesla topics that often make headlines, the media appears to be somewhat clueless.

WIRED GEAR SCIENCE ENTERTAINMENT BUSINESS SECURITY DESIGN OPINION VID

AUTOPIA | evs and hybrids

Tesla's Founder Sues Tesla's CEO

BY CHUCK SQUATRIGLIA 06.11.09 1:15 AM

Panasonic **Product Information Sheet**

Panasonic Batteries
Panasonic Industrial Company
A Division of Panasonic Corporation of North America
5201 Tollview Drive, 1F-3
Rolling Meadows, IL 60008
Toll Free: 877-726-2228
Fax: 847-468-5750

Product: **Lithium-ion Batteries (Li-ion)**
Applicable models/sizes: **All Cylindrical and prismatic Lithium-ion Cobalt type batteries**

FIRE SAFETY
In case of fire, you can use dry chemical, alcohol resistant foam or carbon dioxide fire extinguishers. Cooling the exterior of the batteries will help prevent rupturing. Burning of these batteries will generate toxic fumes. Fire fighters should use self-contained breathing apparatus.

employees.
Because all of our batteries are defined as "articles", they are exempt from the requirements of the Hazard Communication Standard, hence a MSDS is not required.

The following components are found in a Panasonic Lithium ion batter

Component	Material	Formula
Positive Electrode	Lithium Cobalt Oxide	$LiCoO_2$
Negative Electrode	Graphite	C
Electrolyte	Ethylene Carbonate - Solvent	$C_3H_4O_3$
	Diethyl Carbonate - Solvent	$C_5H_{10}O_3$
	Lithium Hexafurophosphate - Salt	$LiPF_6$

The overall reaction is: $Li_xC + Li_{1-x}CoO_2 \leftrightarrows C + LiCoO_2$

DISPOSAL
All Panasonic Lithium ion batteries are classified by the federal government as non-hazardous waste and are safe for disposal in the normal municipal waste stream. These batteries, however, do contain recyclable materials and are accepted for recycling by the Rechargeable Battery Recycling Corporation's (RBRC) Battery Recycling Program. Please call 1-800-8-BATTERY for information on recycling your used Lithium Ion battery or go to the RBRC website at www.rbrc.org for additional information.

TRANSPORTATION
Effective October 1, 2008 all Panasonic lithium ion batteries are not subject to the requirements of the Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations when shipped in compliance with 49 CFR 173.185 and Special Provision 188.

Currently all Panasonic lithium ion batteries can be transported under the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) under Special Provision A45. Effective January 1, 2009 Special Provision A45 will be replaced by Packing Instructions (PI) 965 (Batteries), PI 966 (Batteries, packed with equipment) and PI 967 (Batteries, contained in equipment).

Currently all Panasonic lithium ion batteries are regulated by the International Maritime Organization (IMO) under Special Provisions 188 and 230. These regulations will stay in effect until January 1, 2010 when Special Provisions 188 and 230 will be updated.

If you build any of our lithium cells into a battery pack you must also assure that they are tested in accordance with the UN Model Regulations, Manual of Test and Criteria, Part III, subsection 38.3. If you plan on transporting any untested prototype battery packs contact your Panasonic Sales Representative for regulatory information.

Notice: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Panasonic Industrial Company makes no warranty expressed or implied.

Panasonic_LIion_H_info.doc Page 1 of 2

GAS2
BURN RUBBER, NOT GAS

Hybrid / EV Biofuels Car Hacks / DIY Cycles Motorsp

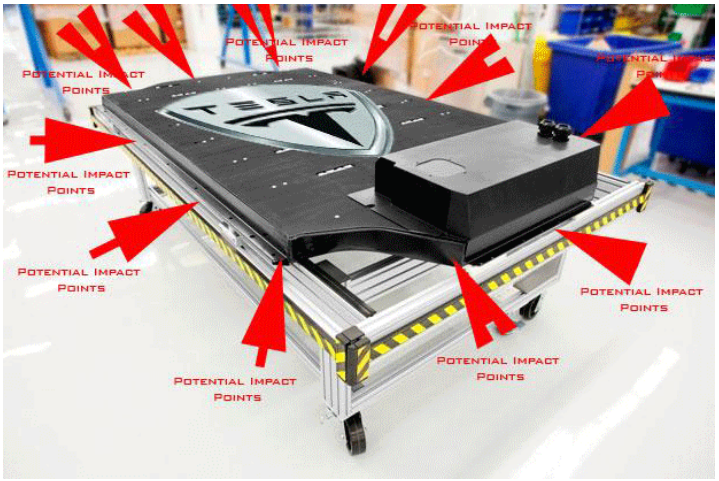
Tesla Model S Bursts Into Flames While Charging

January 1st, 2016 by **Steve Hanley**

On New Year's Day, a Tesla owner in Norway plugged in his Tesla Model S at a SuperCharger station near Kristiansand in the Aust-Agden region and went off to do some shopping while his battery recharged. A few minutes later, his car burst into flames and was destroyed. The duty officer at the campus police office of Jon Kvitnes College told Norway's VG News, "We received notification at 2.29 pm that a car was on fire near a cafe on Brokelandsheia. We came out with the fire brigade and police, but it turned out that this car was burned out when the emergency services arrived at the scene." Fortunately, there was no one in the car at the time and there were no injuries.


ELON MUSK
NO SMOKING
PROPANE
TOO COOL!


NO SMOKING
PROPANE
TOO COOL!


TESLA
Potential Impact Points
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October 29, 2010 11:09 AM PDT

Tesla opens its Model S electric car factory

by Wayne Cunningham

Share 1

Tesla unveiled its sign over the old NUMMI plant, where it will build the Model S electric car. (Credit: James Martin/CNET)

On Wednesday, Tesla CEO Elon Musk and California Senator Diane Feinstein stood before the New United Motor Manufacturing Inc. (NUMMI) plant, shuttered since April, and announced its new beginning as the base for Tesla Model S production. The press conference was capped by the unveiling of a large Tesla sign over the plant.

Tesla Vice President for Manufacturing Gilbert Passin conducted a tour through the parts of the factory that will host production lines for the Model S. Passin boasted that acquiring NUMMI was a huge cost savings for Tesla, as building a new plant would cost hundreds of millions of dollars. Toyota sold the plant to Tesla for $42 million.

Tesla Recommendation for International Expansion

By Avalon Consultants:
Teresa Bergmann
Vu Nguyen
Astrid Santiago
Sean Yang

Table of Content

Executive Summary	1
Tesla Strategic Position	1
India	
Motives for Expanding into India	4
Threats to Entry	8
Auto Industry and Regulations	9
Economic Fundamentals and Principles	10
Culture	13
Ethical Considerations	14
Financing Expansion into India	14
Singapore	
Motives for Expanding into Singapore	15
Auto Industry and Regulations	15
Economic Fundamentals and Principles	17
Culture	20
Ethical Considerations	20
EV Test Beds	21
Financing Expansion into Singapore	21
Porter's 5-Force Analysis	22
Recommendations	23

Executive Summary

WSJ.

DECEMBER 5, 2008, 2:43 PM ET

Tesla Opposes Redirection of ATVM Funds

By Marisa Wong

The Tesla Roadster

The Competition update: You won't see Tesla Motors among the U.S. automakers currently groveling before Congress for a bailout. The Silicon Valley company, whose cars do not use gas at all, did, however, apply in mid-November for a grant from the Department of Energy's Advanced Technology Vehicle Manufacturing Incentive Program, known as ATVM. This is a $25 billion fund earmarked for makers of ultra-fuel-efficient cars that push technology beyond the internal combustion engine.

Congress established the program in December 2007, when it passed the Energy Independence and Security Act. It became a reality in September 2008—a month before sales of U.S. cars dove to near-record levels. When Detroit automakers began jostling for stop-gap cash, the ATVM funds caught their eye, and U.S. carmakers urged Congress to redirect the funds to prop them up.

Tesla—that rarity, a solvent American car company—opposes the redirection, which its Vice President for Business Development, Diarmuld O'Connell, calls an attempt to "pervert the intended purpose of the ATVM program." Now it's up to Congress to decide.
–M.G. Lord

Tesla Motors CEO Elon Musk at the wheel of a Tesla Roadster

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Tesla CEO Elon Musk, demonstrating the Model X third-row seat and falcon doors

In the toughest days of Tesla's early years, CEO Elon Musk said on film, he wired $3 million of his personal fortune to the company so it could make payroll.

Now the always-quotable CEO is downplaying the effect the $465 million in U.S. Department of Energy low-interest loan guarantees it received under the government's Advanced Technology Vehicles Manufacturing program. In fact, Musk says, it was Daimler -- not the DoE -- which saved Tesla from bankruptcy.

Never shy of saying interesting things, Musk made the debatable revelation at *The Wall Street Journal*'s ECOnomics conference in Santa Barbara yesterday.

"We were saved by Daimler," Musk said, adding that Daimler's $50 million, 9 percent ownership of Tesla was enough to help the company stage a successful initial public offering without the DoE's help.

Technically, Musk is correct. Without the investment from Daimler, the DoE loan guarantees would never have been given to Tesla. In reality however, the DoE loans enabled Tesla to do much more than the Daimler investment did.

Not to be ungrateful for the $465 million of tax-payers' money, Musk was sure to add "The DOE was a helpful catalyst," and that without it, Tesla's IPO "wouldn't have been as good."

With the 2012 Tesla Model S Luxury Sedan set to enter production this year and the 2013 Tesla Model X Crossover SUV already unveiled, it isn't difficult to see why Musk is keen to bask in Tesla's less-grim prospects. After all, history tends to be written by the victors.

But while we understand Musk's keenness to distance Tesla from other, less-successful DoE ATVM loan recipients, his next move baffled us.

"Musk said that generally he doesn't believe government subsidies are good, but in some cases they do help," reports *The Wall Street Journal*.

Instead of offering federal loans which artificially pick and choose winners and losers in the marketplace, he opined, companies should be allowed to survive on their own merits. The implication, of course, was that startups should rely on private investment, not government funds. In addition, he proposes taxing business and individuals on the carbon dioxide they produce, encouraging individuals to make greener choices through taxation.

Had Tesla not taken funds from the DoE, Musk's statements would be entirely understandable.

More

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DECEMBER 5, 2008, 2:43 PM ET

Tesla Opposes Redirection of ATVM Funds

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By Marisa Wong

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—M.G. Lord

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Safety Management Services, Inc. is an approved and authorized Examining Agency to perform explosives and other hazardous materials examination services. These services are for determining the DOT transportation classification, including the proper shipping name, hazard class and division, and compatibility group for explosive substances and articles.

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Compliance Testing Program Manufacturer's Responsibility

Office of Vehicle Safety Compliance

National Highway Traffic Safety Administration
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COMPLIANCE TESTING PROGRAM

MANUFACTURERS' RESPONSIBILITY

It is the responsibility of a manufacturer of vehicles and/or items of motor vehicle equipment to certify that each motor vehicle and/or equipment item is in full compliance with the minimum performance requirements of all applicable Federal Motor Vehicle Safety Standards (FMVSSs). This is a **self-certification** process as opposed to the type approval process which is used in some other countries such as Japan. The NHTSA does **not** issue approval tags, stickers or labels for vehicles or equipment items before or after the first sale. In order to provide certification, the manufacturer takes whatever actions it deems appropriate. This usually means laboratory testing in accordance with the FMVSS or conducting other studies or analyses (due care process) to ensure that its products fully comply.

The manufacturer must not only be concerned with the initial certification, but should also monitor continued compliance of vehicles and/or items of motor vehicle equipment throughout the production run. To accomplish this, an effective quality control program must be established to periodically inspect and test vehicles and/or items of motor vehicle equipment randomly selected from the assembly line to ensure that the original performance is carried through to all other units.

The Office of Vehicle Safety Compliance (OVSC) does not specify the type of quality control program that a manufacturer should employ. That decision is left to the manufacturer. If the vehicle or item of motor vehicle equipment is designed with a reasonable factor of safety, the manufacturer can elect to have a selective sample surveillance program to demonstrate that production variations will not take the vehicle or item of motor vehicle equipment out of the range of full compliance. On the other hand, if the margin of safety is less with respect to the required performance, a more stringent quality control program would be needed.

TESLA SACKINGS A "BLOODBATH" : COMPANY'S CO-FOUNDER, MANY MORE GONE

IN WITNESS WHEREOF, Applicant has executed this Information Certificate as of June 23, 2009.

TESLA MOTORS, INC.

By: _____
Name: DEEPAK AHUJA
Title: CHIEF FINANCIAL OFFICER

ACCEPTED AND AGREED TO
as of the date of this Conditional Commitment Letter:

TESLA MOTORS, INC.

By: _____
Name: ELON MUSK
Title: CEO

Comment:

Corporate Validation

Point of Contact: DIARMUID O'CONNELL Date: 8/26/10

Title: V.P. BUSINESS DEVELOPMENT

Signature:

Determination:

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as prescribed by DOE Order 451.1B), I have determined that the proposed loan action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed loan action is hereby categorically excluded from further NEPA review.

Signature
Matthew McMillen
NEPA Compliance Officer
Loan Programs Office

8-31-2010
Date

The Tesla Roadster Battery System
Tesla Motors, Inc.
August 16, 2006

Gene Berdichevsky, Kurt Kelty, JB Straubel and Erik Toomre

Summary:
This paper provides details about the design of the Tesla Roadster's lithium-ion (Li-ion) battery pack (otherwise known as the ESS, or Energy Storage System) with a particular focus on the multiple safety systems, both passive and active, that are incorporated into the pack. This battery pack has been under development and refinement for over three years and is the cornerstone of the Tesla Roadster. The high level of redundancy and multiple layers of protection in the Tesla Roadster battery pack have culminated in the safest large Li-ion battery that we or many of the experts in the field, with whom we've consulted, have seen.

Background:
The battery pack of the Tesla Roadster electric vehicle is one of the largest and technically most advanced lithium-ion battery packs in the world. It is capable of delivering enough power to accelerate the Tesla Roadster from zero to sixty miles per hour in approximately four seconds. Meanwhile, the battery stores enough energy for the vehicle to travel 250 miles on the EPA highway cycle (i.e. 400 kilometers) without recharging, something no production electric vehicle in history can claim.

Designed to use commodity, 18650 form-factor, lithium-ion cells, the Tesla Roadster battery draws on the progress made in lithium-ion batteries over the past fifteen years. Under the market pull of consumer electronics products, energy and power densities have increased while cost has dropped making lithium-ion *the* choice for an electric vehicle. In the past, to achieve such tremendous range for an electric vehicle it would need to carry more than a thousand kilograms of nickel metal hydride batteries. Physically large and heavy, such a car could never achieve the acceleration and handling performance that the Tesla Roadster has achieved.

Due to their high energy density, lithium-ion batteries have become the technology of choice for laptops, cell phones and many other portable applications. Precisely because they have all this energy stored in a small space, Li-ion batteries can be dangerous if not handled properly. In fact, there have been several cases of Li-ion batteries going into thermal runaway in laptop applications leading to recalls by Dell, Apple, IBM and other manufacturers. However even with this high energy density, the lithium-ion batteries in the Tesla Roadster only store the energy equivalent of about eight liters of gasoline; a very small amount of energy for a typical vehicle. The pack operates at a nominal 375 volts, stores about 50kwh of electric energy and delivers up to 200 kilowatts of electric

Why Is the Government Subsidizing a $104,000 Car?

By WILLIAM TUCKER on 2.14.12 @ 6:08AM

Is Fisker Automotive the next Solyndra? Maybe, but that misses the larger point.

Fisker Automotive suspended efforts in Delaware last week to retool an abandoned GM production plant into a manufacturing facility for its new electric hybrid NINA, derived from the $104,000 luxury Karma.

Fisker's problem is that it is the recipient of a $529 million loan from the Department of Energy. Having already pocketed $193 million to help push the $104,000 Karma onto the market, Fisker is now "failing to meet DOE benchmarks" in converting the Wilmington, Delaware factory into an assembly line for the $40,000 NINA. In the kind of accounting the government likes in order to show it isn't just throwing away money, DOE wanted some proof of performance. Fisker is already far behind schedule, and so it had to lay off 26 of the 100 construction workers on site and tell subcontractors to hold the phone. Negotiations on whether DOE will come through with the second $336 million installment are now expected to take months.

Pundits immediately pounced, asking whether this was the next Solyndra. Some said yes, others said no. Yet through all the editorial fulminating, no one asked the much more obvious question: Why on earth is the government subsidizing a $104,000 luxury sports car in the first place?

Fisker Automotive is the brainchild of Henrik Fisker, a 48-year-old Danish auto designer who first made his mark working at BMW's advanced design studio in Munich. Among his accomplishments were the Z07 concept car showcased at the 1997 Tokyo Motor Show and the exterior of the BMW Z8 roadster. He then headed to Newbury Park, California, where he founded DesignworksUSA, a BMW subsidiary concentrating solely on futuristic designs. In 2001 he jumped to Ford, where he was creative director of Ingeni, Ford's London-based design center, then back to California, where he became director of Ford's Global Advanced Design Studio in Irvine.

Like many ambitious auto executives before him -- John DeLorean comes to mind -- Fisker's real dream was to build his own car. So in 2004 he left Ford to found Fisker Coachbuild, a boutique designer of one-of-kind luxury cars. He also produced the initial design for the Tesla Model S, the scaled-down version of the $109,000 Tesla Roadster that is supposed to reach auto showrooms this year. In 2008, Fisker unveiled his own luxury hybrid, the Karma, designed to compete with the Roadster at $104,000. Although still headquartered in southern California, Fisker elected to build the Karma in Finland at a plant that once produced the Porsche Boxster and Cayman. Fisker promised to deliver the first Karmas by 2009. He claimed to have 1,300 orders already.

Like all electrics, the Karma would have some severe limitations. Without its gasoline engine, its range is limited to 35 miles -- meaning it only goes 35 miles before requiring another charge, which can take several hours. Fortunately, it is also fitted with a 2-liter, turbocharged Ecotec engine that extends its range to 230 miles and its top speed to 125 mph. The EPA rated the Karma's mileage at only 20 miles per gallon for its gasoline engine, but 52 mpg for full hybrid mode. The company offered rooftop solar panels that extend the range another four miles. *Time* named the car to its "Green Design 100" list in 2009, before it had even been produced.

Fisker Automotive received initial funding of $500 million from Kleiner Perkins, Silicon Valley's premier venture capital firm, which had started to follow board member Al Gore's advice in moving away from computers and into "green" investments. In the old days, such venture funding primed a company for its initial public offering, when the early backers would recoup their investment. Since the Gore era began, however, the target for second-round investment has become the federal government. Almost as soon as the Obama administration arrived in 2009, Fisker was at the door with a proposal for a loan under the Department of Energy's new Advanced Technologies Vehicle Manufacturing Loan Program, a $25 billion pot of money thrown in with the auto bailout of 2008. The investment fund would allow Washington bureaucrats to point the auto industry in the right direction. Solyndra, remember, was a loan *guarantee*, where the federal government promises to indemnify private lenders if things go wrong. Fisker received a check directly from the U.S. Treasury.

The first $193 million went to save the floundering Karma venture, while the next $336 million would launch the NINA, a "people's" version of the Karma that would sell for $45,000 -- only $39,000 with federal tax credits.

By October 2009, less than ten months after Obama had taken office, Fisker signed an agreement to take over an abandoned General Motors assembly in -- wouldn't you know -- Wilmington, Delaware. Whether Vice President Joe Biden had anything to do with bringing home the bacon is still anyone's guess, but the VP was on hand for the ceremonies, gushing that this cutting-edge green machine would "only cost $40,000!" As the Fisker press release described it:

> Production is scheduled to begin in late 2012. Fisker Automotive anticipates Project NINA will ultimately create or support 2,000 factory jobs and more than 3,000 vendor and supplier jobs by 2014, as production ramps up to full capacity of 75,000-100,000 vehicles per year. More than half will be exported, the largest percentage of any domestic manufacturer.... Fisker plug-in hybrid cars will help remove the country's dependence on foreign energy by eliminating the need for 42 million barrels of oil by 2016. They will also offset 8 million tons of carbon dioxide emissions.

Meanwhile, back in Finland, Fisker was having a little trouble meeting its Karma production schedules. Although promised for 2009, the first models did not roll off the assembly line until July 2011. Instead of the 1,300 supposedly already under wraps, the first delivery to the United States consisted of 239 cars. Six months later, when a leak in the cooling system that might cause battery fires prompted a recall, an inventory discovered fewer than 50 cars sold. The rest were still sitting on the lots. To compensate for poor sales, Fisker upped the price to $116,000.

Not that the green establishment hadn't given the Karma its four-star treatment. As *Fortune* reported, the Karma "has been celebrated by environmentalists, blessed by the federal government with a guaranteed loan, and endorsed by celebrities. Leo DiCaprio ignited a swirl of publicity when he took delivery of the first production model.... The seating foam is made from soy-based bio fiber, the carpet backing composed of recycled post-consumer materials, and the trim sourced from 'fallen, sunken and rescued wood,' including some that has spent the last 300 years resting at the bottom of Lake Michigan." Nonetheless, the fanfare hasn't produced many sales, and DOE was reportedly concerned about revenue. Company officials refused to release figures, however, and the DOE cooperated by blacking out sales numbers in a copy of its report released to the *Delaware News Journal*.

Whether or not this constitutes "another Solyndra" is still up to the press to decide. The real question, though, is this: Why on earth is the federal government subsidizing a $104,000 car being manufactured in Finland? Supposedly the answer is to promote its little brother the NINA. But the NINA is barely distinguishable from the Chevy Volt, which also costs $40,000, has had its own battery fires, and is selling so poorly that dealers are refusing further shipments. Autodata Corp. recorded seven months' worth of unsold inventory in January. The unheralded Chevy Cruze, on the other hand, had a poor month in November when it only sold 13,000 cars. The Nissan Leaf is hardly bettering the Volt, selling only 676 in January and 10,000 all last year. The Tesla Roadster -- which received its own $465 million loan from DOE -- seems to have cornered the market for $100,000 hybrids, selling 2,500 in 2011, although the company is still losing money. But 100,000 NINAs by 2014? Where else but in the federal government would you find anyone willing to accept such projections?

The Karma is not just an investment. It is another milestone in the Obama administration's effort to build an entirely separate economy, where coal is forever banished, cars no longer emit exhaust, and there is a windmill in everyone's backyard -- all subsidized by the federal government. In that sense, the $193 million thrown at the Karma isn't really a loss at all. It's just another step in watering the shoots of the Green Economy -- this time sprouting in Joe Biden's back yard.

ABOUT THE AUTHOR

William Tucker *is the author of* Terrestrial Energy: How Nuclear Power Will Lead the Green Revolution *and* End America's Energy Odyssey.

Who Bricked The Electric Car? You Did!

Filed in: Automobiles , Electric Vehicles

By Leo Xavier, February 23, 2012 @ 11:22am

Tesla Motors might be hiding a big battery issue from their customers. Apparently, the company's electric vehicles, including their Roadster and the upcoming Model S, feature a battery pack which if completely discharged might leave a huge financial burden on the unfortunate owner. But is the owner unfortunate, or simply a bit careless?

According to an article by Michael Degusta over at theunderstatement.com, if a Tesla electric car, such as the Roadster is parked unplugged, it will eventually become what the company calls a "brick". The vehicle can no more be started or even pushed down the road. This is the result of the car's always-on subsystems which continually feed on the battery.

And when the battery dies, the owner ends up paying Tesla approximately $40,000 for replacing the battery pack. Reportedly, there is no protection available via warranty or a car insurance policy for this particular problem. Apparently, at least five Tesla owners were unfortunate enough to end up with this problem. Degusta says Tesla is unwilling to let their customers know about the issue, although they know that it's a big one.

But don't you have a slight feeling that Degusta's argument is nonsense. That's because it is.

If you are familiar with electric cars or batteries or even smartphones, you might know the fact that the battery which is not recharged will eventually die. And since the battery pack on a Roadster is not your usual $100 laptop battery, people will have to pay a huge price for not finding the time for maintenance.

And a Tesla, as you know, has an electric motor. There is lot less maintenance required for the vehicle when compared to a vehicle with a combustion engine. So it's not too difficult to pay attention to the charge in the battery packs. And the company has designed the car in such a way that it warns the owner (and even the company, in the case of the latest Roadster) when the battery is low. The owners who ended up with a brick might have ignored all the warnings.

So who is culpable here?

Tesla has this to say in response to Degusta's article: "*All automobiles require some level of owner care. For example, combustion vehicles require regular oil changes or the engine will be destroyed. Electric vehicles should be plugged in and charging when not in use for maximum performance. All batteries are subject to damage if the charge is kept at zero for long periods of time. However, Tesla avoids this problem in virtually all instances with numerous counter-measures. Tesla batteries can remain unplugged for weeks (or even months), without reaching zero state of charge. Owners of Roadster 2.0 and all subsequent Tesla products can request that their vehicle alert Tesla if SOC falls to a low level. All Tesla vehicles emit various visual and audible warnings if the battery pack falls below 5 percent SOC. Tesla provides extensive maintenance recommendations as part of the customer experience*".

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Girl treated for second-degree burns after iPhone explodes in pocket

posted on Feb 3rd 2014 by Kevin Krause Share This Story Tweet

A 14-year old girl in Kennebunk, Maine was settling in for another normal school day late last week when she heard a pop emanate from her pocket. Her friends immediately noticed smoke billowing from the girls' pants and realized they had caught fire. When all was said and done the girl, who remains unidentified, was in the hospital. A charred iPhone 5c was on the classroom floor.

According to witnesses as well as emergency responders, it was an iPhone 5c, given to the girl less than two months prior, that ignited in what can be considered a freak occurrence. The most likely culprit was the handset's lithium-ion battery.

Elon Musk
@elonmusk

When you want your car to return, tap Summon on your phone. It will eventually find you even if you are on the other side of the country

10/20/16, 4:34 AM

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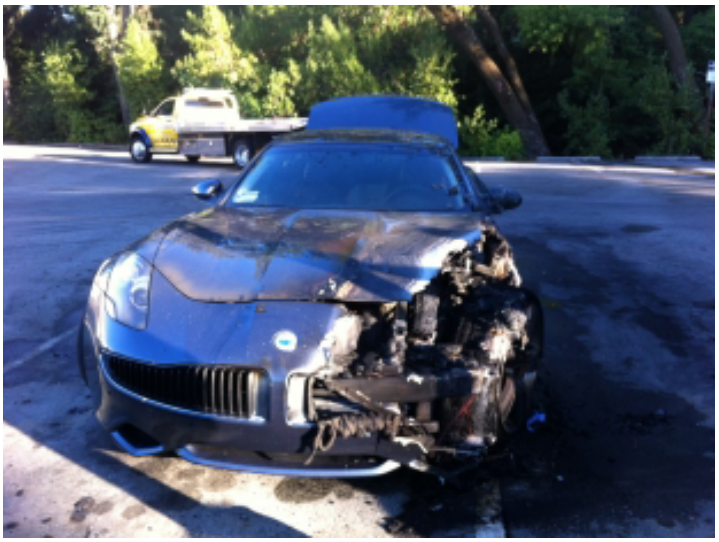
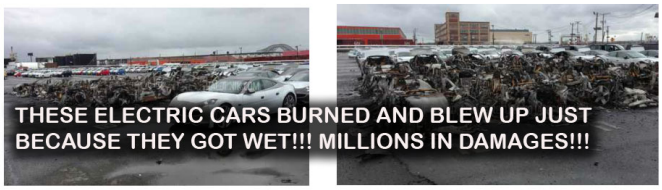
Keywords: Lithium ion battery, ionic liquid, electrolyte, safety, thermal stability

1. INTRODUCTION

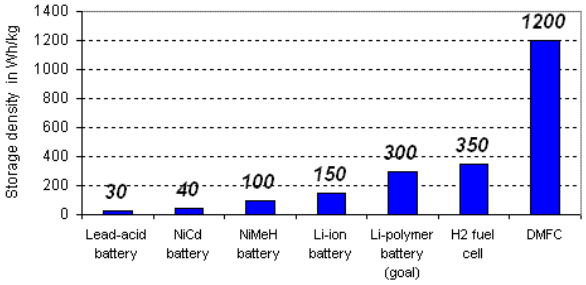
Lithium ion batteries have been widely used on personal computers and mobile phones for their high-voltage, high-energy-density characteristics [1-4]. Especially, the rapidly need for cleanly resource and crisis of energy, lithium ion batteries attract more attention as the power source of electric and hybrid electric vehicles. However, Lithium ion batteries have not been large-scale applied to electric vehicles for the safety issues, the volatile and flammable organic solvent organic solvents is the main components of electrolytes in lithium ion batteries, the cases of flaming, smoking or thermal runaway caused by electrolytes are the main reason for the safety problem. Therefore, electrolyte system, which has more stable features, is necessary to be found.



Tesla now? Fisker's insurance company is balking at paying for this saying: "You knew this would happen".



These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:
http://updates.jalopnik.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and
http://green.autoblog.com/2012/08/12/fisker-flambe-second-karma-spontaneously-combusts-w-video/



Storage densities of energy conversion / storage systems

Assumptions: H_2 fuel cell efficiency: 40 %, DMFC efficiency: 25 %.
Source: Samsung / SFC Smart Fuel Cell

A number of incidents of cell phones with lithium ion batteries blowing up in peoples pockets, notebook computers blowing up in peoples briefcases and other shocking fires have been deeply documented.

LITHIUM ION BATERIES BLOWING UP ON THEIR OWN

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Elderly Man Dies After His Tesla Motors Inc Car Crashed Into Pool

By Mark Melin on December 29, 2015 8:19 am In Technology

Tesla Motors Inc (NASDAQ:TSLA) stock price ended down $1.62 one day after a fatal crash into a swimming pool left an elderly man dead and the car's design is in part being blamed.

Tesla crashes through brick wall, lands in pool in oddball accident, passenger escapes

Partial blame is being laid upon the car's interior design when the 85 year-old driver crashed into a neighbor's swimming pool. He was reported to have pressed the accelerator rather than the break while in the garage.

At approximately 2 PM Sunday, the driver and a passenger crashed through a brick wall and into a swimming pool in the neighbor's yard. A witness described the chaotic scene when the black Tesla sank into the pool. Once the Tesla landed in the swimming pool it slowly dropped to the bottom, giving the female passenger time to escape through a window after the driver told her "get out of the car. She got out of the car, trying to get him out of the car, but the way they're made with the console and the seat belts and everything, it just didn't happen."

these could have been better managed and, to a certain extent, anticipated since what you have started was a major paradigm shift in the industry. It was well understood that a revolutionary movement always comes with major challenges and costs. What Tesla has now become is a mere profit-loss centric company--and with a poor chance of making even that--unless someone absorbs it for its remaining core value that you have left behind. Tesla lost its true evangelist and the leader..." (end of blog quotes)

So, what do you think happened at and/or to Tesla Motors? One thing we can probably rule out, and that's the forming of Tesla to rip-off people's money. Even though the company demanded (and got) 100% down-payments of $100,000, or more, from each potential buyer just to get on a list of those wanting a car, the founders of Tesla already had tens and maybe hundreds of millions of their own dollars; many of them came to Tesla after retiring at young ages from their various Silicon Valley success stories.

That's where the mystery deepens, the part of the story when people shake their heads and force themselves to wonder: Was Tesla simply the modern iteration of what used to be called "planned obsolescence"? Were the Tesla EVs always destined for the dump, their real purpose to "prove" to the world that even the money and minds of Silicon Valley are unable to build and market an EV?

These and other questions will probably never be satisfactorily answered. For our money, we bet Tesla will not be an exhibitor at the 2008 Los Angeles Auto Show.

TESLA SACKINGS A "BLOODBATH" : COMPANY'S CO-FOUNDER, MANY MORE GONE

Say what you will about Carroll Shelby (and we've said plenty of uncomplimentary things along with the good; there are at least two sides to every story), but something he told me a long time ago holds true today, even more than it did 50 years ago. "Steve," he said, while we were sitting in some hotel suite in some city, "It's just as tough and expensive to make one car as it is to make a million." His point is an old story; The costs of R&D, manufacturing, tooling, marketing, advertising and emissions testing and crash-testing are enormous, and not anywhere near the total of what real car-making costs. And only people who know what they are doing should get involved in such an undertaking. And an "undertaking" it has, quite unfortunately, but not unexpectedly, turned-out to be for California start-up EV venture Tesla Motors. (Photo - A Tesla 'roadster' on LA's streets).

When we saw the sad, sorry "exhibit" which featured Tesla at the recent Los Angeles Auto Show, it was obvious that either the company was "in-between" PR and marketing people, or, worse (and true, as we found) the company itself was going through some terrible divisions. (Photo - Tesla's LA Auto Show exhibit was part of the Yokohama Tire display in the LA Convention Center lobby; how far -- and how quickly -- the mighty had fallen).

[redacted] and we've seen some shlocky "car companies" come and go; we know plenty of "car-builders" who somehow bolt-together one version of the earth-shaking "car" they're trying to raise money for, and they re-paint it every few weeks so it appears that he or she has more than one car already built.

Talked-up to the world's media by no less an odd couple of American politics than Condoleeza Rice and Arnold Schwarzenegger, Tesla, heavy on cash and brainpower but low on car-industry experience (like, none at all) seems now on the verge of shutting down ... but maybe reappearing, we'd hope, as a company which might actually be able to deliver on its promises.

Elsewhere on this blog, we've detailed the close connections between Tesla, the Bush Administration and Republican heavyweights. Is it possible that, as many say General Motors did with their "EV1", Tesla was organized in order to "prove" once more that a true battery-powered electric vehicle is untenable given today's technology? That oil-fueled internal combustion engines still make the most sense? (Photo - Martin Eberhard, a co-founder of Tesla, was fired by the company).

[redacted] We're all entitled to an opinion (last time I checked ... the Supreme Court hasn't changed that yet, have they?), but the co-founder of Tesla, Bernhard Eberhard, and other "Tesla Founders", have a thing or two to say about Tesla on their blog. Even though going to that blog today has this message from Eberhard about some specific entries of his: "This blog entry has been taken down at the strong request of Tesla's management. By taking it down, I am in no way admitting that anything I wrote was in violation of any agreement I signed with Tesla Motors, and I stand behind the truth of what I wrote. But it was explained to me that Tesla and its financial backer(s) can spend far more than I can on a lawsuit... Most of the comments on this blog entry have also be taken down; sorry for the inconvenience", we at SteveParker.com have found the original postings by Eberhard and others (Tesla can't fire us); the numbers of those fired by Tesla are between 26 and 40, depending on the source, and offices in Detroit and possibly Washington, DC, have been shuttered. With all that, here's what at least some of the "Tesla Founders" have to say:

"As you may have heard, the ax has been steadily chopping away at Tesla. I don't pretend to understand the choices being made and honestly wouldn't even be surprised to learn if I was next on the list. At this point, I'm not even sure if that would necessarily be a bad thing."

"The company has changed so tremendously since I started. It's very secretive and cold now. It's like they're trying to root out and destroy any of its heart that might still be beating."

"I came to Tesla with a great deal of optimism to work for a company with a noble purpose that had a real chance to make a difference in the world. That sense of mission and hope generated incredible energy and determination to overcome the many challenges of producing a great EV. This energy has been drained by the cold, irrational bloodletting that has been going on there. Everyone understands necessary, rational cost management actions in startups, but this was neither necessary nor rational. No thought has been given to the immediate and long term impact on the future of Tesla. Entire departments are stumbling around stunned, bleeding, and headless." (Photo - California Arnold Schwarzenegger and Tesla's Martin Eberhard give Tesla the "walkaround" treatment at a Santa Monica, CA, media event in 2006).

"It is a damn shame about Tesla. I once again spent the day dreading the words, 'Did you hear?' Today I [redacted] heard that both Wally Rippel and [REDACTED1] are now gone. I just don't know what they're thinking. [REDACTED2] referred to it as a 'stealth bloodbath.' It's next to impossible to concentrate and actually get anything done. And the real insult in my mind is that they have the nerve to host the holiday party this Saturday. It's going to be more like a wake(!)"

"The atmosphere at Tesla Motors has been suffering for the last couple of months as the new management have slowly squeezed the life out of engineering. The way in which the layoff/reduction-in-force/firings have been handled is one almighty cluster cabbage. In a stroke of pure genius, the two HR folks were the first to go, leaving nobody to turn out the lights. Only after they left the building did they realize that now there was nobody to write the termination letters. Like I said, pure undiluted genius."

"Sadly - and I do mean this - I am not sorry to leave. The culture that Martin and Marc created is gone. The car is nice, but every day in the office was like a visit to the dentist, not knowing what was going to happen next. Enough. I have moved on."

"Unfortunately, the company that I used to love has changed drastically. If I were to pin point a critical turning point, it would be the day when you were pushed aside. Until then, it was not so obvious how Tesla Motors was really Martin Eberhard's company. After you were gone, I think the spirit and the character of the company went with you. It was surprising how quickly it happened. Yes, there were technical and operations delays for sure, but

SECTIONS SEARCH

Los Angeles Times

TUESDAY, JUL. 21, 2015 LATEST MOST POPULAR LOCAL CALIFORNIA ENTERTAINMENT SPORTS #GRADEYOUR

Caltrans spokesman Philip Havins said the plan is to run both directions of the freeway on the westbound bridge.

The severed link was already stranding motorists. One driver making the journey from Arizona to Redondo Beach in an electric car became marooned after exhausting the 270 miles of charge on his Tesla. He was unaware of the freeway closure and lengthy detour.

Fires followed by floods: California faces dramatic climate year with El Nino, drought


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Elon Musk Had Amazing Severance Packages For Tesla Employees In Case The Company Failed

KAMELIA ANGELOVA NOV. 26, 2013, 4:47 PM 4,672 3

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Tesla and SpaceX were on the verge of bankruptcy in 2008 and Elon Musk was about to lose all his money, but the founder made sure that his employees would be taken care of, if the companies failed.

Produced by Kamelia Angelova, Alana Kakoyiannis and Justin Gmoser

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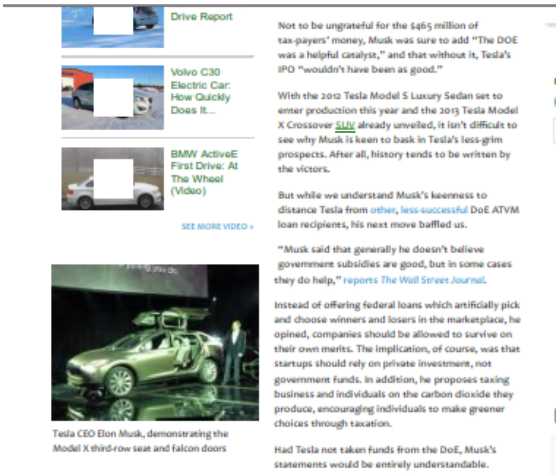

Drive Report

Volvo C30 Electric Car: How Quickly Does It...

BMW ActiveE First Drive: At The Wheel (Video)

SEE MORE VIDEO »

Tesla CEO Elon Musk, demonstrating the Model X third-row seat and falcon doors

Not to be ungrateful for the $465 million of tax-payers' money, Musk was sure to add "The DOE was a helpful catalyst," and that without it, Tesla's IPO "wouldn't have been as good."

With the 2012 Tesla Model S Luxury Sedan set to enter production this year and the 2013 Tesla Model X Crossover SUV already unveiled, it isn't difficult to see why Musk is keen to bask in Tesla's less-grim prospects. After all, history tends to be written by the victors.

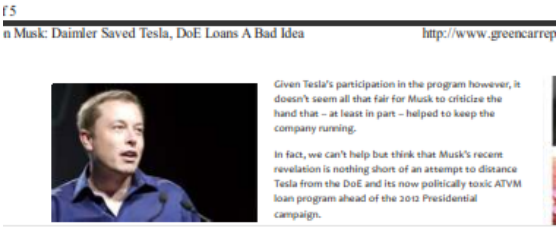
But while we understand Musk's keenness to distance Tesla from other, less-successful DoE ATVM loan recipients, his next move baffled us.

"Musk said that generally he doesn't believe government subsidies are good, but in some cases they do help," reports The Wall Street Journal.

Instead of offering federal loans which artificially pick and choose winners and losers in the marketplace, he opined, companies should be allowed to survive on their own merits. The implication, of course, was that startups should rely on private investment, not government funds. In addition, he proposes taxing business and individuals on the carbon dioxide they produce, encouraging individuals to make greener choices through taxation.

Had Tesla not taken funds from the DoE, Musk's statements would be entirely understandable.

MUSK GRABS HIS MONEY AND THEN TRIES TO SABOTAGE THE PROGRAM FOR OTHERS!



Given Tesla's participation in the program however, it doesn't seem all that fair for Musk to criticize the hand that – at least in part – helped to keep the company running.

In fact, we can't help but think that Musk's recent revelation is nothing short of an attempt to distance Tesla from the DoE and its now politically toxic ATVM loan program ahead of the 2012 Presidential campaign.

Tesla Motors
New Mexico is the proposed location for this project, which plans to build a battery-electric powered vehicle with enhanced range that can be produced for the consumer market.

BIOMASS PROJECTS

Alico, Inc.
Florida is the proposed location for this project, which plans a first-of-a-kind commercial-scale cellulosic ethanol plant that would use multiple feedstocks and produce multiple products.

Blue Fire Ethanol, Inc.
California is the proposed location for this project, which plans to build a commercial-scale cellulosic ethanol plant using an array of low-cost feedstocks.

Choren USA
Southeastern, U.S. is the proposed location for this project, which plans to construct an industrial-scale biomass gasification facility for clean synthetic diesel fuels in the United States.

Endicott Biofuels, LLC
Virginia is the proposed location for this project, which plans to construct a second generation biodiesel and bio-derived products plant that would feature a high level of feedstock flexibility allowing for the production of a broad range of biodiesel fuels.

Iogen Biorefinery Partners, LLC
Idaho is the proposed location for this project, which plans to build a biorefinery to produce ethanol from a wide range of cellulosic feedstocks and to produce other byproducts of value to several industries.

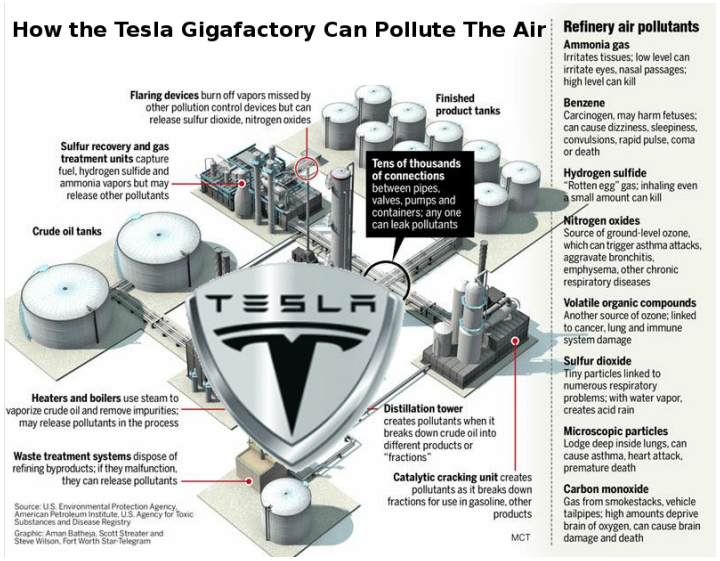
Voyager Ethanol, LLC
Iowa is the proposed location for this project, which plans to build a cellulosic ethanol plant that can accommodate multiple feedstocks in the production of ethanol and higher value byproducts.

Following funding and authorization for the program in February 2007, DOE has established a Credit Review Board to make recommendations to the Secretary of Energy on loan guarantees; named an office director and technical and financial experts to work in the Loan Guarantee program office; and developed guidelines for the financial and technical review of loan guarantee applications.

Review the final regulations and more about DOE's loan guarantee program.

U.S. Department of Energy, Office of Public Affairs, Washington, D.C.

Billions worldwide agreed that, by this point in human civilization, they would have expected a better process than entrusting all their political, commercial, and social decisions to vindictive, self-absorbed fuckers.



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This is what a melted Tesla looks like

Published time: 2 Jan, 2016 20:16
Edited time: 2 Jan, 2016 22:00

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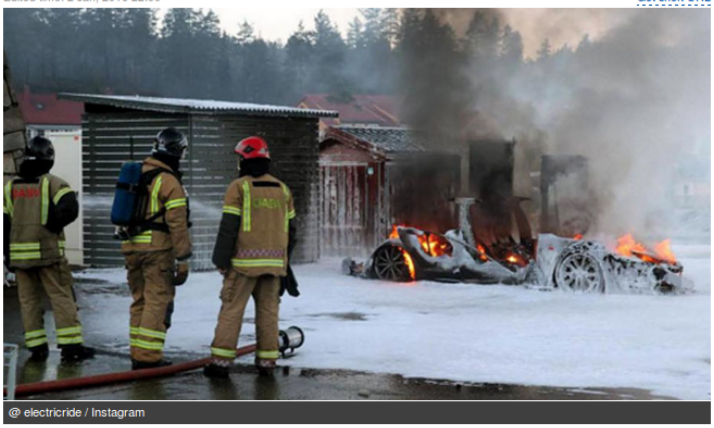

@ electricride / Instagram

Yet another Tesla Model S has burst into flames, getting the new year of its Norwegian owner off to a bad start.

The electric sedan caught fire while plugged into a SuperCharging station in Gjerstad, Norway.

"What' I'm referring to is the fact that a Tesla Model S spontaneously combusted on New Year's.

If you thought that Consumer Reports' love story with the Tesla Model S - which broke their rating system by getting 103% in testing - was over because the sought-after "Recommended" seal of approval was removed after reliability issues showed up..."

Seating Chair

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Shopper Studies: Tesla Mannequin S Is

"What' I'm referring to is the fact that a Tesla Model S spontaneously combusted on New Year's.

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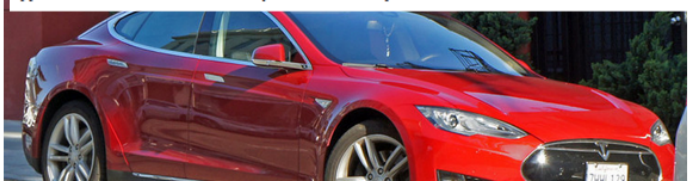

Sociopath World

Home | Portrait of a sociopath | Frequently asked questions | Contact | Forum

TUESDAY, MARCH 22, 2011

Famous sociopaths: Elon Musk?

People frequently ask me whether there are any "good" sociopaths or "famous" sociopaths, meaning any sociopaths that people might know and respect without necessarily knowing and respecting that they are a sociopath. Of course it's all guessing games because even if that person was aware that they were a sociopath, there is no reason why they would out themselves (just to be socially ostracized and professionally second-guessed). If you read between the lines, though, there are plenty of sociopaths out there doing things, like Elon Musk, co-founder of PayPal, Space Exploration Technologies (which contracted with NASA to basically replace the Space Shuttle in servicing the Space Station), and current CEO of Tesla Motors. In a dated New Yorker article, which is unfortunately unavailable without a subscription, the following sociopathic characteristics or quotes are revealed (all are quotes from the article, the text in quotation marks are from Musk unless otherwise indicated):

- "We're like a giant parallel supercomputer, and each of our brains runs a piece of the software" contrasted with "Most people don't know much."
- "The people who know me generally have a good impression. Generally, if I didn't fire them, then they have a good impression."
- He fell silent for two minutes, processing. Then he announced, "I'm going to call Dan Neil and say, 'What the fuck?' Starting with a negative conclusion and backfilling the facts is a classic dickhead move–and a classic human fallacy." Humans!
- [H]e believes it's the duty of the intelligent and educated to replicate, "so we don't devolve into a not very literate, theocratic, and unenlightened future." As part of his program for Homo sapiens, the beta version, he reminds unfruitful employees,"You should have, on average, 2.1 kids per woman."
- [Tesla Chief Technology Office J.B. Straubel] says, "As the company has matured, it has become more of a worthy adversary for Elon. He constantly wants everything we're doing to be really difficult, but he works really hard to make sure it's not impossible. He almost won't let us fail." Justine Musk observes, "I like to compare him to the Terminator. He sets his program and just . . . will . . . not . . . stop."
- At times, between meetings, Musk finds himself daydreaming about building a supersonic electric airplane, or a double-decker highway.

The quotes suggest certain sociopathic traits, the overall tone of the article suggests even more, including an inability to commit to projects for more than 3-5 years, an aggressive risk-seeking that keeps Tesla simultaneously on the brink of bankruptcy and

Celebrity, Sex, Fashion for Women. Without Airbrushing.

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JEZEBEL

RECOMMENDED BY IRIN CARMON

Mississippi Personhood Advocates Are Extra Scary in Person

Britain Shamed By Proliferation Of Drunken Ladies

Larry Flynt Offering $1 Million For Rick Perry Sex Stories

Just Freaking Give Boys The HPV Vaccine Already

Scott Baio Just Turned 51... And I'm Out

Did TechCrunch Discriminate Against A

The Special Hell Of Being A "Starter Wife"

At their wedding, the husband told his wife, "I am the alpha in this relationship," later repeating, "If you were my employee, I would fire you." Now he's a multimillionaire, and she's writing tell-alls about their divorce.

This happened first in *The Times Of London*, and on her blog, and now, complete with glamorous photos, in *Marie Claire*, where Justine Musk, a novelist, writes about her painful, lengthy divorce proceedings with Elon Musk, who founded PayPal among other entrepreneurial projects. Whether or not rich people's divorces are inherently more painful, the

WIRED GEAR SCIENCE ENTERTAINMENT BUSINESS

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Tesla Motors' Musk: Let Me Run Detroit

BY ELIOT VAN BUSKIRK 06.15.09 12:55 PM

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BECOME A BETTER MAN

maintain a peaceful coexistence with these remorseless and incorrigible human psychopaths, who hide among us behind their masks of sanity.

Psychopaths

"PSYCHOPATHIC TRAITS"

While most of us tend to think of a psychopath (or sociopath) as simply a deranged individual who can kill or maim without feeling any remorse or compassion, that's an oversimplification of a very complex condition. There's actually a lot more to it than that. Actual psychopathy requires the coexistence of several key indicators. Here are some important ones to watch for.

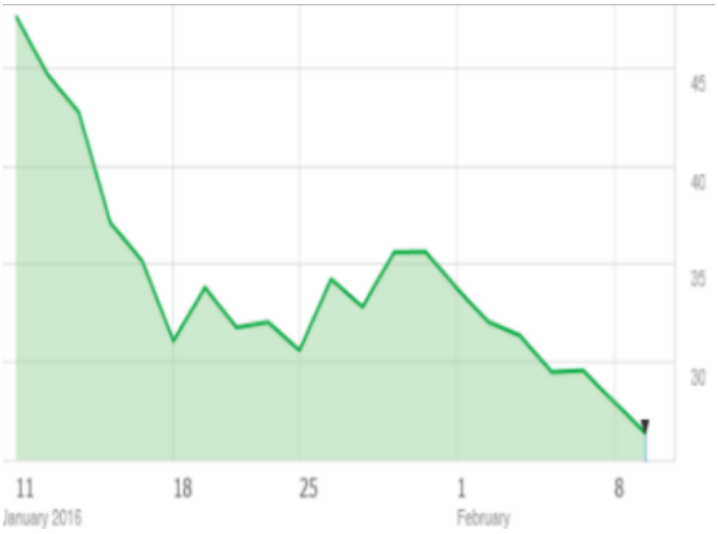
- Insincerity, coupled with superficial charm.
- An inflated sense of self-worth, egocentric.
- Lies habitually.
- Manipulative.
- Remorseless. Can easily rationalize wrongdoings.
- Shows little in the way of emotion or feelings.
- Fakes emotions.
- Callousness, lacks empathy.
- Failure to accept responsibility for their own action(s).
- Easily bored. Needs constant stimulation.
- Takes advantage of the goodwill of others.
- Lack of realistic long-term goals.
- Impulsiveness.
- Behavioral problems earlier in life.
- Poor **behavior control**.
- Irresponsibility.
- Commitment issues, many short-term relationships.

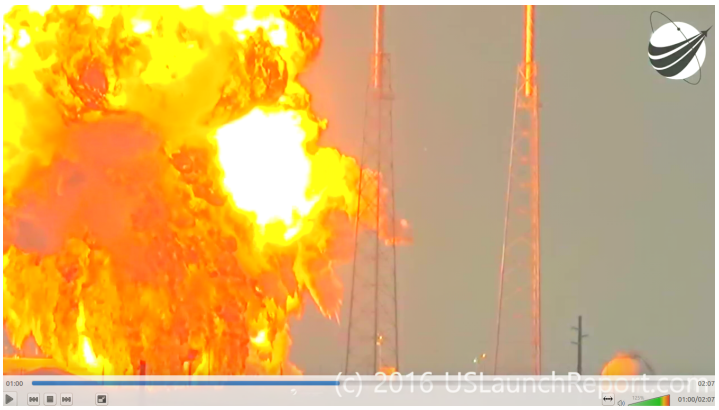
Elon doesn't understand | Forums | Tesla Motors
The press is not **Elon Musk**'s advertising agency. omarsultan | November 22, 2013. What a bunch of **self-aggrandizing** horse doo-doo - sounds ...
www.teslamotors.com/forum/forums/**elon**-doesnt-understand - View by Ixquick Proxy - Highlight

Tesla CEO: We Get Way Too Much Attention - [H]ard|Forum
Elon Musk loved all the attention before the fires. I guess he ... Habitual lying, self -aggrandizing, unethical business practice...yup, sociopath.
www.hardforum.com/showthread.php?t=1792765 - View by Ixquick Proxy - Highlight

Long Open Thread, **Elon**'s Hyperloop - Decline of the Empire
8 Aug 2013 ... And because I called out **Elon Musk** before I stopped publishing daily, ... How awful for a **self-aggrandizing** denizen of Americana Hopium to be ...
www.declineoftheempire.com/ 2013/ 08/ long-open-thread-**elon**s-hyperloop.html - View by Ixquick Proxy - Highlight

Elon Musk: Visionary Or Crazy Person? - The Car Connection
21 Jan 2009 ... **Elon Musk**. Enlarge Photo. There are a lot of ... He is also, as most people of his type are, fairly **self-aggrandizing**: "We're all focused on our little ...
www.thecarconnection.com/ news/ 1017872_**elon-musk**-visionary-or-crazy-person - View by Ixquick Proxy - Highlight




(c) 2016 USLaunchReport.com


(c) 2016 USLaunchReport.com

Tesla continues to insist the car is safer than internal combustion engines, although neither the electric Nissan Leaf nor Chevrolet's gas-electric hybrid, Volt has suffered from the same issue.

Here's how the sales-lease-back arrangements work:

- A ZEV or ZEV component manufacturer applies to CAEATFA to have a project approved pursuant to the policy. If approved, CAEATFA buys the equipment, and finances the purchase by taking out a loan or selling bonds. CAEATFA does not pay the sales tax on the transaction. The manufacturer makes lease payments to CAEATFA for use of the equipment, and CAEATFA uses these payments to repay the bonds or loan.

- Under the lease arrangement with CAEATFA, the manufacturer has the option to purchase the equipment outright. If it purchases the equipment, the manufacturer obtains the benefit of the sales tax exemption, saving seven percent to nine percent on the purchase price.

The tax incentive policy approved by CAEATFA covers several ZEV technologies, and any qualifying ZEV manufacturer can apply. The eligible technologies include fuel cell electric vehicles, battery electric vehicles, plug-in hybrid electric vehicles, hydrogen internal combustion engines, advanced technology partial ZEVs and neighborhood electric vehicles.

CAEATFA finances transportation technologies that conserve energy, reduce air pollution, and promote economic development and jobs. Additionally, CAEATFA provides financing for facilities that use new and alternative energy sources and technologies.

###

NEWS RELEASE

CALIFORNIA STATE TREASURER BILL LOCKYER

FOR IMMEDIATE RELEASE
June 30, 2008

Contact: Tom Dresslar
916-653-2995

Treasurer Lockyer Announces Financial Incentive to Encourage Zero-Emission Vehicle Manufacturing in California

Tesla Motors Will Use New Policy to Build Electric Car in Bay Area

SAN CARLOS – State Treasurer Bill Lockyer today announced Tesla Motors, Inc. has decided to manufacture its second-generation electric car in California following the California Alternative Energy and Advanced Transportation Financing Authority's (CAEATFA) adoption of a policy that creates a financial incentive to build zero-emission vehicles (ZEVs) in the state.

"These vehicles can play a big part in helping California successfully implement its groundbreaking laws to fight climate change," said Lockyer, who chairs CAEATFA. "By offering this financial incentive, our goal is to ensure zero-emission vehicles realize their full potential in our state. In the bargain, we believe the policy will bolster our emerging green economy, create good-paying jobs and reduce our dependence on foreign oil. I'm very pleased the policy helped convince Tesla to build its high-performance electric cars in California."

"Today's announcement is great news for California, our economy and our environment," said Governor Arnold Schwarzenegger. "We want these cutting-edge companies not to just start in California and do their research and development here—we want them to build in California. Tesla's announcement today is just one of many we will celebrate as we implement AB 32 and reach our greenhouse gas emissions reduction goals. I have always said that we must protect our economy and our environment at the same time, and today it is clear that we are once again demonstrating to the world how to do that."

Existing law exempts CAEATFA from paying the sales tax on equipment used to manufacture advanced transportation products. Under the new policy – developed in coordination with the Governor's Office – CAEATFA will pass through that tax break to qualifying ZEV manufacturers under "sales-lease-back" agreements.

Tesla will ask CAEATFA to approve such an arrangement to finance the purchase of equipment to build its second-generation electric car, called the Model S. The five-passenger sedan – which will be able to travel 225 miles between charges and cost about $60,000 – will be manufactured at a still-to-be-determined site in the Bay Area.

(MORE)

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Entertainment | Mon Mar 31, 2014 11:02am EDT

Related: ENTERTA

U.S. stock markets are rigged, says author Michael Lewis

NEW YORK | BY JOHN MCCRANK

A Wall Street sign is pictured outside the New York Stock Exchange in New York, October 25, 2013. REUTERS/CARLO ALLEGRI

(Reuters) - The U.S. stock market is rigged in favor of high-speed electronic trading firms, which use their advantages to extract billions from investors, according to Michael Lewis, author of a new book on the topic, "Flash Boys: A Wall Street Revolt."

High-frequency trading (HFT) is a practice carried out by many banks and proprietary trading firms using sophisticated computer programs to send gobs of orders into the market, executing a small portion of them when opportunities arise to capitalize on price imbalances, or to make markets. HFT makes up more than half of all U.S. trading volume.

The trading methods and technology that make HFT possible are all legal, and the stock exchanges HFT firms trade on are highly regulated. But Lewis said these firms are using their speed advantage to profit at the expense of other market participants to the tune of tens of billions of dollars.

"They are able to identify your desire to buy shares in Microsoft and buy them in front of you and sell them back to you at a higher price," Lewis, whose book is available on Monday, said on the television program "60 Minutes" on Sunday.

"This speed advantage that the faster traders have is milliseconds, some of it is fractions of milliseconds," said Lewis, whose books include "The Big Short" and "Moneyball."

Those milliseconds can be valuable, making it possible to send around 10,000 orders in the blink of an eye.

You can stop

CORRUPTION

TESLA: THE OFFICIAL CAR OF DOUCHE BAGS


ANOTHER TESLA FIRE!
TESLA ON FIRE. DRIVER & PASSER BY BREATH TOXINS


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SENT FROM HEAVEN
IT WILL HARDLY BURN YOUR FACE OFF
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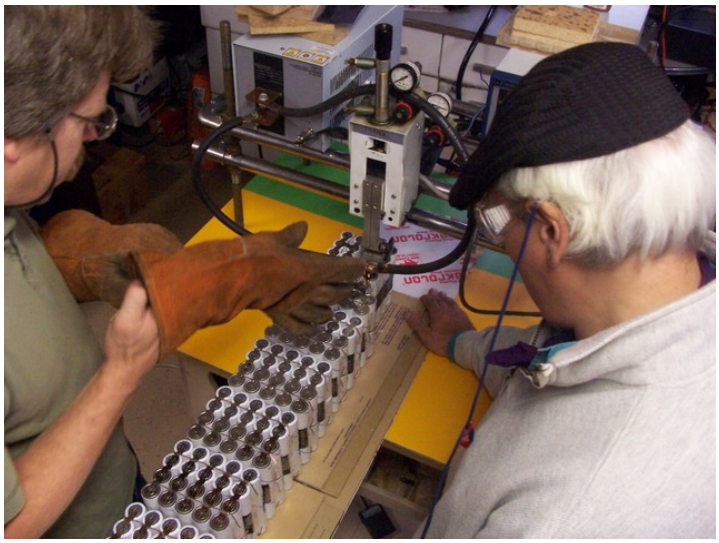
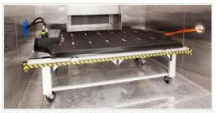
TO DRIVE LIKE HELL



THIS IS ONE OF TESLA'S BATTERIES. EACH TESLA HAS OVER 7000 OF THEM. A CRACK THIS SMALL CAN RELEASE POISON GAS AND BLOW UP YOUR TESLA

This is the Tesla battery inside the MILITARY-GRADE BLAST CHAMBER that it must be used in at the Tesla Factory because of the EXTREME EXPLOSION DANGER of the Tesla Battery

TESLA HAS TO TEST THEIR BATTERIES IN a **BLAST CHAMBER!!!!!!!:**

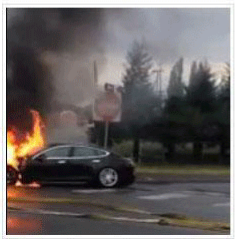


IF TESLA SAYS THIS THING IS SO SAFE WHY DO THEY TEST IT IN A STEEL ENCLOSED EXPLOSION ROOM WITH WIRES COMING IN THROUGH BLAST HOLES!!!!!!!!

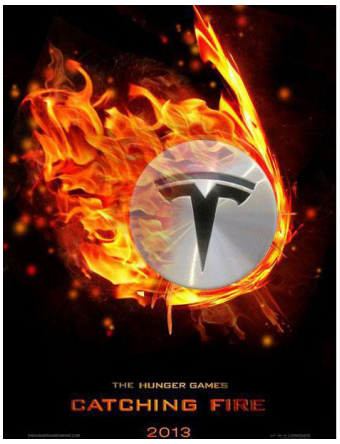
Millions of dollars of lithium ion electric cars that exploded because they got wet!

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD



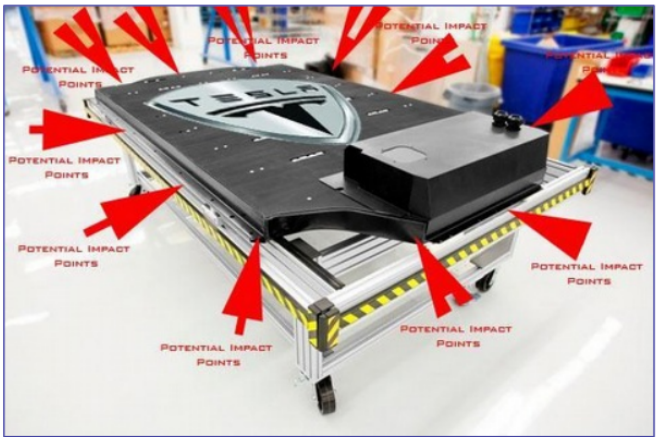
TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

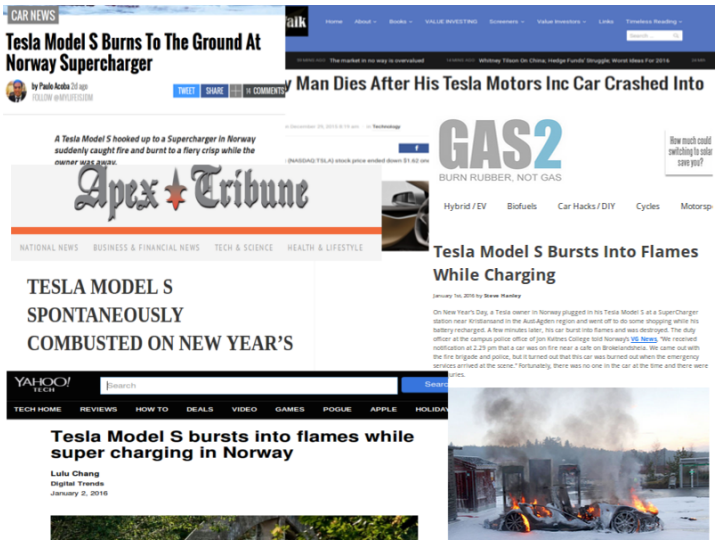


not apply directly to DOE but instead work with financial institutions satisfying the qualifications of an eligible lender which may apply directly to DOE to access a loan guarantee. The solicitation invites applications from eligible lenders for partial, risk-sharing loan guarantees from DOE. The guarantee percentage will be no more than 80% of the maximum aggregate principal and interest during a loan term, and the project debt must obtain a credit rating of at least 'BB' or an equivalent with a nationally recognized credit rating agency.

This solicitation marks the eighth round of solicitations issued by the Department's Loan Guarantee Program since its inception.

Read more information on this solicitation and the Department's Loan Guarantee Program at www.lgprogram.energy.gov.





Tesla crashes through brick wall, lands in pool in oddball accident, passenger escapes

Partial blame is being laid upon the car's interior design when the 85 year-old driver crashed into a neighbor's swimming pool. He was reported to have pressed the accelerator rather than the break while in the garage.

At approximately 2 PM Sunday, the driver and a passenger crashed through a brick wall and into a swimming pool in the neighbor's yard. A witness described the chaotic scene when the black Tesla sank into the pool. Once the Tesla landed in the swimming pool it slowly dropped to the bottom, giving the female passenger time to escape through a window after the driver told her "get out of the car. She got out of the car, trying to get him out of the car, but the way they're made with the console and the seat belts and everything, it just didn't happen."

Tesla Model S is dead after the first day | Forums | **Tesla** Motors
Tech was adamant the 2nd key would fix the problem... well, the 2nd key was 30 ... They would unlock the **door** remotely, try to fix the car in my ...
www.**tesla**motors.com/forum/forums/**tesla**-model-s-dead-after-first-day - View by Ixquick Proxy - Highlight

Charge Port **Door** Opens Spontaneosly | Forums | **Tesla** Motors
This was diagnosed to be because of a defective charging cable. ... is locked when it is parked in a public place, the charge port **door** is locked.
www.**tesla**motors.com/forum/forums/charge-port-**door**-opens-spontaneosly - View by Ixquick Proxy - Highlight

Tesla recalls some Model S cars due to seat-mount **defect** ...
19 Jun 2013 ... Electric car maker **Tesla** Motors will recall 1228 of its 2013 Model S cars ... The Palo Altro automaker twice recalled its first model, the two-**door** ...
www.contracostatimes.com/ ci_23491448/ **tesla**-recalls-some-model-s-cars-due-seat - View by Ixquick Proxy - Highlight

Door Handles: Warning! Random **Door** Opening While Locked! [Archive ...
Tesla needs to figure out the problem and fix it ASAP. ... I have started to **lock** the **door** manually (key fob push) rather than depending on the ...
www.**tesla**motorsclub.com/archive/index.php/t-13017.html - View by Ixquick Proxy - Highlight

Door handle **problems** | Forums | **Tesla** Motors
Two weeks ago my right rear **door** handle assembly was replaced by the **Tesla** Ranger. He also replaced the 12v battery as a separate issue. This week, my driver **door** handle has the same **problem** and they are coming this week to replace it.
teslamotors.com/nl_NL/forum/forums/door-handle-problems

Door Problem | Forums | **Tesla** Motors
... rispondi ai filoni di discussione aperti con i proprietari e gli appassionati **Tesla**, oppure ... I only noticed it today when the car wouldn't **lock**. ... The old design still uses a pressure switch and because there is no give when pulling on the **door** handle, this causes **problems with** the ...
teslamotors.com/it_IT/forum/forums/door-problem

Tesla Model S gets Consumer Reports' recommendation - Oct. 28 ...
The **Tesla** Model S is now Consumer Reports Recommended. The Model S isn't perfect, according to its owners, but none have reported any **problems with** the car's battery-powered electric drive system or with the enormous iPad-like touch screen inside the cabin.
money.cnn.com/2013/10/28/autos/tesla-model-s-consumer...

Tesla Model S: Glitches, Quirks, and Peccadilloes Roundup
Door locks are electronic on many cars. If a solenoid misfires, the **door** unlocks. ... the **door problems** are a lie despite **Tesla's** publicly acknowledging the **problem**, etc... When people write good things, they are true and you don't question them.
greencarreports.com/news/1081935_tesla-model-s-glitches-qui...

Door Won't Open! - **Tesla** Motors Club - Enthusiasts & Owners Forum
So I got my **Tesla** S Performance and was so excited to show it off to as many people ... Do you have 4.2 (1.19.42) installed? I had **problems with** this exact **door**. It only worked randomly. I did the update and it hasn't failed to work. The **door** seemed to get better (before my update) the more ...
teslamotorsclub.com/showthread.php/13213-Door-Won-t-Open!

EVERYBODY THINKS THAT
PEOPLE WHO DRIVE TESLA'S
ARE ASSHOLES & DOUCHEBAGS!

http://www.glassdoor.com/Reviews/Tesla-Motors-Company-Reviews-E43129_P3.htm

3

8+1

11 Like Share

TESLA EMPLOYEE REVIEWS ON GLASSDOOR

Jan 22, 2014

Culture & Values
Work/Life Balance
Senior Management
Comp & Benefits
Career Opportunities
Disapproves of CEO

3 people found this helpful

"Tesla is an abusive and highly unethical company."

Anonymous Employee (Current Employee)
Palo Alto, CA

I have been working at Tesla Motors full-time for more than a year

Pros – Very public company with great brand recognition.

Cons – Very poor management who regularly abuses their power.
Below average pay - Many customer facing employees are paid poorly and sometimes are in danger of a salary cut.
The use of intimidation and fear tactics.
Excessive work hours 65+ hours a week is expected.
Management is primarily made up of engineers and not business oriented professionals.
HR has a blind eye to abuse and will not take action against managers.
Illegal work practices.
Little to no training.
Extreme favoritism.

Advice to Senior Management – Hold regular peer reviews, hire real industry professionals and start a management training program to educate managers on proper management techniques and practices.

No, I would not recommend this company to a friend

Was this review helpful? Yes | No Add Employer Response Flag Review

Jan 10, 2014

Culture & Values
Work/Life Balance
Senior Management
Comp & Benefits
Career Opportunities
Approves of CEO

9 people found this helpful

"ABSOLUTE THE WORST JOB I'VE EVER HAD: "Very Disappointing!"; "Completely Corrupt""

Service Advisor (Former Employee)

I worked at Tesla Motors full-time

Pros – Sexy fast cars, allot of incredibly talented people, excellent benefits, cutting edge opportunity and free food.

Cons – TERRIBLE TERRIBLE QUALITY CONTROL, vehicles shipped to customer locations incomplete yes MISSING PARTS that should have been installed at the factory from doors, frunks to the screws that hold the vehicle to solid (CraZy…), salaries WAY below market, RIDICULOUS cut throat management politics, VERY disorganized throughout the company, ZERO work life balance (forget having a day off), I've seen them FIRE employees in an instant and HIDE behind the "CA. AT WILL ACT" so they don't have to deal with management or their quality issues, HR. claims to have an open door policy but what they really mean is open your mouth about anything and your FIRED (I've seen it), allot of haste with company money on travel between cities and countries rather than QC at factory level and quality staffing, "NO RECOGNITION OF TALENT & HARD WORK.", review system is a joke this is a very frustrating environment.

No, I would not recommend this company to a friend – I'm not optimistic about the outlook for this company

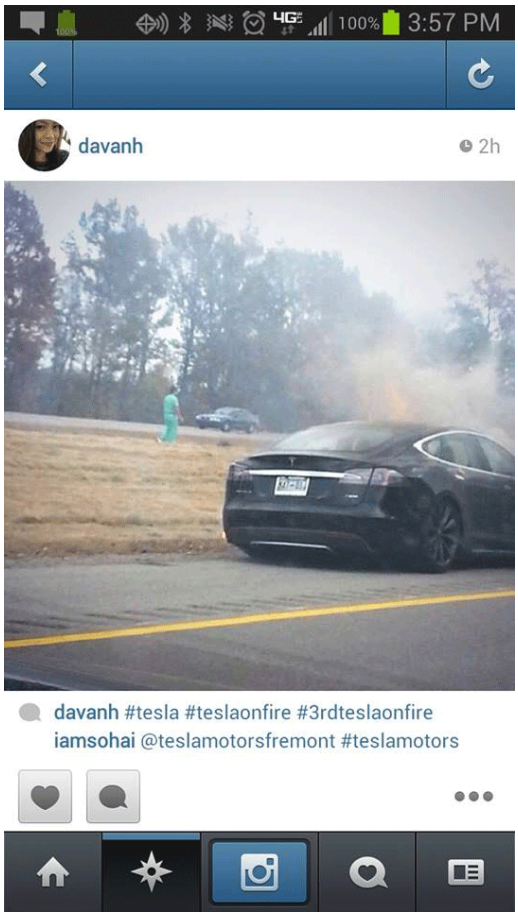
Was this review helpful? Yes | No Add Employer Response Flag Review

Model S spontaneous fire during customer test drive in France

r/teslamotors • 3dkSdkvDskReddit • 14h ago
980 points • 460 comments

sla #ødelagt #miljøvenelig

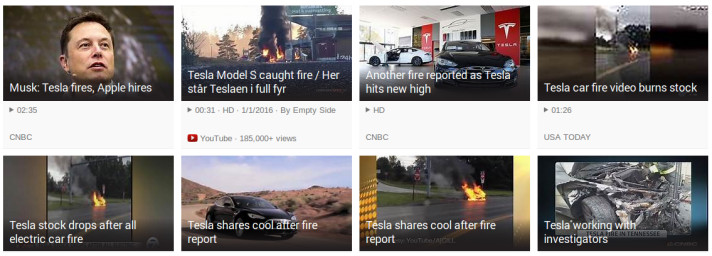

Musk/Feinstin: A Love Bonded In Crime
TESLA
SOLYNDRA
FREMONT CALIFORNIA REAL ESTATE SCAM
TESLA
Her Husband
CBRE
Commercial Real Estate
Senator
SOLYNDRA
TESLA: THE OF CAR OF DOUCH
SENATORS DROPP LIKE FLIES IN CORRUPTION ARRESTS
FBI
Senator Yee: ARERESTED
Senator Melendez: ARRESTED
Tesla opens its Model S electric car factory
Senator Feinstein: Next?

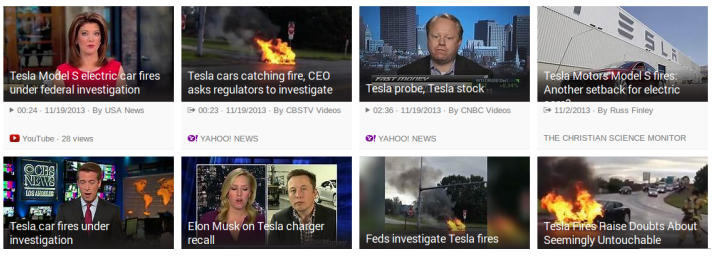

100% 3:57 PM
davanh
2h
davanh #tesla #teslaonfire #3rdteslaonfire
iamsohai @teslamotorsfremont #teslamotors


TESLA
ANOTHER TESLA FIRE!


TESLA
FIREMAN WITH FIRE EXTINGUISHER
TRYING TO PUT TESLA FIRE OUT


NRK
@NRKno
Follow
Tesla tok fyr u
/sorlandet/tesl
View translation
ANOTHER
TESLA FIRE!
RETWEETS
LIKES


Musk: Tesla fires, Apple hires
Tesla Model S caught fire / Her står Teslaen i full fyr
Another fire reported as Tesla hits new high
Tesla car fire video burns stock
Tesla stock drops after all electric car fire
Tesla shares cool after fire report
Tesla shares cool after fire report
Tesla working with investigators


Tesla Model S electric car fires under federal investigation
Tesla cars catching fire, CEO asks regulators to investigate
Tesla probe, Tesla stock
Tesla Motors Model S fires: Another setback for electric
Tesla car fires under investigation
Elon Musk on Tesla charger recall
Feds investigate Tesla fires
Tesla Fires Raise Doubts About Seemingly Untouchable

BUSINESS INSIDER Tech Finance Politics Strategy Life

People In San Francisco Are Leaving Insane Fliers On Tesla Cars, Claiming To Expose The 'Truth' About The Company

MEGAN ROSE DICKEY
APR. 30, 2014, 5:12 PM | 12,460 | 51

FACEBOOK LINKEDIN TWITTER GOOGLE+

People are apparently leaving fliers on Tesla cars in San Francisco, warning drivers that owning a Tesla means they are involved in "organized crime."

The flier accuses Tesla of "manipulating Congress" and questions the safety of lithium ion batteries.

"Lithium ion batteries blow up if they get wet or bumped," the flier reads. "They have already burned planes, cars, homes & children. There have been tens of thousands of lithium ion battery fires & explosions. Tesla's (sic) have over 7000 "non-automotive designed" batteries in each car, that means over 7000 chances of having a catastrophic fire."

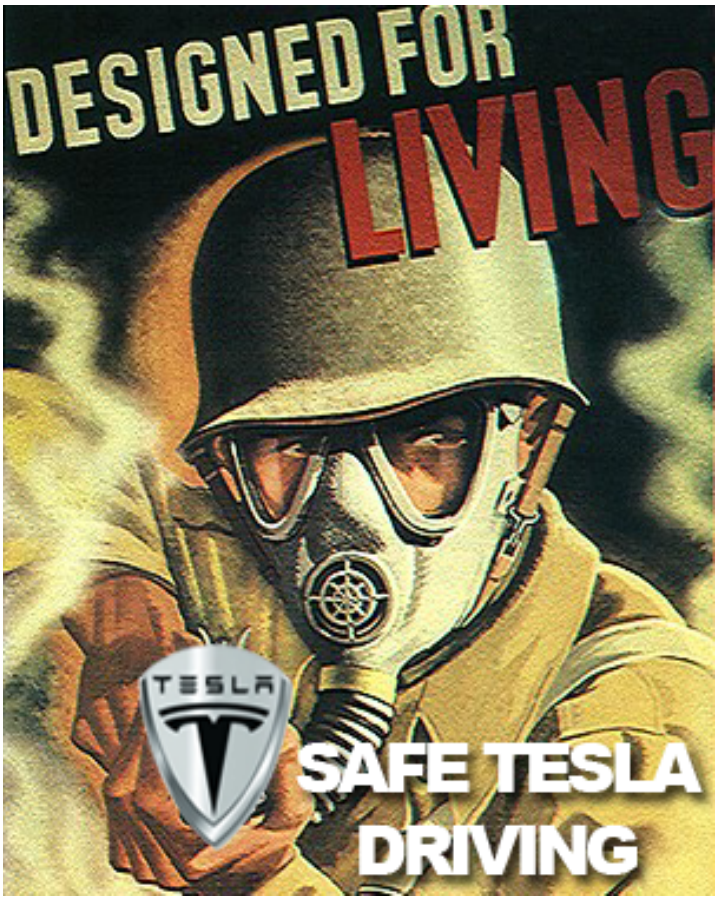
The flier also speculates that Google is a "silent partner" of Tesla's.

"Tesla audio and location tracking can be remotely monitored with two clicks of a mouse," the flier reads. "Google hushes up bad news about Tesla. By driving a Tesla you are supporting spying."

It's not clear who is behind this, but the flier ultimately urges Tesla owners to give the car back. Check it out below.

The National "TESLA FLYERS" CONTROVERSY

TESLA: FUNDED BY CORRUPTION & ORGANIZED CRIME!

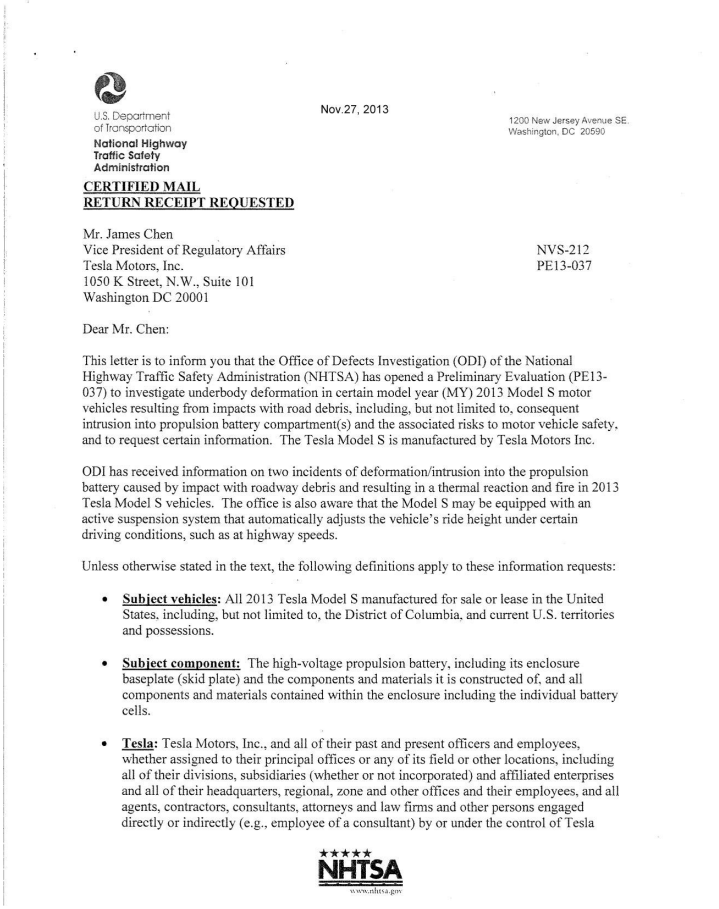


Nitesh Dhanjani Follow
@nitesh_dhanjani

Cursory Evaluation of the Tesla Model S: We Can't Protect Our Cars Like We Protect Our Workstations
dhanjani.com/blog/2014/03/c...

1:47 AM - 29 Mar 2014

11 RETWEETS **2** FAVORITES



U.S. Department of Transportation
National Highway Traffic Safety Administration

Nov.27, 2013

1200 New Jersey Avenue SE.
Washington, DC 20590

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. James Chen
Vice President of Regulatory Affairs
Tesla Motors, Inc.
1050 K Street, N.W., Suite 101
Washington DC 20001

NVS-212
PE13-037

Dear Mr. Chen:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE13-037) to investigate underbody deformation in certain model year (MY) 2013 Model S motor vehicles resulting from impacts with road debris, including, but not limited to, consequent intrusion into propulsion battery compartment(s) and the associated risks to motor vehicle safety, and to request certain information. The Tesla Model S is manufactured by Tesla Motors Inc.

ODI has received information on two incidents of deformation/intrusion into the propulsion battery caused by impact with roadway debris and resulting in a thermal reaction and fire in 2013 Tesla Model S vehicles. The office is also aware that the Model S may be equipped with an active suspension system that automatically adjusts the vehicle's ride height under certain driving conditions, such as at highway speeds.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** All 2013 Tesla Model S manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.
- **Subject component:** The high-voltage propulsion battery, including its enclosure baseplate (skid plate) and the components and materials it is constructed of, and all components and materials contained within the enclosure including the individual battery cells.
- **Tesla:** Tesla Motors, Inc., and all of their past and present officers and employees, whether assigned to their principal offices or any of its field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Tesla

NHTSA
www.nhtsa.gov

(including all business units and persons previously referred to), who are or, in or after 2006, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

a. Design, engineering, analysis, modification or production (e.g. quality control);
b. Testing, assessment or evaluation;
c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

Alleged defect: Deformation or damage to the subject component from impacts to the subject component or failure of the subject component to withstand an impact such that the propulsion battery or individual cells of the battery are damaged by the impact, and/or shut down of the vehicle propulsion system, stalling of the vehicle or fire or other thermal event in the propulsion battery following an impact to the subject component.

- **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Tesla, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Tesla or not. If a document is not in the English language, provide both the original document and an English translation of the document.

Short: The term "Short" refers to an unintended change in the path of electrical current flow within a circuit, battery, semiconductor, conductor or electro-mechanical device.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Tesla has previously provided a document to ODI, Tesla may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Tesla's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles Tesla has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Tesla, state the following:

   a. Vehicle identification number (VIN);
   b. Power rating/capacity of the propulsion battery;
   c. Whether the suspension system (ride height) is actively controlled;
   d. Date of manufacture;
   e. Date warranty coverage commenced; and,
   f. The State in the United States where the vehicle was originally sold or leased.

   Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

2. State the number of each of the following, received by Tesla, or of which Tesla is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:

   a. Consumer complaints, including those from fleet operators;
   b. Field reports, including dealer field reports;
   c. Reports involving a crash, injury or fatality;
   d. Reports involving a fire;
   e. Reports involving a thermal reaction and/or short not included in Tesla's response to subpart d above;
   f. Property damage claims;
   g. Third-party arbitration proceedings where Tesla is or was a party to the arbitration; and
   h. Lawsuits, both pending and closed, in which Tesla is or was a defendant or codefendant.

   For subparts "a" through "h," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

   In addition, for items "c" through "h," provide a summary description of the alleged problem and causal and contributing factors and Tesla's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "g" and "h," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

   a. Tesla's file number or other identifier used;
   b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
   c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
   d. Vehicle's VIN;
   e. Vehicle's make, model and model year;
   f. Vehicle's mileage at time of incident;
   g. Incident date;
   h. Report or claim date;
   i. Whether a crash is alleged;
   j. Whether a fire, thermal reaction and/or short is alleged;
   k. Whether property damage is alleged;
   l. Number of alleged injuries, if any; and
   m. Number of alleged fatalities, if any.

   Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Tesla used for organizing the documents. Describe in detail the search methods and search criteria used by Tesla to identify the items in response to Request No. 2.

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Tesla to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

   Separately, for each such claim, state the following information:

   a. Tesla's claim number;
   b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
   c. VIN;
   d. Repair date;
   e. Vehicle mileage at time of repair;
   f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
   g. Labor operation number;
   h. Problem code;
   i. Replacement part number(s) and description(s);
   j. Concern stated by customer; and
   k. Comment, if any, by dealer/technician relating to claim and/or repair.

   Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

6. Describe in detail the search methods and search criteria used by Tesla to identify the claims in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State the terms of the new vehicle warranty coverage offered by Tesla on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Tesla offered for the subject vehicles and state the number of vehicles that are covered under each such extended warranty.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Tesla has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Tesla is planning to issue within the next 120 days.

8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions," and including actions conducted during subject vehicle design, development, and validation) that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:

   a. Action title or identifier;
   b. The actual or planned start date;
   c. The actual or expected end date;
   d. Brief summary of the subject and objective of the action;
   e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
   f. A brief summary of the findings and/or conclusions resulting from the action.

   For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

9. Provide detailed engineering drawings depicting dimensional specifications of the subject component and including all subassemblies and mechanical, electrical, and battery components. The drawings should contain sufficient detail, such as sectional views of the battery cells/modules that show proximity to the enclosure baseplate and/or other conductive materials which would allow ODI to assess the consequences of enclosure baseplate deformation or damage and the likelihood that it could lead to cell damage.

10. Describe all modifications or changes made by, or on behalf of, Tesla in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

    a. The date or approximate date on which the modification or change was incorporated into vehicle production;
    b. A detailed description of the modification or change;
    c. The reason(s) for the modification or change;
    d. The part number(s) (service and engineering) of the original component;
    e. The part number(s) (service and engineering) of the modified component;
    f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
    g. When the modified component was made available as a service component; and
    h. Whether the modified component can be interchanged with earlier production components.

    Also, provide the above information for any modification or change that Tesla is aware of which may be incorporated into vehicle production within the next 120 days.

11. Describe all modifications or changes made by, or on behalf of, Tesla in the function and operation of the actively controlled suspension system, from the start of production to date,

which affects, or may affect the subject vehicle ride height, including but not limited to software or other programming modifications/revisions. For each such modification, provide the following information:

    a. A detailed description of the modification;
    b. The reason(s) for the modification as it pertains to the alleged defect;
    c. The changes in vehicle ride height due to the modification;
    d. Whether the modification was incorporated into vehicle production, and is so, the date it was incorporated;
    e. Whether the modification was introduced (released) as a service update for consumer owned subject vehicles, and if so;
       i) The date the modification was released;
       ii) The number of subject vehicles available for updated (i.e., how many were produced to the original/unmodified condition);
       iii) The number of consumer owned vehicles that have been modified/updated to date; and,
    f. A description of how the service update is applied (the procedure or method used to make the modification) to an affected vehicle.

Also, provide the above information for any modification or change that Tesla is aware of which may be incorporated into vehicle production, or as a service update, within the next 120 days.

12. Describe in detail all possible consequences to the vehicle from an impact to the subject component that damages the battery. Describe in detail how these possible consequences were addressed in the design of the subject vehicle and the limits of that design to prevent damage to the propulsion battery, stalling and fires.

13. Furnish Tesla's assessment of the alleged defect in the subject vehicle, including:

    a. The causal or contributory factor(s);
    b. The failure mechanism(s);
    c. The failure mode(s); and,
    d. The risk to motor vehicle safety that it poses.

Legal Authority for This Request

This letter is being sent to Tesla pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

Civil Penalties

Tesla's failure to respond promptly and fully to this letter could subject Tesla to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to $7,000 per violation per day, with a maximum of $35,000,000 for a related series of daily violations, for failing or

refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond completely, accurately, and in a timely manner to ODI information requests. The maximum civil penalty of $7,000 per violation per day is established by 49 CFR 578.6(a)(3). The maximum civil penalty of $35,000,000 for a related series of daily violations of 49 U.S.C. § 30166 is authorized by 49 U.S.C. § 30165(a)(3) as amended by § 31203(a)(1)(B) of the Moving Ahead for Progress in the 21st Century Act, Public Law 112-141.

If Tesla cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Tesla does not submit one or more requested documents or items of information in response to this information request, Tesla must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office. In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to PE13-### in Tesla's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Tesla claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Tesla must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Tesla is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. *See* 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Otto Matheke, Senior Attorney, Office of Chief Counsel at otto.matheke@dot.gov or (202) 366-5253.

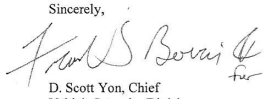
Due Date

Tesla's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by January 14, 2014. Tesla's response must include all non-confidential attachments and a redacted version of all documents that contain confidential information. If Tesla finds that it is unable to provide all of the information requested within the time allotted, Tesla must request an extension from me at (202) 366-0139 no later than five business days before the response due date. If Tesla is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Tesla then has available, even if an extension has been granted.

Please send email notification to Will Godfrey at will.godfrey@dot.gov and to ODI_IRresponse@dot.gov when Tesla sends its response to this office and indicate whether there is confidential information as part of Tesla's response.

If you have any technical questions concerning this matter, please call Will Godfrey of my staff at (202) 366-5231.

Sincerely,



D. Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation

Due Date

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If you have any technical questions concerning this matter, please call Will Godfrey of my staff at (202) 366-5231.

Sincerely,

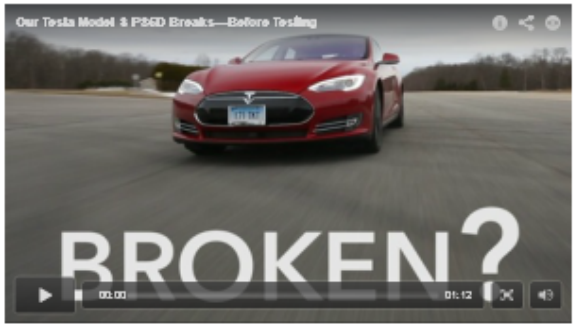
D. Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation

ConsumerReports.org Find Ratings

Consumer Reports' Tesla Model S P85D breaks—before testing begins

A broken power door handle is one of the most common Tesla problems

Last updated: May 18, 2015 02:15 PM



Find Ratings
Hybrids/EVs
See Dealer Pricing

A new car shouldn't have problems when you've owned it for less than a month. Yet Consumer Reports' brand-new $127,000 Tesla Model S P85 D, with the fancy retractable door handles refused to let us in, effectively rendering the car undriveable. (Read "Why We Bought a Tesla Model S.")

After we'd owned the P85 D for a mere 27 days, with just over 2,300 miles on the odometer, the driver-side door handle failed. The door handles in the Model S retract electrically so they rest flush with the sides of the car when they're not in use. Walk up to the car with the key fob in your pocket, and the handles move out to allow you to grip them.

Except this time, the one on the driver's door of our P85D didn't pop out, leaving us no way to open the door from the outside. And significantly, the car wouldn't stay in Drive, perhaps misinterpreting that the door was open due to the issue with the door handle. We have observed other vehicles likewise prohibiting driving with a door open.

We're far from the first Tesla owners to experience this problem. Our car reliability survey shows that doors, locks, and latches are the biggest trouble areas with Teslas and that the Model S has far higher than average rates of such problems.

Driver's door handle is stuck.

Consumer groups now have absolute proof that Tesla Motors is a stock market SCAM! Tesla is a criminally corrupt political payola scheme using taxpayer dollars to build the most unsafe cars in the world. Now it will be proven in court, in the media and before every federal law enforcement agency! Tesla is a crime of a company!

SEE THE FACTS FOR YOURSELF AT THESE LINKS AND BY SEARCHING ON ANY NON-GOOGLE SEARCH ENGINE:

http://tesla-motors-review.weebly.com
http://wp.me/p73h1t-xA
http://greencorruption.blogspot.com
http://policystudy.wordpress.com
http://politicalhitjobs.wordpress.com
http://crimesquad1.wordpress.com
http://thecleantechcrash.wordpress.com
http://departmentofenergyoverwatch.wordpress.com
https://thesacramentocaper.wordpress.com
https://thebigtakedown.wordpress.com
http://elonmuskmobster.wordpress.com
http://lithium-ion.weebly.com
http://thesiliconcoup.weebly.com
http://bookoftesla.weebly.com
http://xyzcase.weebly.com
http://venturecapitalcorruption.weebly.com
http://vcracket.weebly.com
https://publicreportsblog.wordpress.com
http://wp.me/p7lz6b-zXd
http://wp.me/p7G46V-1H
and thousands more…

Help Shut Down Tesla Motors: Pass this around on social media and letters-to-the-editor

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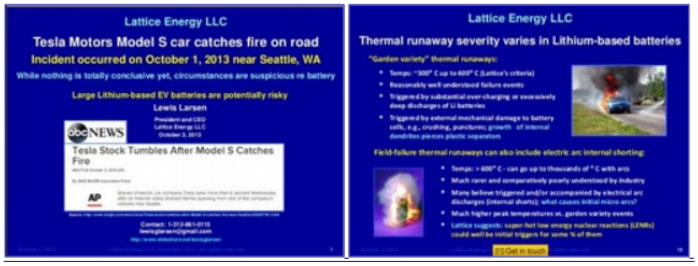


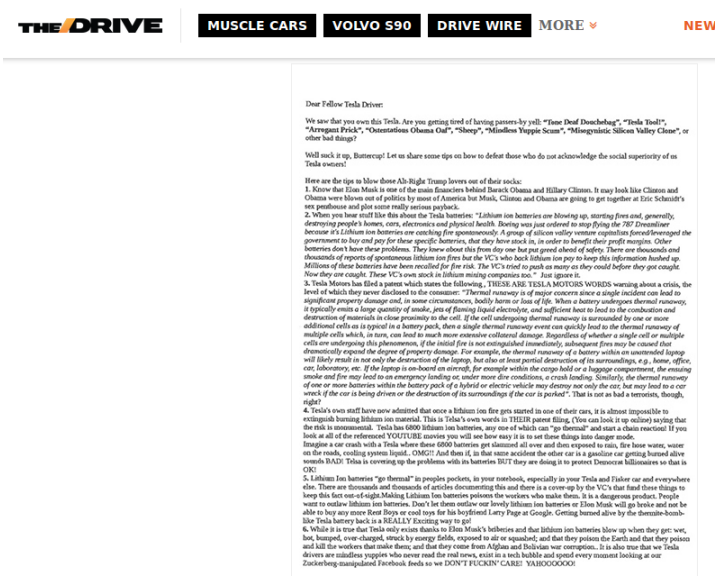
Ex-Tesla Execs Win Reinstatement Of Contract Claims

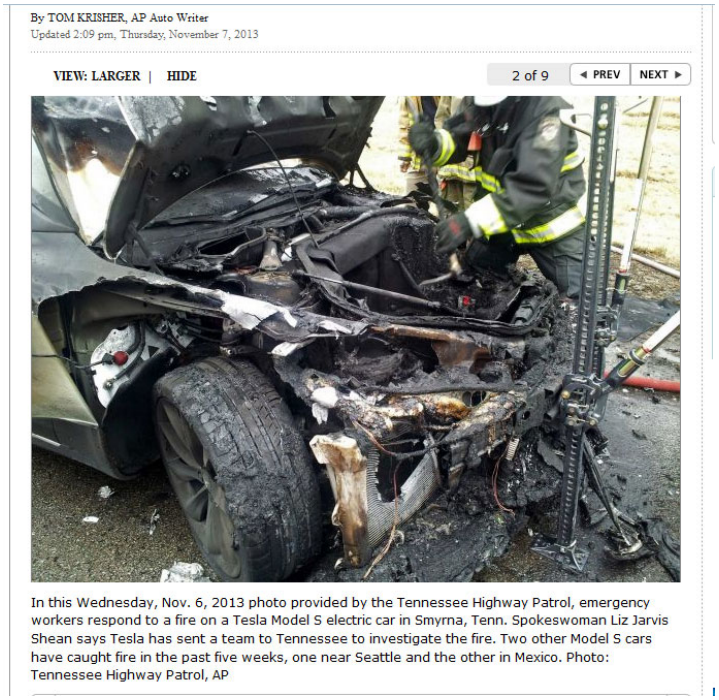
By **Leigh Kamping-Carder**

Law360, New York (May 06, 2011, 8:05 PM ET) -- A California appeals court on Thursday dismissed the defamation claims of two Tesla Motors Inc. executives fired in a round of layoffs in 2008 but reinstated claims that the electric-car maker breached a stock options agreement.

Statements Tesla made about a group of 26 fired employees were clearly opinion, not fact, and did not name former Director of Communications David Vespremi and former Chief Information Officer Gene Glaudell directly, entitling the company to free speech protections, the appeals court ruled.

Vespremi and Glaudell joined Tesla in...





By TOM KRISHER, AP Auto Writer
Updated 2:09 pm, Thursday, November 7, 2013

VIEW: LARGER | HIDE

ANOTHER TESLA FIRE!

In this Wednesday, Nov. 6, 2013 photo provided by the Tennessee Highway Patrol, emergency workers respond to a fire on a Tesla Model S electric car in Smyrna, Tenn. Spokeswoman Liz Jarvis Shean says Tesla has sent a team to Tennessee to investigate the fire. Two other Model S cars have caught fire in the past five weeks, one near Seattle and the other in Mexico. Photo: Tennessee Highway Patrol, AP

U.S. DEPARTMENT OF ENERGY

NEWS MEDIA CONTACT:
(202) 586-4940

FOR IMMEDIATE RELEASE:
June 23, 2009

Obama Administration Awards First Three Auto Loans for Advanced Technologies to Ford Motor Company, Nissan Motors and Tesla Motors

Washington, DC – Today, the Obama Administration announced $8 billion in conditional loan commitments for the development of innovative, advanced vehicle technologies that will create thousa
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Tesla

Tesla Motors will receive $465 million that will also advance electric vehicles. The first loan will finance a manufacturing facility for the Tesla Model S sedan. This vehicle demonstrates how the emerging electric car is becoming more affordable: the Model S is expected to be roughly $50,000 cheaper than Tesla's first vehicle, the Roadster. The all-electric sedan consumes no gasoline and runs entirely on electricity from any conventional 120V or 220V outlet. It will get the equivalent of more than 250 miles per gallon, far exceeding the 32.7 mpg minimum efficiency required for large sedans. Production of the Model S will begin in 2011 and ramp up to 20,000 vehicles per year by the end of 2013. This integrated facility expects to create 1,000 jobs in Southern California.

$$ AWARDED TO TESLA TO DO NONE OF THE THINGS THEY SAID!!???

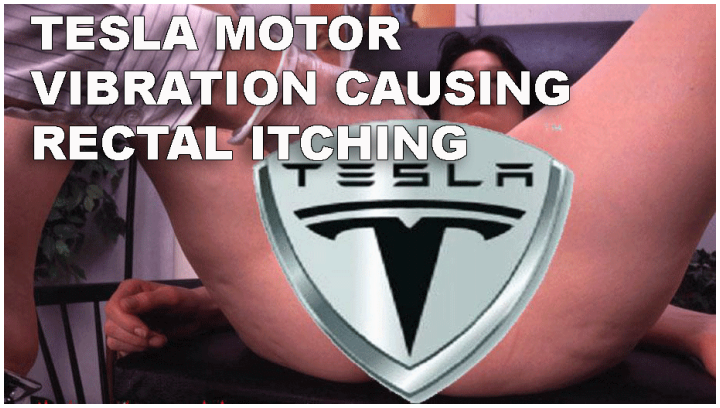
The second part of the loan will support a facility to manufacture battery packs and electric drive trains to be used in Teslas and in vehicles built by other automakers, including the Smart For Two city car by Daimler. This project demonstrates how Tesla's early technology will support electric projects at larger companies. Early pilot battery pack production will begin in 2011, reaching about 10,000 by 2012 and 30,000 packs in 2013. The new facility expects to employ 650 people in the Bay area of Northern California.

-DOE-

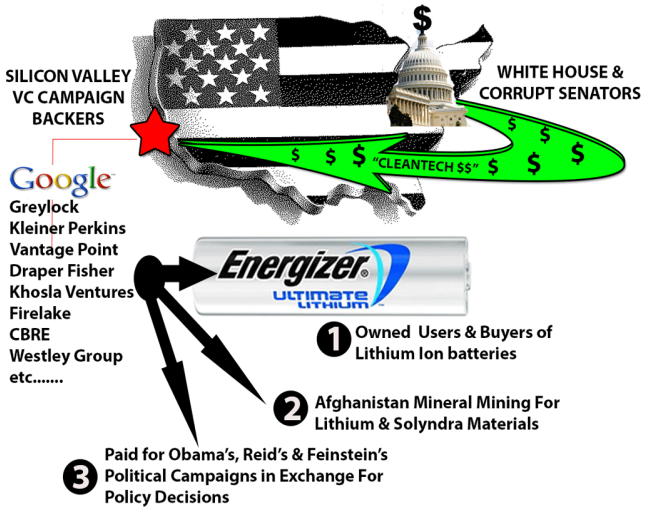
To unsubscribe to DOE's press release distribution list, please send a plain-text email to listserv@ml1.hqadmin.doe.gov with the following command in the body of the email: Unsubscribe DOENEWS firstname lastname.

the potential to increase US fuel efficiency dramatically over the next several years.

Tesla Model S Plunges Off Cliff, Catches Fire, Fatality Reported



Are you SUFFERING from TESLA MOTORS ANAL ITCHING caused by high frequency seat vibration



3 Tesla Employees Killed in Plane Crash | WIRED

www.wired.com/2010/02/plane-crash-kills-tesla-employees

3 Tesla Employees Killed in Plane Crash SUBSCRIBE. Search. Business; Design; Entertainment; Gear; Science; Security; Photo; ... Wired Staff; RSS;

3 Tesla workers killed in Calif. plane crash - US news ...

www.nbcnews.com/.../t/tesla-employees-killed-calif-plane-crash

A small plane crashes in a residential neighborhood in East ... 3 Tesla employees killed in Calif. plane crash ... Tenn. plane crash devastates Kansas ranching ...

Videos of 3 tesla staff killed in plane crash

bing.com/videos

3 Tesla Motors Employees Kil...	3 TESLA EMPLOYEES ...	3 Tesla Motors Employees Re...	3 Tesla Employees Di...
Mashable	YouTube	treehugger.com	YouTube

See more videos of 3 tesla staff killed in plane crash

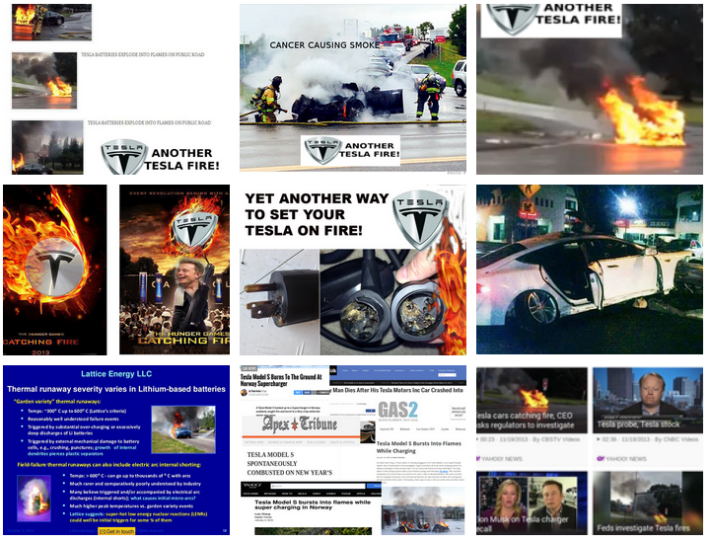
3 Tesla employees killed in California plane crash

www.autonews.com/article/20100217/OEM02/100219869/3-tesla...

Three employees of Tesla Motors were killed in a small airplane crash in northern California today, ... Tesla CEO Elon Musk confirmed all had worked at the company.

URGENT: 3 Tesla Motors employees killed in plane crash

www.presstelegram.com/technology/20100217/urgent-3-tesla-motors...



Marin County Tesla driver who died in crash off Hwy. 1 cliff ...

So, Elon's earlier joke about someone probably having to drive it off a cliff to die in a Tesla has finally come to pass. Sad. Worse yet if it was intentional.

teslamotors.com/forum/forums/marin-county-tesla-driver-wh...

Drove it off a cliff and still avoided injury | Forums ...

Tesla Tour; Forums; Stores; Service Centers; Superchargers; Contact; Order Your Tesla; What to Expect; ... He shared the story of the crash in Mexico where the driver, ... It suggests that you theoretically could make a car that could drive off a cliff of any height and still be survivable.

teslamotors.com/en_GB/forum/forums/drove-it-cliff-and-sti...

Driver of Tesla who drove off cliff identified :: SFBay | San ...

Driver of Tesla who drove off cliff identified. By ... The Sonoma County coroner's office has identified a driver of a Tesla found at the bottom of a cliff along ... California Highway Patrol officials said. Emergency responders found a 2014 Tesla at the bottom of the cliff with ...

sfbay.ca/2014/12/31/driver-of-tesla-who-drove-off-...

Tesla's stock drives itself off a cliff | America's Markets

Tesla's stock drives itself off a cliff. By: Matt Krantz October 10, 2014 11:30 am. SHARE ON FACEBOOK. SHARE ON TWITTER TWEET. SHARE ON SMS. SHARE ON WHATSAPP. EMAIL Getty. Editor's Note: An

Tesla driver who killed Santa Cruz bicyclist: I fell asleep ...

Tesla driver who killed Santa Cruz bicyclist: I fell asleep. ... 40, of Santa Cruz. VIDEO: Tesla driver strikes, kills cyclist on Highway 1. The deadly accident happened on a bright, sunny Saturday at 11:30 a.m.

ksbw.com/news/central-california/santa-cruz/santa-...

CHP: Dozing driver struck, killed bicyclist north of Santa Cruz

The driver of the black 2013 Tesla S has not been arrested, ... Alper had been cycling with three people. Two of them were far in front of him and one person was far behind and none of them saw ... Alper is one of a handful of cyclists killed in Santa Cruz County in recent years. Joshua ...

santacruzsentinel.com/general-news/20131104/chp-dozing-driver-s...

accident with cyclist in Santa Cruz - Tesla Motors Club

Very sad story about a cyclist killed when struck by Tesla Model S: Santa Cruz cyclist struck by ... Very sad story about a cyclist killed when struck by Tesla Model S: Santa Cruz cyclist struck by motorist on Hwy. 1 ... the Tesla's driver went up and down the dirt embankment ...

teslamotorsclub.com/showthread.php/23418-accident-with-cyclis...

Tesla Motors named in fatal bike crash suit in Santa Cruz ...

SANTA CRUZ -- A 63-year-old Tesla driver from Santa Cruz, ... "If you or I drove across Highway 1 and into the bushes, then steered straight back on to the highway and killed somebody, we would have been hauled off to jail in handcuffs," O'Reilly said.

mercurynews.com/crime-courts/ci_25076376/tesla-motor-co-n...

Cyclelicious » Cyclist killed by Tesla in Santa Cruz County

My condolences to his friends and loved ones. A 40 year old Santa [...] Cyclelicious; About; Shop; ... A 40 year old Santa Cruz resident was killed after he was hit in a head on collision with a Tesla Model S on Saturday morning. ... "Cyclist killed by Tesla driver ...

cyclelicio.us/2013/cyclist-killed-by-tesla-in-santa-cru...

Driver of Tesla who drove off cliff identified :: SFBay | San ...

TESLA TRUTH TICKET:

**Do you know what people are thinking of you when they see you driving this Tesla car?:
" What an arrogant elitist", " What a 1%er!", "How could they be so uninformed!",
"Why would they want to drive the poster car of corruption", Look it's a Solyndra-mobile",
"Who is that dick?"**

Do you want that?

Why would you drive a car that makes everyone sneer at you and think you are a bad person?

**Have you not been reading the news?:
The lithium ion batteries under the entire floorboard of this car can go up in flames, for no reason, at any moment. Tesla has published private patent papers saying they knew this but they did not tell you.**

The company is based on nearly free federal money they got by bribing Washington officials to get your tax dollars to make profits for a billionaire and bankers who did not need the money.

You can get a Nissan Leaf or many other, non-tainted, electric cars that do the same thing for about $20,000 without feeling like a loser.

The founders of Tesla were kicked out in a hostile take-over. You are supporting evil-doers, not innovators, by owning this car.

The company owes more money than it can pay back, nobody is buying the cars in any amount that counts, they are just using their VC money to keep the company looking like it is alive to avoid political embarrassment. Relative to the amount of money invested, they have sold less cars than any car company in history after 10 years of trying to sell a non-innovative thing. They won't be around much longer. The real numbers (not the ones in their fake accounting) don't lie.

Give the car back, get your money back. Others are cancelling their reservations. Don't be stuck with an albatross that ruins your personal AND family brand by associating you with creeps.

All this information is plainly visible in an online search.

(This ticket is being placed on every Tesla in the world by concerned neighbors in your community and others. If you care about truth, please copy this and place it on other Tesla's)

U.S. DEPARTMENT OF ENERGY

Advanced Technology Vehicles Manufacturing Loan Program

Effective Date: April 13, 2010

**GUIDANCE FOR APPLICANTS TO
ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM**

The U.S. Department of Energy's Advanced Technology Vehicles Manufacturing Loan Program (ATVMLP) was established under Section 136 of the Energy Independence and Security Act of 2007. Its purpose is to arrange loans from the U.S. Department of Treasury's Federal Financing Bank to eligible manufacturers of advanced technology vehicles (ATVs) and ATV components. This memorandum provides guidance to ATV req The Fina am Inte

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b) **Financial Viability**. The applicant must be financially viable without the receipt of additional federal funding for the proposed project other than the ATVMLP loan. This requires a determination by the ATVMLP that (i) there is a reasonable prospect that the applicant will be able to pay principal and interest as and when due under the ATVMLP loan and (ii) the applicant has a net present value that is positive, taking all costs, existing and future, into account. 10 CFR 611.100(c) sets forth some of the factors considered by the ATVMLP in determining the applicant's financial viability.

2) **Eligible Project**. The proposed project to be financed with the ATVMLP loan must consist of either (1) the reequipping, expanding or establishing of a manufacturing facility located in the United States which will produce ATVs or ATV components or (2) engineering integration performed in the United States for ATVs or ATV components.

1) **Eligible Applicant.** The applicant must be an ATV manufacturer or ATV component manufacturer States for ATVs or ATV components

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4) **Eligible Costs**. The ATVMLP loan can only be used to reimburse the applicant for (i) costs that are reasonably related to reequipping, expanding or establishing a manufacturing facility in the United States or (ii) costs of engineering integration performed in the United States. Such costs cannot have been incurred before substantial completion of the application. The ATVMLP loan cannot be used to reimburse the applicant for costs associated with vehicle variants that are not ATVs.

compliance date is available is at least equal to the adjusted average fuel economy of the applicant's fleet for model year 2005. If the applicant is an ATV manufacturer that

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6) **Fees**. At the financial closing date, the applicant must pay a fee equal to 0.1% of the principal amount of the ATVMLP loan. The ATVMLP may also require the applicant to pay certain customary administrative or collateral agency fees.

tment

letter to an applicant that is an ATV component manufacturer, the applicant must demonstrate to the satisfaction of the ATVMLP that the ATV component will be installed in an ATV.

(12) **United States Patent**
Rawlinson

(10) **Patent No.: US 8,286,743 B2**
(45) **Date of Patent: Oct. 16, 2012**

(54) **VEHICLE BATTERY PACK BALLISTIC SHIELD**

(75) Inventor: **Peter Dore Rawlinson**, Playa Del Rey, CA (US)

(73) Assignee: **Tesla Motors, Inc.**, Palo Alto, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/311,435**

(22) Filed: **Dec. 5, 2011**

(65) **Prior Publication Data**

US 2012/0160088 A1 Jun. 28, 2012

Related U.S. Application Data

(63) Continuation of application No. 13/311,343, filed on Dec. 5, 2011.

(60) Provisional application No. 61/426,254, filed on Dec. 22, 2010.

(51) **Int. Cl.**
B60R 16/04 (2006.01)

(52) **U.S. Cl.** **180/68.5**

(58) **Field of Classification Search** 180/68.5; 429/96, 400; 105/51; 224/400; 248/500
See application file for complete search history.

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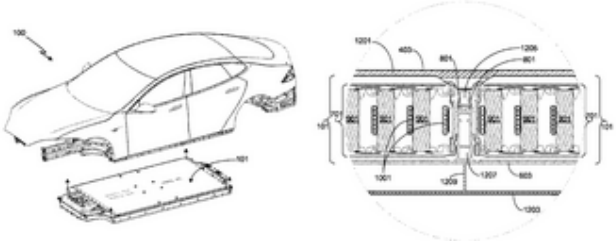
WO WO 2012065393 A1 * 5/2012

Primary Examiner — Hau Phan
Assistant Examiner — Jacob Meyer
(74) *Attorney, Agent, or Firm* — Patent Law Office of David G. Beck

(57) **ABSTRACT**

An improved protection system for a battery pack mounted between the passenger cabin floor panel of an electric vehicle and the driving surface is provided, the system utilizing a ballistic shield mounted under the electric vehicle and interposed between the battery pack enclosure and the driving surface, where the ballistic shield is spaced apart from the enclosure bottom panel. A layer of a compressible material may be interposed between the ballistic shield and the battery pack enclosure.

20 Claims, 14 Drawing Sheets

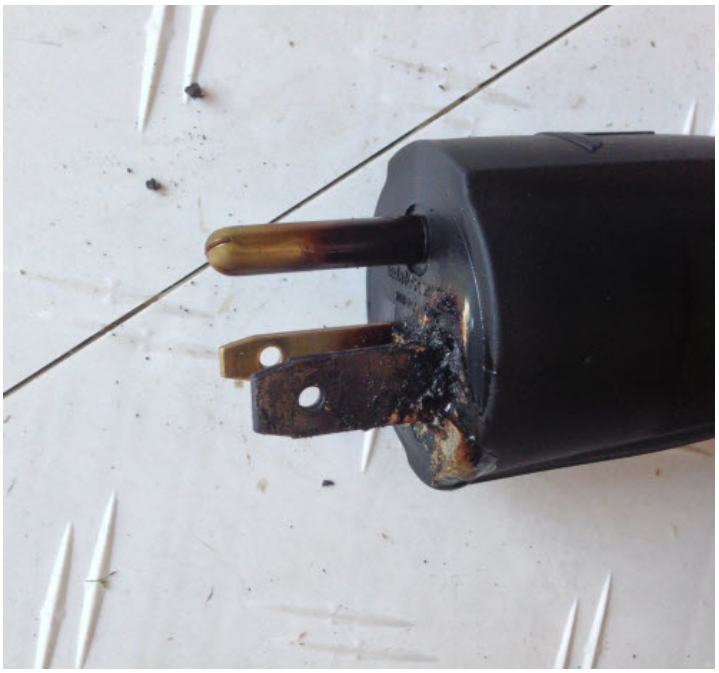


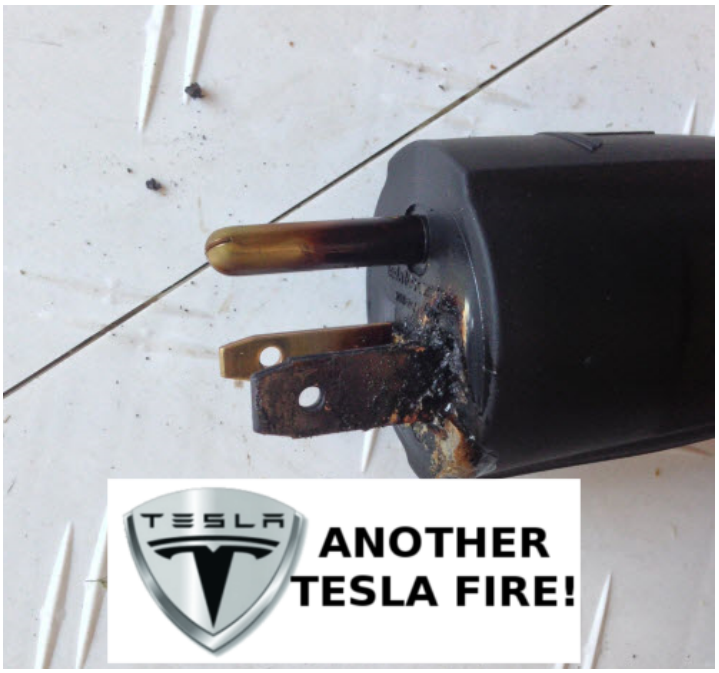
Elon Musk: Government's $5 Billion Man

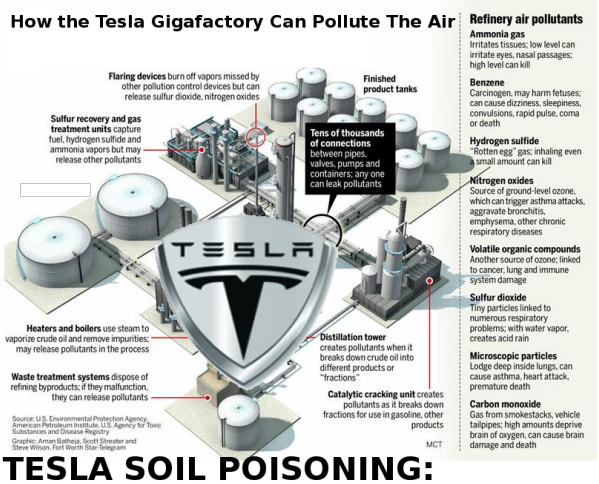
83 Comments

06/05/2015 06:48 PM ET

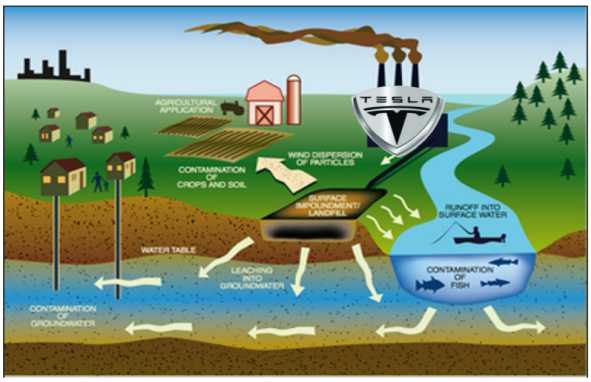
Capitalism 2015: In corporate finance today, the theme is "Go where the money is." For Elon Musk, CEO of Tesla, SolarCity and SpaceX, the place to hunt for cash isn't Wall Street or even Silicon Valley. It's Washington, D.C.

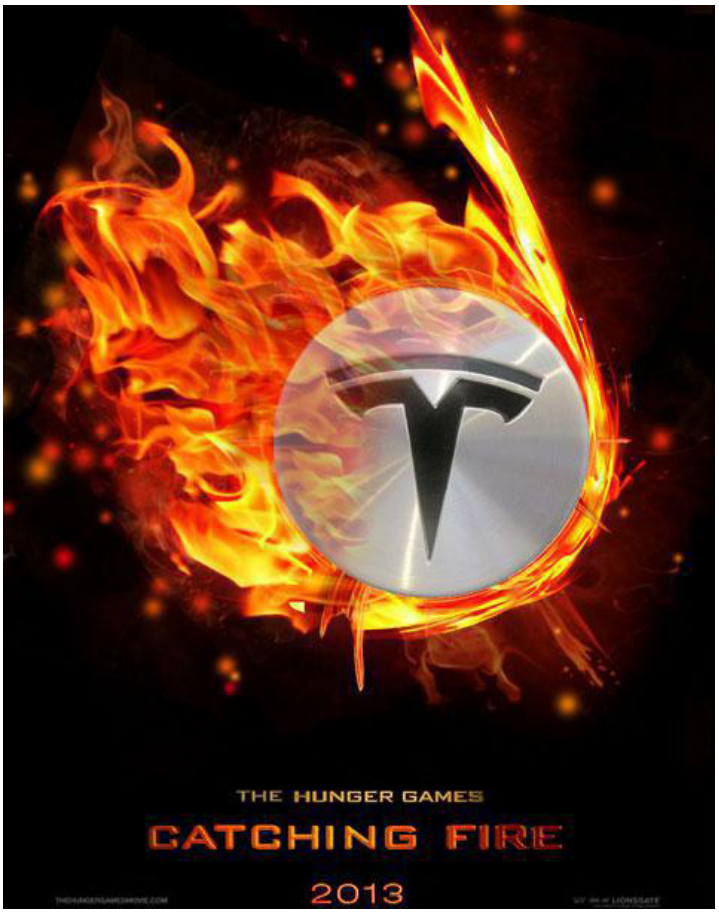






TESLA SOIL POISONING:





Lattice Energy LLC

Key take-aways

- ✓ In July 2010, Lattice began to issue public warnings about thermal runaway risks with large, scaled-up Lithium-based battery packs; on Slide #54 in an August 6, 2013 Lattice presentation subtitled "A Fool's Paradise" we questioned whether Tesla's engineering had solved problematic runaway issues, or whether they had just been lucky - so far
- ✓ October 1, 2013 fire incident (really a form of battery runaway) with Tesla Model S that occurred near Seattle, WA suggests that they had merely been lucky to date --- battery thermal runaway issues have not yet been truly solved by Tesla Motors or anyone else
- ✓ As seen in the progression of news stories quoted from herein, Tesla began the news cycle by trying to assert that the battery pack had nothing to do with the hot fire that consumed the front end of a $70,000 car. By Wednesday evening they finally admitted that the battery was in fact the culprit, but that the incident had been triggered by the vehicle's impact with "metal debris" that had been lying on the road surface and that consequent mechanical damage to battery cells triggered the thermal runaway fire event; they are emphatically asserting that the battery did not catch fire spontaneously
- ✓ While Tesla's theory of the incident is plausible, it is inconsistent with statements made by the highway patrol officer --- trained to be keenly observant --- who first investigated the accident scene and found no evidence whatsoever of any claimed "metallic debris"
- ✓ Unless conclusive physical evidence is revealed that proves otherwise, Lattice believes it is more likely that the fire was caused by a spontaneous heat-event inside the battery

Lattice Energy LLC

Tesla Motors Model S car catches fire on road

Incident occurred on October 1, 2013 near Seattle, WA

While nothing is totally conclusive yet, circumstances are suspicious re battery

Large Lithium-based EV batteries are potentially risky

Lewis Larsen
President and CEO
Lattice Energy LLC
October 3, 2013

abcNEWS

Tesla Stock Tumbles After Model S Catches Fire

SEATTLE October 3, 2013 (AP)

By MIKE BAKER Associated Press

AP

Shares of electric car company Tesla sank more than 6 percent Wednesday after an Internet video showed flames spewing from one of the company's vehicles near Seattle.

Source: http://www.king5.com/news/local/Tesla-stock-tumbles-after-Model-S-catches-fire-near-Seattle-226207191.html

Contact: 1-312-861-0115
lewisglarsen@gmail.com
http://www.slideshare.net/lewisglarsen

Lattice Energy LLC

Thermal runaway severity varies in Lithium-based batteries

"Garden variety" thermal runaways:

- Temps: ~300° C up to 600° C (Lattice's criteria)
- Reasonably well understood failure events
- Triggered by substantial over-charging or excessively deep discharges of Li batteries
- Triggered by external mechanical damage to battery cells, e.g., crushing, punctures; growth of internal dendrites pierces plastic separators

Field-failure thermal runaways can also include electric arc internal shorting:

- Temps: > 600° C - can go up to thousands of ° C with arcs
- Much rarer and comparatively poorly understood by industry
- Many believe triggered and/or accompanied by electrical arc discharges (internal shorts); what causes initial micro-arcs?
- Much higher peak temperatures vs. garden variety events
- Lattice suggests: super-hot low energy nuclear reactions (LENRs) could well be initial triggers for some % of them

October 3, 2013 Lattice Energy Get in touch rights reserved 18

Important Safety Recall Notice Regarding Your Universal Mobile Connector NEMA 14-50 Adapter

Dear Model S Owner,

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

REASON FOR THIS RECALL

Tesla Motors has decided that a defect which relates to motor vehicle safety exists in your Tesla Model S vehicle. Under increased electrical resistance circumstances, the NEMA 14-50 adapter for the Universal Mobile Connector (UMC) provided with your Model S vehicle, or the electrical wall receptacle, could overheat. An overheated adapter or wall outlet could impact the UMC cord as well and result in an increased risk of burn injury and/or fire.

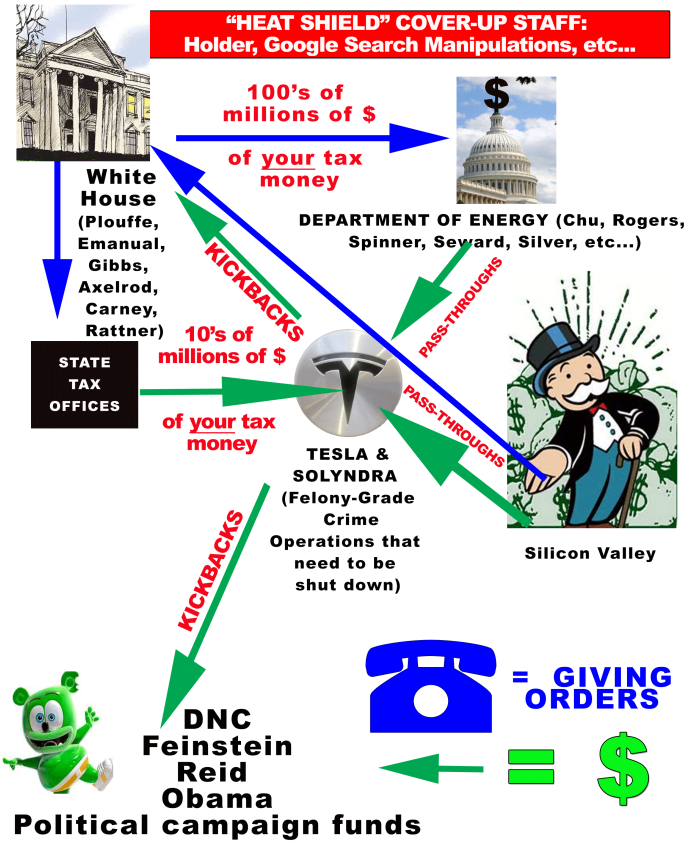
WHAT TESLA MOTORS WILL DO

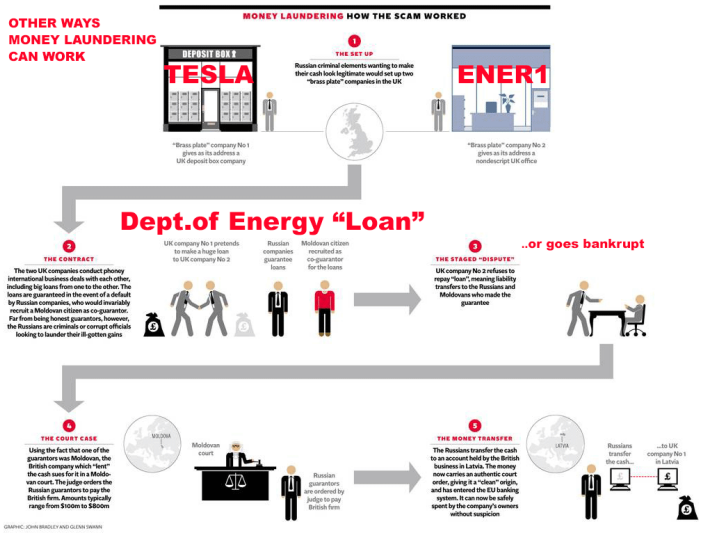
First, Tesla Motors has developed a software update that allows the Model S onboard charging system to detect any unexpected fluctuations in the input power or higher resistance connections to the vehicle. If detected, the onboard charging system automatically reduces the charging current by 25%. For example, this reduces a 40 amp charge rate to 30 amps. This dramatically reduces the heat generated in any high resistance connections outside of the vehicle.

Second, Tesla is replacing the NEMA 14-50 adapters with ones of an improved design. Tesla will begin mailing the new adapters in the next two weeks. New adapters can be readily distinguished by the grey connector face as shown in the picture below.

READ THE PUBLIC TESLA MOTORS SAFETY REPORT

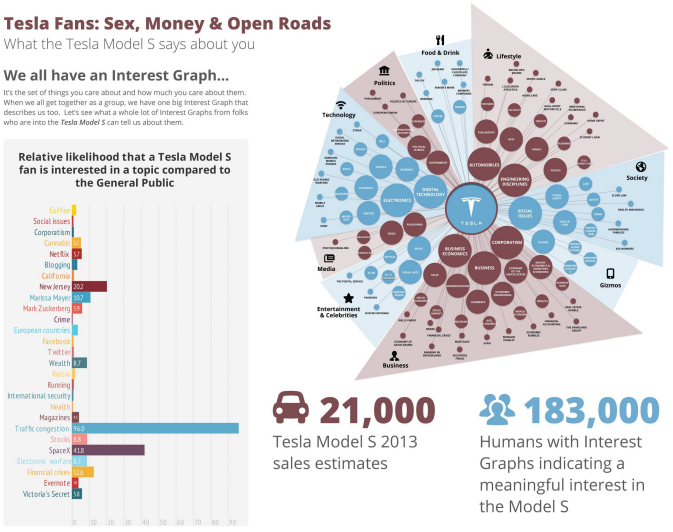
THE TESLA TAX MONEY SCAM

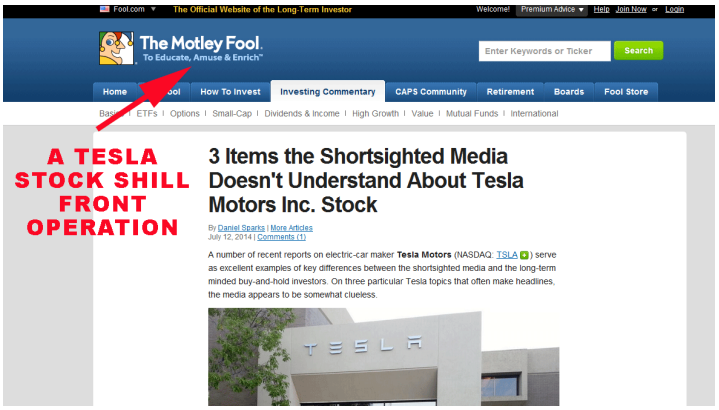




Studies prove: Tesla drivers like more drugs and twisted sex

in addition to *severe douche-baggery!*

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To Educate, Amuse & Enrich
Enter Keywords or Ticker
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How To Invest
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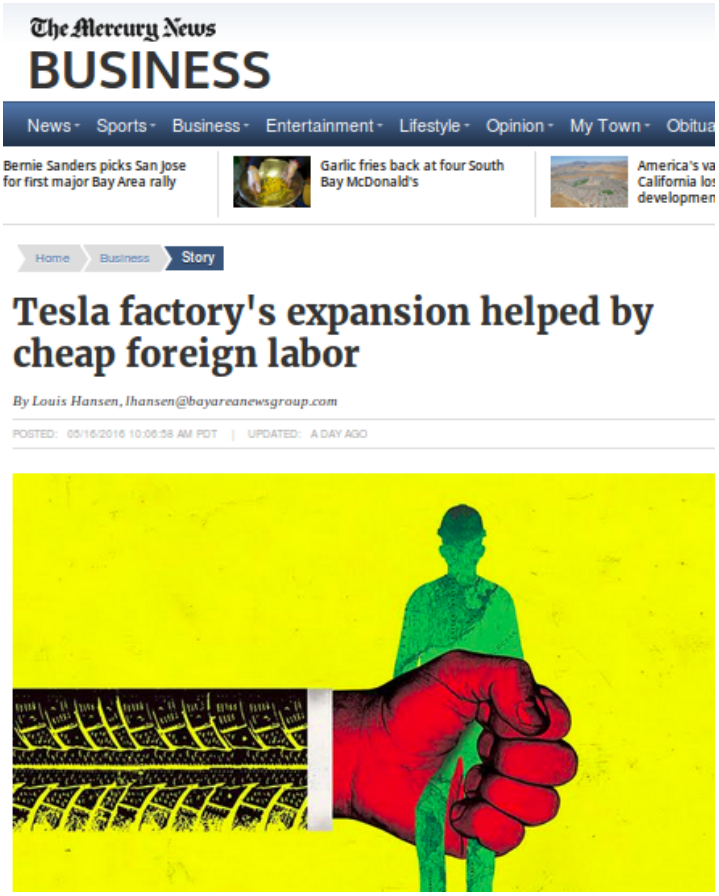
Fool Store
ETFs | Options | Small-Cap | Dividends & Income | High Growth | Value | Mutual Funds | International
A TESLA STOCK SHILL FRONT OPERATION
3 Items the Shortsighted Media Doesn't Understand About Tesla Motors Inc. Stock
By Daniel Sparks | More Articles
July 12, 2014 | Comments (1)
A number of recent reports on electric-car maker Tesla Motors (NASDAQ: TSLA) serve as excellent examples of key differences between the shortsighted media and the long-term minded buy-and-hold investors. On three particular Tesla topics that often make headlines, the media appears to be somewhat clueless.
TESLA


TESLA
MODEL S
MARSH MALLOW
H.Payne ©2015 Universal UClick/GoComics.com/hpayne@detnews.com


The Mercury News
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Bernie Sanders picks San Jose for first major Bay Area rally
Garlic fries back at four South Bay McDonald's
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Home
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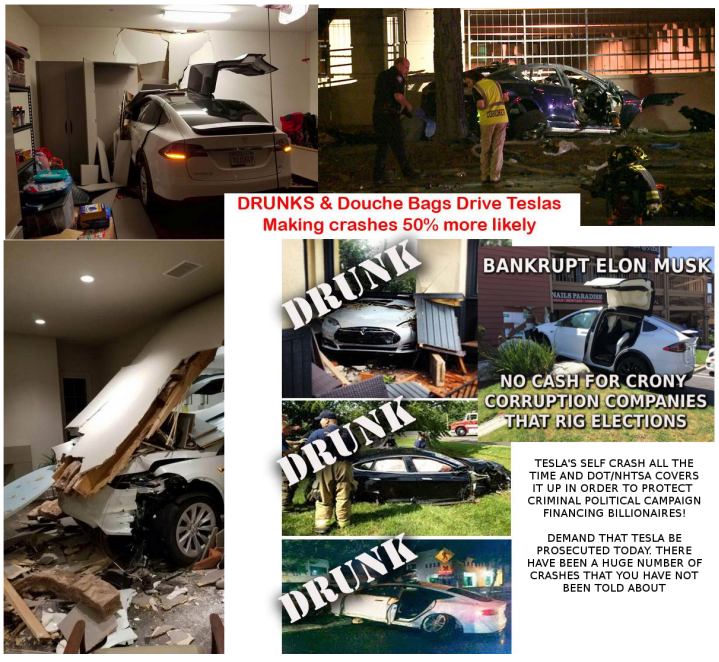
Story
Tesla factory's expansion helped by cheap foreign labor
By Louis Hansen, lhansen@bayareanewsgroup.com
POSTED: 05/16/2016 10:06:38 AM PDT | UPDATED: A DAY AGO

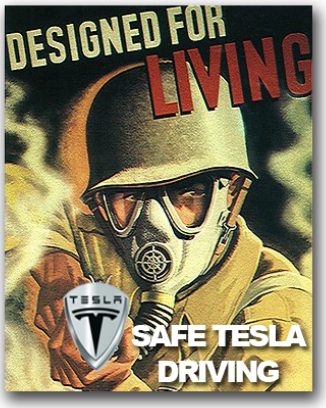

DRUNKS & Douche Bags Drive Teslas
Making crashes 50% more likely
DRUNK
DRUNK
DRUNK
BANKRUPT ELON MUSK
NO CASH FOR CRONY CORRUPTION COMPANIES THAT RIG ELECTIONS
TESLA'S SELF CRASH ALL THE TIME AND DOT/NHTSA COVERS IT UP IN ORDER TO PROTECT CRIMINAL POLITICAL CAMPAIGN FINANCING BILLIONAIRES!
DEMAND THAT TESLA BE PROSECUTED TODAY. THERE HAVE BEEN A HUGE NUMBER OF CRASHES THAT YOU HAVE NOT BEEN TOLD ABOUT


TESLA


TRAVESTY


TESLA
IS HOT

TOXIC FUMES FROM TESLA FIRES

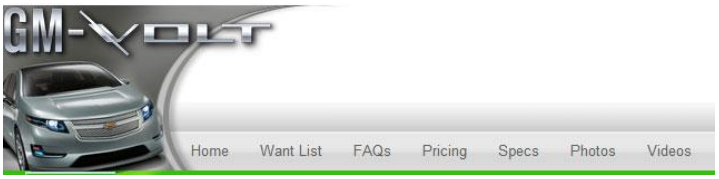


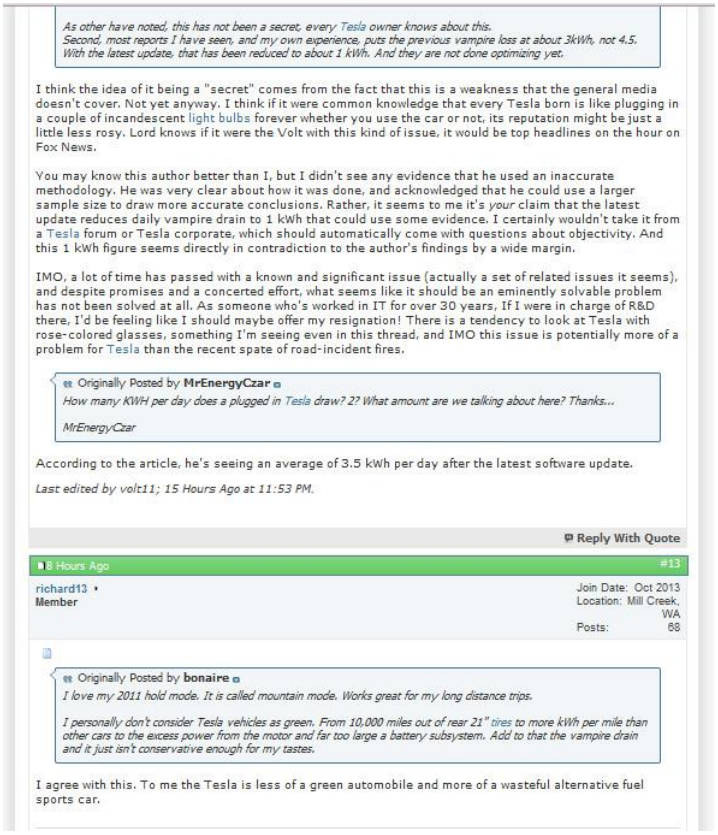
Fired **Tesla employee** sues company, **wins** - Silicon Valley ...
An early **Tesla employee** this week won a wrongful termination **lawsuit** against the company, reportedly walking away with $207,000 in damages.
bizjournals.com/sanjose/news/2013/04/18/fired-tesla-emplo...

How We See It - Top Gear **Lawsuit** | Forums | **Tesla** Motors
On March 29 2011, **Tesla** filed a **lawsuit** to stop Top Gear's continued rebroadcasts of an episode containing malicious falsehoods about the **Tesla** Roadster.
teslamotors.com/forum/forums/how-we-see-it-top-gear-lawsuit

Tesla Motors Sued By Car Dealers - Slashdot
An anonymous reader writes "Car dealers in New York and Massachusetts have filed a **lawsuit** that seeks to block **Tesla** from selling its pricey electric vehicles in those states. The dealers say they are defending state franchise laws, which require manufacturers to sell cars through dealers they ...
news.slashdot.org/story/12/11/10/154211/tesla-motors-sued-b...

Top Gear Responds to **Tesla's Lawsuit** | WIRED
Andy Wilman, the executive producer of Top Gear, shares his thoughts on **Tesla** Motors' libel **lawsuit** against the popular BBC program in this piece written for Jalopnik.
wired.com/2011/04/top-gear-responds-to-teslas-lawsuit/





As other have noted, this has not been a secret, every Tesla owner knows about this.
Second, most reports I have seen, and my own experience, puts the previous vampire loss at about 3kWh, not 4.5.
With the latest update, that has been reduced to about 1 kWh. And they are not done optimizing yet.

I think the idea of it being a "secret" comes from the fact that this is a weakness that the general media doesn't cover. Not yet anyway. I think if it were common knowledge that every Tesla born is like plugging in a couple of incandescent light bulbs forever whether you use the car or not, its reputation might be just a little less rosy. Lord knows if it were the Volt with this kind of issue, it would be top headlines on the hour on Fox News.

You may know this author better than I, but I didn't see any evidence that he used an inaccurate methodology. He was very clear about how it was done, and acknowledged that he could use a larger sample size to draw more accurate conclusions. Rather, it seems to me it's *your* claim that the latest update reduces daily vampire drain to 1 kWh that could use some evidence. I certainly wouldn't take it from a Tesla forum or Tesla corporate, which should automatically come with questions about objectivity. And this 1 kWh figure seems directly in contradiction to the author's findings by a wide margin.

IMO, a lot of time has passed with a known and significant issue (actually a set of related issues it seems), and despite promises and a concerted effort, what seems like it should be an eminently solvable problem has not been solved at all. As someone who's worked in IT for over 30 years, If I were in charge of R&D there, I'd be feeling like I should maybe offer my resignation! There is a tendency to look at Tesla with rose-colored glasses, something I'm seeing even in this thread, and IMO this issue is potentially more of a problem for Tesla than the recent spate of road-incident fires.

Originally Posted by **MrEnergyCzar**
How many KWH per day does a plugged in Tesla draw? 2? What amount are we talking about here? Thanks...

MrEnergyCzar

According to the article, he's seeing an average of 3.5 kWh per day after the latest software update.

Last edited by volt11; 15 Hours Ago at 11:53 PM.

Reply With Quote

8 Hours Ago #13

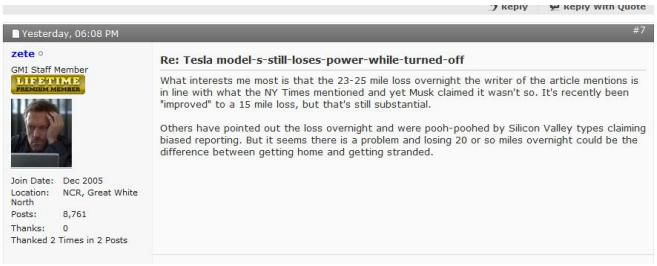
richard13 •
Member

Join Date: Oct 2013
Location: Mill Creek, WA
Posts: 68

Originally Posted by **bonaire**
I love my 2011 hold mode. It is called mountain mode. Works great for my long distance trips.

I personally don't consider Tesla vehicles as green. From 10,000 miles out of rear 21" tires to more kWh per mile than other cars to the excess power from the motor and far too large a battery subsystem. Add to that the vampire drain and it just isn't conservative enough for my tastes.

I agree with this. To me the Tesla is less of a green automobile and more of a wasteful alternative fuel sports car.



Yesterday, 06:08 PM #7

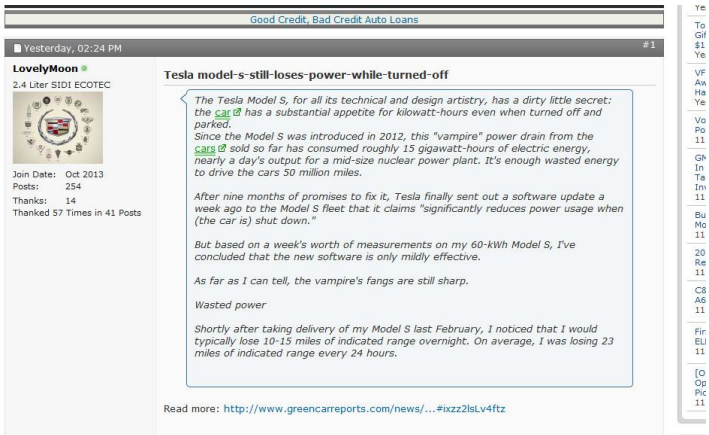
zete
GM Staff Member
LIFETIME Premium Member

Join Date: Dec 2005
Location: NCR, Great White North
Posts: 8,761
Thanks: 0
Thanked 2 Times in 2 Posts

Re: Tesla model-s-still-loses-power-while-turned-off

What interests me most is that the 23-25 mile loss overnight the writer of the article mentions is in line with what the NY Times mentioned and yet Musk claimed it wasn't so. It's recently been "improved" to a 15 mile loss, but that's still substantial.

Others have pointed out the loss overnight and were pooh-poohed by Silicon Valley types claiming biased reporting. But it seems there is a problem and losing 20 or so miles overnight could be the difference between getting home and getting stranded.



Yesterday, 02:24 PM #1

LovelyMoon
2.4 Liter SIDI ECOTEC

Join Date: Oct 2013
Posts: 254
Thanks: 14
Thanked 57 Times in 41 Posts

Tesla model-s-still-loses-power-while-turned-off

The Tesla Model S, for all its technical and design artistry, has a dirty little secret: the car has a substantial appetite for kilowatt-hours even when turned off and parked.
Since the Model S was introduced in 2012, this "vampire" power drain from the cars sold so far has consumed roughly 15 gigawatt-hours of electric energy, nearly a day's output for a mid-size nuclear power plant. It's enough wasted energy to drive the cars 50 million miles.

After nine months of promises to fix it, Tesla finally sent out a software update a week ago to the Model S fleet that it claims "significantly reduces power usage when (the car is) shut down."

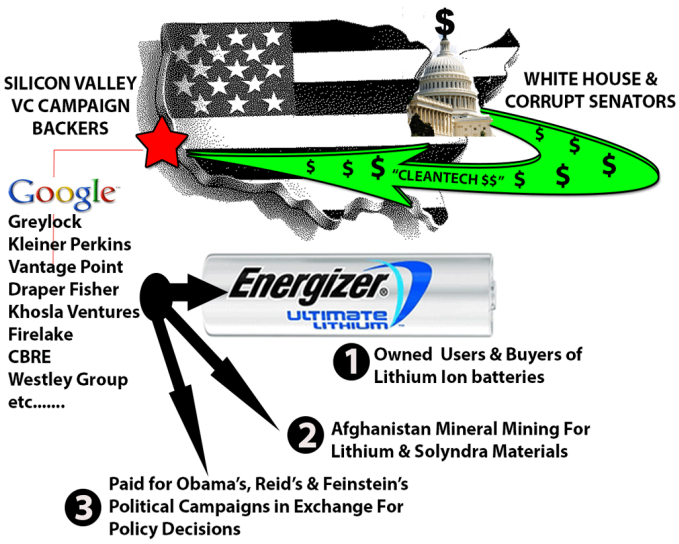
But based on a week's worth of measurements on my 60-kWh Model S, I've concluded that the new software is only mildly effective.

As far as I can tell, the vampire's fangs are still sharp.

Wasted power

Shortly after taking delivery of my Model S last February, I noticed that I would typically lose 10-15 miles of indicated range overnight. On average, I was losing 23 miles of indicated range every 24 hours.

Read more: http://www.greencarreports.com/news/...#ixzz2lsLv4ftz



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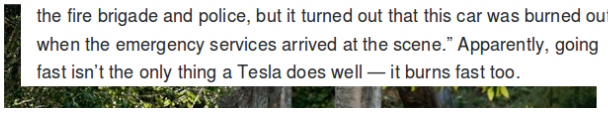
Tesla Model S bursts into flames while super charging in Norway

Lulu Chang
Digital Trends
January 2, 2016

that a car was on fire near a café on Brokelandsheia. We came out with the fire brigade and police, but it turned out that this car was burned out when the emergency services arrived at the scene." Apparently, going fast isn't the only thing a Tesla does well — it burns fast too.



AFGHANI-SCAM

"Afghani-Scam" Blood For Batteries: Feature Story

printable version - fixed-width version

Afghanistan | U.S.

"DIRTY" CRIMES FOR "CLEAN" ENERGY: THE AFGHANISTAN LITHIUM SCAM
by Lucreta Munoz
Sunday Jun 21st, 2015 5:35 PM

"DIRTY" CRIMES FOR "CLEAN" ENERGY: THE AFGHANISTAN LITHIUM SCAM

Latest case assessment summary:
At this point, enough evidence has accumulated to clearly prove that a mining scam was underway involving trillions of dollars of lithium, which Tesla, John Doerr and the Silicon Valley Cartel, 1.) clearly acquired the monopoly ownership of, 2.) at exactly the right moment to time it to the Afghan War, 3.) and place their associate: Steven Chu in office, 4.) and arrange the Dept. of Energy exclusive cash give-aways and 5.) tie in with Goldman Sachs commodity rigging which every suspect has now been shown to have had an operational hand in, and financial & political benefit from.

Afghanistan: The Saudi Arabia of Lithium?

Lithium, which is ... from mobile phon... nation's economy.

By JAMES RISEN
Published: June 13, 2010

WASHINGTON — The United States has discovered nearly $1 trillion in untapped mineral deposits in Afghanistan, far beyond any previously known reserves and enough to fundamentally alter the

As of late Februar... held Ener1 Group ... loan to Think Global, which is trying to emerge from bankruptcy — is held by Bzinfin, a British Virgin Islands company whose "indirect beneficial owner" is Boris Zingarevich, a Russian businessman. Zingarevich has close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin.

Investing in Lithium Mining Stocks
How To Profit from the Lithium Boom
By Brian Hicks
Friday, October 16th, 2009
Editor's Note:
While Western Lithium remains ... trades — and possibly a third ... opportunity to double if not trip...

Green power corrupts

Goldman Sachs culture 'toxic'? Letter confirms suspicions about Wall Street.

A123 lithium-ion battery maker bankruptcy fuels criticism of President Barack Obama's alternativ...

Energy & Genius
The Saudi Arabia of Lithium
Brendan I. Koerner, 10.30.08, 06:00 PM EST
Forbes Magazine dated November 24, 2008
The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the...

Ener1 Wants to Win Lithium Ion Battery Race

U.S. Identifies Vast Mineral Riches in Afghanistan

The problem with lithium
David Booth, National Post

RUSSIAN OWNED

Goldman Sachs discloses ownership in Talison Lithium Corp.

chloride ring SQM ... creating the illusio... the ultra-arid sala...

Image: CarSpace

Lithium ion battery manufacturer Ener1 (IEV) could become the country's first lithium ion bat... mass producer–if it wins a $480M Department of Energy loan. CNNMoney has more:

At this point, enough evidence has accumulated to clearly prove that a mining scam was underway involving trillions of dollars of lithium, which Tesla, John Doerr and the Silicon Valley Cartel, 1.) clearly acquired the monopoly ownership of, 2.) at exactly the right moment to time it to the Afghan War, 3.) and place their associate: Steven Chu in office, 4.) and arrange the Dept. of Energy exclusive cash give-aways and 5.) tie in with Goldman Sachs commodity rigging which every suspect has now been shown to have had an operational hand in, and financial & political benefit from.

Solyndra was staged to exploit indium and other related minerals from the same mining deal. Alas, the Afghan War failed, costing U.S. taxpayers (According to multiple news reports) over six trillion dollars, the Republicans found out about the "Cleantech Scam" and dissected it, almost all of the Cartel's pool of exploitation companies went out of business, the Russian portions went into cold war mode with their U.S. counter-parts and leaks from Dept. of Energy staff broke the cover-up. Senior Federal employees participated in, coordinated and benefitted from the crime.

How many Afghan farmers, soldiers and workers had to die to buy John Doerr his new mansion?

Why did federal employees get the profits from helping do this crime?

DiscoveryNews

Afghanistan: The Saudi Arabia of Lithium?

Lithium, which is used to make batteries for everything from mobile phones to iPads, could transform the war-torn nation's economy.

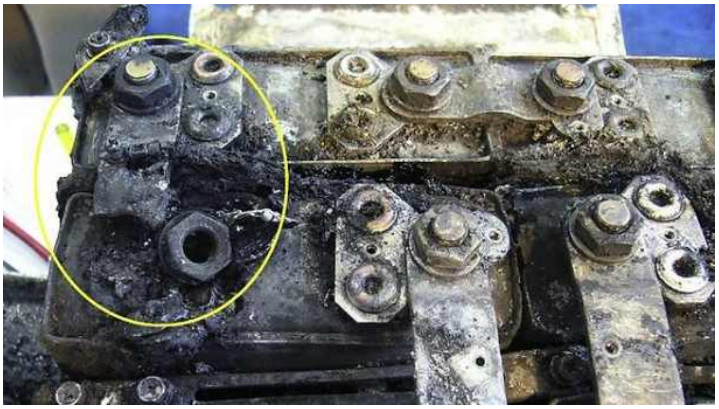
Mon Jun 14, 2010 12:25 PM ET
Content provided by Waheedullah Massoud, AFP
3 Comments | Leave a Comment

THE GIST

- Nearly $1 trillion of mineral wealth has been discovered in war-ravaged Afghanistan.
- Lithium, gold, iron and copper are among the minerals identified.
- Little has been exploited because the country has been mired in conflict for three decades.

enlarge

Aside from massive lithium stores, iron and copper deposits are also large enough to make Afghanistan one of the world's top producers. Click to enlarge this image.
AP Photo



THIS IS AN ACTUAL BOEING BATTERY

Keywords: Lithium ion battery, ionic liquid, electrolyte, safety, thermal stability

1. INTRODUCTION

Lithium ion batteries have been widely used on personal computers and mobile phones for their high-voltage, high-energy-density characteristics [1-4]. Especially, the rapidly need for cleanly resource and crisis of energy, lithium ion batteries attract more attention as the power source of electric and hybrid electric vehicles. However, Lithium ion batteries have not been large-scale applied to electric vehicles for the safety issues, the volatile and flammable organic solvent organic solvents is the main components of electrolytes in lithium ion batteries, the cases of flaming, smoking or thermal runaway caused by electrolytes are the main reason for the safety problem. Therefore, electrolyte system, which has more stable features, is necessary to be found.

Panasonic **Product Information Sheet**

Panasonic Batteries
Panasonic Industrial Company
A Division of Panasonic Corporation of North America
5201 Tollview Drive, 1F-3
Rolling Meadows, IL 60008
Toll Free: 877-726-2228
Fax: 847-468-5750

Product: **Lithium-ion Batteries (Li-ion)**
Applicable models/sizes: **All Cylindrical and prismatic Lithium-ion Cobalt type batteries**

FIRE SAFETY
In case of fire, you can use dry chemical, alcohol resistant foam or carbon dioxide fire extinguishers. Cooling the exterior of the batteries will help prevent rupturing. Burning of these batteries will generate toxic fumes. Fire fighters should use self-contained breathing apparatus.

employees.
Because all of our batteries are defined as "articles", they are exempt from the requirements of the Hazard Communication Standard, hence a MSDS is not required.

The following components are found in a Panasonic Lithium Ion batter

Component	Material	Formula
Positive Electrode	Lithium Cobalt Oxide	$LiCoO_2$
Negative Electrode	Graphite	C
Electrolyte	Ethylene Carbonate - Solvent	$C_3H_4O_3$
	Diethyl Carbonate - Solvent	$C_5H_{10}O_3$
	Lithium Hexafurophosphate - Salt	$LiPF_6$

The overall reaction is: $Li_xC + Li_{1-x}CoO_2 \leftrightarrows C + LiCoO_2$

DISPOSAL
All Panasonic Lithium Ion batteries are classified by the federal government as non-hazardous waste and are safe for disposal in the normal municipal waste stream. These batteries, however, do contain recyclable materials and are accepted for recycling by the Rechargeable Battery Recycling Corporation's (RBRC) Battery Recycling Program. Please call 1-800-8-BATTERY for information on recycling your used Lithium Ion battery or go to the RBRC website at www.rbrc.org for additional information.

TRANSPORTATION
Effective October 1, 2008 all Panasonic lithium ion batteries are not subject to the requirements of the Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations, if shipped in compliance with 49 CFR 173.185 and Special Provision 188.

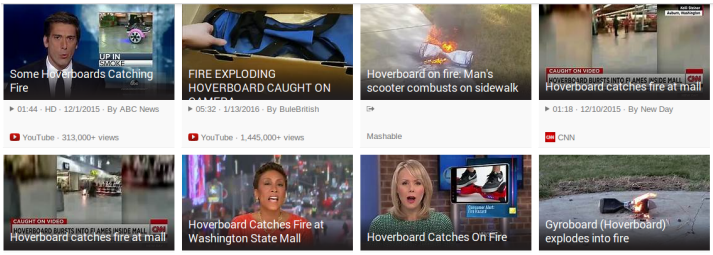
Currently all Panasonic lithium ion batteries can be transported under the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) under Special Provision A45. Effective January 1, 2009 Special Provision A45 will be replaced by Packing Instructions (PI) 965 (Batteries), PI 966 (Batteries, packed with equipment) and PI 967 (Batteries, contained in equipment).

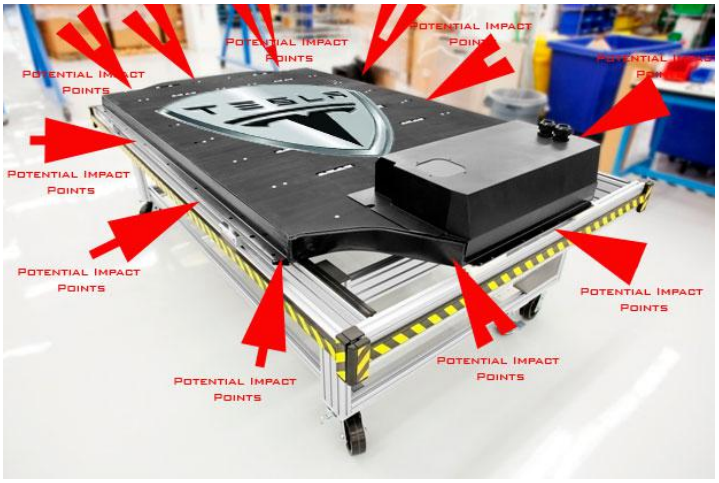
Currently all Panasonic lithium ion batteries are regulated by the International Maritime Organization (IMO) under Special Provisions 188 and 230. These regulations will stay in effect until January 1, 2010 when Special Provisions 188 and 230 will be updated.

If you build any of our lithium cells into a battery pack you must also assure that they are tested in accordance with the UN Model Regulations, Manual of Test and Criteria, Part III, subsection 38.3. If you plan on transporting any untested prototype battery packs contact your Panasonic Sales Representative for regulatory information.

Notice: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Panasonic Industrial Company makes no warranty expressed or implied.

Panasonic_Lion_H_info.doc Page 1 of 2





However, virtually everyone readily agrees that the world's current production of lithium -- approximately 20,000 tons -- is woefully short of what's needed if electric car production really takes off.

Argentina, Australia and Chile account for more than 50% of the world's lithium production; Russia also produces significant amounts.

But the real power player in the lithium market is Bolivia. Whether you take the pessimistic or optimistic estimate of its reserves, the South American country's Salar de Uyuni salt desert has about 40% of the world's lithium, so far untapped. Mitsubishi, which thinks electric car production will outstrip lithium supply as early as 2015, is already in talks with Bolivia about sourcing its lithium. Ditto Toyota, one of the few automakers producing its own batteries.

What makes Bolivia's position atop the lithium world truly ironic is that one of the United States' (and Europe's as well) primary objectives is to end its slavery to "foreign oil," particularly since some of its suppliers have "problematic" politics. Evo Morales, the President of Bolivia, while not nearly as controversial as Venezuela's Hugo Chavez, is nonetheless an ardent socialist and eager to ensure that South America's poorest nation is not again ravaged of its natural resources.

According to Time magazine, Morales is adamant that battery production--not just lithium mining -- becomes a source of revenue for his impoverished country.

So far, despite the potential for increased demand, development of Bolivia's lithium reserves has not proceeded rapidly. However, the incredible irony remains that the U. S. -- where growth in hybrid vehicles is strongest -- could be trading one unwanted South American source of energy --Venezuela -- for another.

The questions remain: Will there be enough lithium for electric cars? Will it be mined fast enough? No answer seems definitive. Besides, the predicted popularity of electric cars could just be an environmentalist's fantasy. Just as easily, battery technology could develop beyond the need for lithium, although, at the current rate of development, automakers seem committed to it for at least the medium-term future. Of course, we could have faith in the rosiest of mining/production estimates and assume all will go swimmingly no matter how many electric cars and laptop batteries are needed.

But I'm not paid to be an optimist. I'm a skeptic. And Lord knows, the world of electric cars could use less of the former and more of the latter.

comparatively light weight of lithium ion cells. Virtually all cellphone and laptop batteries use lithium as a core constituent. The much-ballyhooed but seldom-seem Tesla electric roadster uses more than 6,000 computer-sized batteries all mashed into one package. But whether they are the lithium cobalt batteries used in portable devices -- not very useful for automotive use because of their reputation for overheating -- or the newer lithium phosphate or lithium manganese formulations developed for cars, all use a base of lithium metal, which is most easily extracted from salt brine.

That might be a problem. There is already discussion of how much oil remains interred beneath the Earth's surface and whether we are already suffering shortages because of the peak oil problem -- essentially a theory stating that the amount of the world's oil reserves is irrelevant since we have already reached our maximum ability to easily extract it. Now there may be problems with how much lithium the Earth holds and how quickly it can be mined.

On the pessimistic side, there is William Tahil, author of the research paper The Trouble with Lithium, who estimates the world's lithium reserves at about four million tons. He claims the production of hybrid and electric cars will soon tax the world's production of lithium carbonate. At the other end of the spectrum is Keith Evans, who has released An Abundance of Lithium, a report estimating there are 28 million tons of the base metal to be had, plenty enough to go around. Somewhere in the middle of these two opposing viewpoints is the United States Geological Survey's somewhat dated estimate of 11 million tons.

Part of the discrepancy is due to how economical and easily each group thinks the mining of lithium will be, dividing their estimates between "reserves" (think of easily obtained Saudi Arabian oil literally bubbling to the surface) and the more difficult to process "base reserves" (think Canada's Athabasca Oil Sands). Even the optimistic Evans allows that, like oil, his more generous prediction is based on the price of lithium rising in order to make increased mining cost-effective. This is not good news to automakers since it's estimated that these new high-tech batteries already cost as much as US$10,000.

While existing mining levels are able to cope with current demand, there is no consensus on how many lithium-powered electric cars can be produced.

Tahil says any more than 1.5 million GM Volt-type vehicles annually would strain current production. SQM S. A., Chile's largest producer of lithium carbonate, says there is plenty for about five million electric vehicles. Evans predicts there's enough lithium for far more.

Bob Kruse, GM's executive director of Global Vehicle Engineering, also notes that some of the lithium in his company's new Chevy Volt will be recyclable, thereby reducing demand.

The discrepancies owe as much to the types of electric cars being produced -- fully electric cars need bigger batteries and, therefore, more lithium than hybrids -- as to the exact amount of the world's lithium stocks.

NATIONAL POST

Friday, May 1, 2009

The problem with lithium

David Booth, National Post

Pierre Verdy, AFP, Getty Images

How quickly we have forgotten. Yesterday's front-page headline is today's page 13 filler, consigned to the back of the newspaper as something sexier or more pressing forces its way to page one--above the fold.

The subject I'm talking about is oil, the pressing story before all the world's stock markets decided to simultaneously implode. We used to worry about the price of oil and when it would run out, and even non-petrochemical engineers understood the concept of "peak oil." But, whether alternative energy is still big news or not, this much is clear: The world's oil supply is finite, fossil-fuelled vehicles pollute and the public outcry for an alternative is strong.

The leading alternative right now -- if you judge technology by the amount of press generated -- is electric cars. Electric cars don't pollute, electrons are relatively cheap and, perhaps most importantly, these vehicles seem to have captured the imagination of the American consumer, still the greatest economic engine in the world.

Naturally, there are issues. Electric cars don't have the range that current gasoline-powered cars enjoy. Replenishing the onboard energy supply is problematic, taking anywhere from 30 minutes (with special equipment) to all day. There's also the small problem of the battery having to power both the car's engine and its various ancillary and convenience devices -- someday soon you may have to decide what's more important, air conditioning or getting to your final destination.

Then there's the least talked about problem on our road to electric transportation -- the source of all that power. I don't mean the massive amounts of additional electricity needed to power the approximately seven million cars a very optimistic Carlos Ghosn, Nissan's CEO, estimates will be sold annually by the year 2020 but the actual batteries that will store all those portable electrons. Just as we already have a problem with peak oil having caused last year's massive price spike at the pumps, there may be a similar paucity in the world's capacity to produce lithium, the miracle metal key to so many automakers' future plans for hybrid and electric vehicles.

This lightest metal in the periodic table was used primarily in the production of ceramics and high-temperature glass, not to mention anti-psychotic drugs. But, about two decades ago, it started gaining prominence as a material used for battery production, thanks to the relatively high energy density and

Applicant	DOE Award (Dollars in Millions)	Project Locations	Technology
Cell, Battery, and Materials Manufacturing Facilities			
Johnson Controls, Inc.	$299.2	Holland, MI Lebanon, OR (Entek)	Production of nickel-cobalt-metal battery cells and packs, as well as production of battery separators (by partner Entek) for hybrid and electric vehicles.
A123 Systems, Inc.	$249.1	Romulus, MI Brownstown, MI	Manufacturing of nano-iron phosphate cathode powder and electrode coatings; fabrication of battery cells and modules; and assembly of complete battery pack systems for hybrid and electric vehicles.
KD ABG MI, LLC (Dow Kokam)	$161	Midland, MI	Production of manganese oxide cathode / graphite lithium-ion batteries for hybrid and electric vehicles.
Compact Power, Inc. (on behalf of LG Chem, Ltd.)	$151.4	St. Clair, MI Pontiac, MI Holland, MI	Production of lithium-ion polymer battery cells for the GM Volt using a manganese-based cathode material and a proprietary separator.
EnerDel, Inc.	$118.5	Indianapolis, IN	Production of lithium-ion cells and packs for hybrid and electric vehicles. Primary lithium chemistries include: manganese spinel cathode and lithium titanate anode for high power applications, as well as manganese spinel cathode and amorphous carbon for high energy applications.
General Motors Corporation	$105.9	Brownstown, MI	Production of high-volume battery packs for the GM Volt. Cells will be from LG Chem, Ltd. and other cell providers to be named.
Saft America, Inc.	$95.5	Jacksonville, FL	Production of lithium-ion cells, modules, and battery packs for industrial and agricultural vehicles and defense application markets. Primary lithium chemistries include nickel-cobalt-metal and iron phosphate.
Exide Technologies with Axion Power International	$34.3	Bristol, TN Columbus, GA	Production of advanced lead-acid batteries, using lead-carbon electrodes for micro and mild hybrid applications.
East Penn Manufacturing Co.	$32.5	Lyon Station, PA	Production of the UltraBattery (lead-acid battery with a carbon supercapacitor combination) for micro and mild hybrid applications.
Advanced Battery Supplier Manufacturing Facilities			
Celgard, LLC, a subsidiary of Polypore	$49.2	Charlotte, NC Aiken, SC	Production of polymer separator material for lithium-ion batteries.
Toda America, Inc.	$35	Goose Creek, SC	Production of nickel-cobalt-metal cathode material for lithium-ion batteries.
Chemetall Foote Corp.	$28.4	Silver Peak, NV Kings Mtn., NC	Production of battery-grade lithium carbonate and lithium hydroxide.
Honeywell International Inc.	$27.3	Buffalo, NY Metropolis, IL	Production of electrolyte salt (lithium hexafluorophosphate (LiPF6)) for lithium-ion batteries.
BASF Catalysts, LLC	$24.6	Elyria, OH	Production of nickel-cobalt-metal cathode material for lithium-ion batteries.
EnerG2, Inc.	$21	Albany, OR	Production of high energy density nano-carbon for ultracapacitors.
Novolyte Technologies, Inc.	$20.6	Zachary, LA	Production of electrolytes for lithium-ion batteries.
FutureFuel Chemical Company	$12.6	Batesville, AR	Production of high-temperature graphitized precursor anode material for lithium-ion batteries.
Pyrotek, Inc.	$11.3	Sanborn, NY	Production of carbon powder anode material for lithium-ion batteries.
H&T Waterbury DBA Bouffard Metal Goods	$5	Waterbury, CT	Manufacturing of precision aluminum casings for cylindrical cells.

Applicant	DOE Award (Dollars in Millions)	Project Locations	Technology
Advanced Lithium-Ion Battery Recycling Facilities			
TOXCO Incorporated	$9.5	Lancaster, OH	Hydrothermal recycling of lithium-ion batteries.
Electric Drive Component Manufacturing Facilities			
General Motors Corporation	$105	White Marsh, MD Wixom, MI	Construction of U.S. manufacturing capabilities to produce the second-generation GM global rear-wheel electric drive system.
Delphi Automotive Systems, LLC	$89.3	Kokomo, IN	Expansion of manufacturing for existing electric drive power electronics components for both passenger and commercial vehicles.
Allison Transmission, Inc.	$62.8	Indianapolis, IN	Increasing U.S. capacity to manufacture hybrid systems for the commercial truck market.
Ford Motor Company	$62.7	Sterling Heights, MI	Producing a Ford electric drive transaxle with integrated power electronics in an existing Ford transmission facility.
Remy, Inc.	$60.2	*Potential locations in IN:* Anderson, Morristown, Greenfield, or Indianapolis AND Fargo, ND	Establishing a standardized platform of hybrid electric motors and controls.
UQM Technologies, Inc.	$45.1	Frederick, CO	Expanding established propulsion systems into a volume manufacturing environment.
Magna E-Car Systems of America, Inc.	$40	Muncie, IN Holly, MI	Increasing production capacity of advanced automotive electric drive system component manufacturing plants located in the U.S.
Electric Drive Subcomponent Manufacturing Facilities			
KEMET Corporation	$15.1	Simpsonville, SC	Production of DC bus capacitors including soft wound film and stacked film capacitors necessary for electric drive system power electronics.
SBE, Inc.	$9.1	Barre, VT	Outfitting of a high-volume manufacturing facility to build DC Bus Capacitors for the electric drive vehicle industry.
Powerex, Inc.	$8.1	Youngwood, PA	Creating an electric drive semiconductor development, qualification, and production center.

RECOVERY ACT AWARDS FOR TRANSPORTATION ELECTRIFICATION

Applicant	DOE Award (Dollars in Millions)	Project Locations	Project Focus
Advanced Vehicle Electrification			
Electric Transportation Engineering Corp. (ETEC)	$99.8	*Headquarters:* Phoenix, AZ *Manufacturing:* Phoenix, AZ and Northern California *Deployment:* Portland, Salem, Eugene and Corvallis, OR; Seattle, WA; San Diego, CA; Phoenix and Tucson, AZ; Nashville, Chattanooga, and Knoxville, TN	ETEC and its partner Nissan will demonstrate up to 5,000 Nissan electric vehicles with a 100 mile range and deploy up to 12,500 Level 2 and 250 Level 3 chargers.
Chrysler LLC	$70	*Manufacturing*: Warren, MI and St. Louis, MO; *Deployment*: 11 partner fleets	Develop, validate, and deploy 220 advanced plug-in hybrid electric pickups and minivans.
South Coast Air Quality Management District (SCAQMD)	$45.4	*Headquarters:* Diamond Bar, CA *Manufacturing:* Galesburg, MI and Elizabethtown, KY; *Deployment:* 50 different utilities and fleets	Develop a fully integrated, production plug-in hybrid system for Class 2 – 5 vehicles (8,501 – 19,500 lbs gross vehicle weight). Demonstrate a fleet of 378 trucks and shuttle buses.
Navistar, Inc. (Truck)	$39.2	*Manufacturing*: Elkhart County, IN; *Deployment:* Portland, Chicago, and Sacramento	Develop, validate, and deploy 400 advanced battery electric delivery trucks (12,100 lbs. gross vehicle weight) with a 100 mile range.
Transportation Sector Electrification			
Cascade Sierra Solutions	$22.2	*Headquarters:* Coburg, OR; *Deployment:* 50 U.S. truck stop electrification sites	Deployment of truck stop electrification infrastructure at 50 sites along major U.S. Interstate corridors and provide 5,450 rebates for truck modification to idle reduction technologies.
Advanced Vehicle Electrification + Transportation Sector Electrification			
General Motors	$30.5	*Manufacturing:* Michigan; *Deployment:* several utility partners' fleets	Develop, analyze, and demonstrate hundreds of Chevrolet Volt Extended Range Electric Vehicles (EREVs) -- 125 Volt PHEVs for electric utilities and 500 Volt PHEVs to consumers.
Ford Motor Company	$30	*Manufacturing:* Michigan and Kansas City, MO; *Deployment:* several utility partners' fleets	Accelerate the launch and commercialization of PHEVs and EVs by partnering with 15 of America's leading utilities. Deploy up to 150 plug-in hybrid electric vehicles, including 130 Ford Escape PHEVs and 20 Ford E450 Van PHEVs.
Smith Electric Vehicles	$10	*Manufacturing*: Kansas City, MO; *Deployment:* Several partners' fleets	Develop and deploy up to 100 electric vehicles, such as "Ampere" (Ford Transit Connect EV), "Faraday" (Ford F150 EV conversions), Step Vans, and "Newton" medium-duty trucks.

Applicant	DOE Award (Dollars in Millions)	Project Locations	Project Focus
Advanced Electric Drive Vehicle Education Program			
West Virginia University (NAFTC)	$6.9	Morgantown, WV State of South Carolina	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; Technicians; Emergency Responders; General Public • *Partnering with:* NAFTC Headquarters and members; West Virginia Department of Education; South Carolina Department of Education; Greater New Haven Clean Cities Coalition; Innovation Drive, Inc.; Advanced Vehicle Research Center; Auto Exposure LLC; Big Fish Advertising and Public Relations; MotorWeek; Sabre Engineering; Northeast Utilities
Purdue University	$6.1	State of Indiana West Lafayette, IN	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; Technicians; General Public • *Partnering with:* University of Notre Dame; Indiana University Purdue University at Indianapolis (IUPUI); Purdue University – Calumet; Indiana University – Northwest; Ivy Tech Community College
Colorado State University	$5	State of Colorado State of Georgia Fort Collins, CO Boulder, CO Atlanta, GA	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; Technicians; Emergency Responders; General Public • *Partnering with:* CSU; Georgia Institute of Technology; Arapahoe Community College; Douglas County School System; Nissan NA; KShare; Ricardo; AM General; Motion Reality, Inc.
Missouri University of Science and Technology	$5	Rolla, MO Warrensburg, MO Linn, MO St. Louis, MO Kansas City, MO Lee's Summit, MO	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; Technicians; Mechanics; Emergency Responders; General Public • *Partnering with:* University of Central Missouri; Linn State Technical College; St. Louis Science Center; Smith Electric Vehicles U.S. Corporation (SEV-US); Kokam America Inc.
Wayne State University	$5	Detroit, MI Warren, MI	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; Technicians; Emergency Responders; General Public • *Partnering with:* NextEnergy; Macomb Community College
National Fire Protection Association	$4.4	Quincy, MA	• *Educational programs for:* Emergency Responders • *Partnering with:* Fire Protection Research Foundation; Automotive Alliance; NREL
Michigan Technological University	$2.98	Houghton, MI (Western Upper Peninsula of MI)	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; General Public • *Partnering with:* Argonne National Laboratory; AVL; GM; Eaton; Horiba; MathWorks; Schweitzer Engineering Laboratories; Woodward

Applicant	DOE Award (Dollars in Millions)	Project Locations	Project Focus
University of Michigan	$2.5	Detroit, MI Ann Arbor, MI Dearborn, MI Flint, MI	• *Educational programs for:* Graduate, Undergraduate and Secondary Students; Teachers; General Public • *Partnering with:* University of Michigan – Dearborn; Kettering University; Ford; GM; Chrysler; Eaton Corp; DTE Energy; Mentor Graphics; Ballard; Quantum Technologies; A123 Systems
J. Sargeant Reynolds Community College	$0.72	Commonwealth of Virginia and Neighboring Mid-Atlantic States.	• *Educational programs for:* Secondary Students; Technicians • *Partnering with:* James Madison University; Virginia Department of Education; Ford; GM; Toyota; Firestone/Bridgestone
City College of San Francisco	$0.5	San Francisco , CA	• *Educational programs for:* Secondary Students; Service Personnel, Technicians • *Partnering with:* Chabot College; Central Shops; Pat's Garage; Perfect Sky Inc.

A123 lithium-ion battery maker bankruptcy fuels Republican criticism of President Barack Obama's alternative-energy policy

A123 Systems workers Dave Berels, left, Kurt Woznak, Shannon DeWaelsche, and Aj Belcuore, go over a battery pack design in Livonia. The lithium-ion battery maker filed Tuesday for Chapter 11 bankruptcy protection, which triggered criticism of the Obama administration's funding of alternative-energy firms. / 2011 photo by ANDRE J. JACKSON/Detroit Free Press

By Nathan Bomey, Todd Spangler and Zlati Meyer
Detroit Free Press Staff Writers

Battery maker A123 Systems' Chapter 11 bankruptcy filing Tuesday triggered a fresh round of political criticism of the Obama administration's alternative-energy investments.

The Waltham, Mass.-based company, which has 626 employees and 348 contract workers in three southeast Michigan locations, said auto supplier Johnson Controls had tentatively agreed to pay $125 million to purchase its automotive-related assets, including the operations in Livonia, Romulus and Ann Arbor.

Republicans immediately compared A123's bankruptcy with the California solar panel manufacturer Solyndra, which filed for bankruptcy and liquidated last year, wiping out a $500-million loan

guarantee from the U.S.

"A123's bankruptcy is yet another failure for the president's disastrous strategy of gambling away billions of taxpayer dollars on a strategy of government-led growth that simply does not work," said Andrea Saul, a spokeswoman for Republican presidential candidate Mitt Romney.

Battered by recalls, high costs and sluggish consumer adoption of electric vehicles, A123 lost $1 billion since its founding in 2001, despite substantial government support.

SOURCE: Yahoo

DAVID PIERCE/DETROIT FR

The U.S. Department of Energy awarded a $249-million grant to A123 in August 2009 with promises of 5,900 jobs, mostly in Michigan. The Michigan Economic Development Corp. also awarded A123 more than $125 million in a variety of tax credits, grants and incentives in 2008 and 2009. The U.S. grant and Michigan incentives drew bipartisan support when they originally were approved.

"This is what's possible in a clean-energy economy -- these folks right here, doing extraordinary work," President Barack Obama said at the White House Rose Garden after meeting A123 employees on April 30, 2010. "This is what happens when we place our bets on American workers and American businesses."

A123 has received $132 million of its federal grant so far. The Energy Department said Johnson Controls could be eligible for the rest of the funding, but that has yet to be determined. The federal government's investment does not have to be repaid, according to Securities and Exchange Commission filings.

But Americans have not embraced electric vehicles that require regular recharging. In many instances, they are priced significantly higher than their gasoline-fueled counterparts. Even federal and state tax credits have not erased that price premium.

Then the lack of easy-to-find recharging stations has left many motorists worried about being left on a remote dark road without adequate power.

"It was an expansion of manufacturing plants in anticipation of customers who never arrived," Litchfield Hills Research analyst Theodore O'Neill said.

A Johnson Controls spokeswoman declined to comment on whether the company would keep A123's employees. Its acquisition of A123 must be approved by a U.S. Bankruptcy Court judge in Delaware.

A123's battery plants remain in production for now.

Johnson Controls has a lithium-ion battery plant in Holland, Mich.

A123, which lost $269 million in the first eight months of the year, according to bankruptcy documents, turned down an interview request.

Democrats responded that during his 2002-06 term as governor of Massachusetts, Romney also provided support to emerging technology firms and some of the investments did not pay off. Meanwhile, the Department of Energy pointed out that A123's investment had bipartisan support from Michigan lawmakers, including incumbent Democratic Sen. Debbie Stabenow and her Republican challenger, Pete Hoekstra.

"Johnson Controls' investment in A123 will help ensure that the U.S. remains competitive in this growing global sector," said former Democratic Michigan Gov. Jennifer Granholm, who promoted battery tax incentives as a way to boost the Michigan economy.

A123's bankruptcy filing comes two months after Chinese auto parts maker Wanxiang Group agreed to invest up to $450 million to acquire up to 80% of A123. But that deal fell apart as A123 was set to burn through $400 million in cash over the next 12 months, O'Neill said.

Instead, Johnson Controls is cherry-picking the best assets out of A123, O'Neill said.

Johnson Controls also was awarded a $299-million Energy Department grant for its lithium-ion battery plant in Holland. The company's spokeswoman declined to comment on whether that plant would be affected by the A123 deal.

Barclays analysts said in a research note that the deal would make Johnson Controls "the dominant surviving" U.S.-based lithium battery maker.

A123 shares, which closed Monday at 24 cents, fell 75% to 6 cents on Tuesday.

Many sophisticated A123 investors have lost millions, including global conglomerate General Electric, which had invested about $70 million by 2009.

Dan Leistikow, an Energy Department spokesman, said in a blog post that the government's investment had produced meaningful battery innovation that would live on.

In its bankruptcy petition, A123 listed total assets of $459.8 million and liabilities of $376 million.

The company's biggest customer is California start-up Fisker Automotive, which plans to keep the contract with Johnson Controls through at least the first quarter of 2013, spokesman Roger Ormisher said.

General Motors, which picked A123 as the battery supplier for the Chevrolet Spark electric vehicle, said it would accept Johnson Controls as its new battery provider.

More Details: Time line of battery maker A123 Systems

Products: Nickel-based batteries, lead acid batteries, lithium-ion batteries, ultra capacitors and fuel cells

2001 — Founded in a Massachusetts Institute of Technology lab by materials scientist Yet-Ming Chiang.

2006 — Began selling batteries.

March 2008 — General Electric invested $20?million in A123 to make batteries for Think Global's electric vehicle.

May 2008 — The U.S. Advanced Battery Consortium and the U.S. Department of Energy awarded it a $12.5-million grant to develop its lithium-ion battery technology for plug-in hybrid electric vehicles.

August 2009 — The DOE awarded it a $249-million grant under the government's Advanced Technology Vehicles Manufacturing Loan Program.

September 2009 — A123 raised $380 million through an initial public offering on the NASDAQ exchange.

December 2009 — Formed a joint venture with Shanghai Automotive Industry Corp.

September 2010 — Opened a lithium-ion battery plant in Livonia, equipped to make battery packs for up to 30,000 electric vehicles a year.

July 2011 — Announced the hiring of its 1,000th worker in Michigan.

March 2012 — A123 recalled battery packs with prismatic cells that it sold to Fisker Automotive to power its Karma electric car. CEO David Vieau estimated that the recall would cost $55?million.

August 2012 — Announced a loss of $82.9 million in the second quarter.

August 2012 — Wanxiang Group, China's largest auto parts manufacturer, agreed to invest up to $465 million in A123 in exchange for 80% of A123.

Tuesday — Filed for Chapter 11 bankruptcy and sold auto-related business to Johnson Controls for $125 million. Wanxiang withdrew its offer to invest $465 million for 80% of the battery maker.

A123 Systems To Recall Electric-Car Battery Packs For Fisker, Others

-IN VOELCKER | 1,123 views | Mar 26, 2012 | Follow John

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Hundreds of recalls a year get announced for gasoline cars, the vast majority completely under the radar.

The high visibility of the electric-car business makes any recalls of batteries different, though.

With that in mind, lithium-ion cell maker A123 Systems [NSDQ:A123] said this morning it will recall battery modules and packs that contain prismatic cells produced at its Livonia, Michigan, plant that may have a defect that reduces their performance.

Fisker Karma largest user

Those components are used in the 2012 Fisker Karma, among other vehicles, which A123 CEO David Vieau noted is currently the largest single program that uses the prismatic cells from Livonia.

The defect, said Vieau, was discovered only in some cells built at Livonia. The hundreds of thousands of prismatic cells it has built at other plants aren't affected, nor are cylindrical cells it builds in China for transportation and energy-storage applications.

"A small number of packs in the field experienced a defect," said Vieau. The defect was traced to a miscalibration in an automatic welding machine at the plant, which resulted in a misaligned component was not detected visually.

When the cells were compressed, interference could be created although the cells functioned properly at first. A123 says the defect does not cause a safety issue, and has had no reports of any safety concerns in any of the products.

Replacements to ship this week

them this week. It estimated that it would incur costs of $55 million to replace the modules and packs, and said it had sufficient liquidity to fund that effort over the next several quarters.

Vieau noted that the modules and packs ranged from starter batteries to full battery packs. He confirmed that the failure of the battery pack in a 2012 Fisker Karma purchased by Consumer Reports was due to a failed A123 module that would be replaced under the recall program.

2012 Fisker Karma during road test, Los Angeles, Feb 2012

Five transportation customers use potentially defective cells produced at the Livonia facility, though Vieau declined several times to identify the companies identified.

A123's customers include Fisker, Chevrolet, BMW, and other vehicle makers. Vieau noted that the BMW ActiveHybrid 3 and ActiveHybrid 5 models use cylindrical cells built at A123's Chinese plant, and so are not affected by the recall.

A123 said it had hired a chief operating officer, Ed Kopkowski, with more than 25 years of experience in quality improvement and cost reduction.

A123 faces challenges

The recall is particularly unfortunate because the Livonia cell fabrication plant is planned to be one of the largest such facilities in the U.S. It received some funding from the 2008 Recovery Act passed by the Bush Administration.

A123 Systems has had several challenges over the last year. With Fisker Automotive cutting its projected purchase of A123's lithium-ion cells for the delayed 2012 Fisker Karma, the company laid off some employees and cut its financial projections.

...e volume of cells it provides to General Motors for the upcoming Chevrolet Spark EV is likely to be ...w, as only a few thousand of that car will likely be built to meet emission regulations in a small ...mber of states.

...erhaps worrisome for investors and industry analysts, Vieau said A123 would adjust its fundraising strategy to accommodate the $55 million cost of the recall.

"It's certainly not good news," he said, though he pointed to the narrow scope of the issue and the global footprint of the company's several manufacturing plants and product lines.

"We make no excuses and we accept full responsibility for this action," said Vieau, but saying the company was "disappointed and frustrated" by the situation. He added that he believed the company had fully identified the problem and developed a field campaign that addresses it fully.

While the rapid ramp-up of the Livonia facility has "resulted in near-term operational challenges," Vieau said, "we are confident in our ability to overcome these issues."

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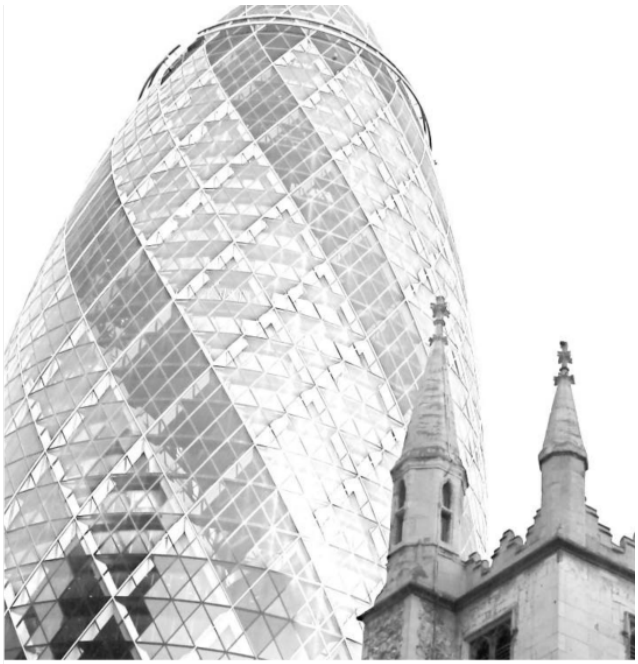


Doing God's Work

How Goldman Sachs Rigs the Game

March 2011

SPINWATCH
MONITORING PR AND SPIN

"The first thing you need to know about Goldman Sachs is that it's everywhere. The world's most powerful investment bank is a great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money."
Matt Taibbi, Rolling Stone Magazine, July 2009

Introduction

Much has been written about Goldman Sachs' immense size and power in the US, of the incessant revolving door between the bank, regulatory and political elites in Washington. But Goldman Sachs has cultivated political contacts around the world, not just in the US capital.

This report looks at how the bank's tentacles have spread throughout British and European political circles, including the regulatory centre of Brussels. Goldman Sachs often operates behind the scenes, also working through a number of business lobby groups. This report explores and exposes those links.

Critics say having friends in high places gives the firm a vital edge.[1] This has also allowed Goldman and other global banks to escape the necessary regulatory reform that many independent commentators believe is vital, especially in areas of derivatives.

There is no doubting that Goldman's image has taken a battering. In the midst of the world's worst oil spill in the Gulf of Mexico, Reuters ran an article entitled: "BP: Still not as evil as Goldman Sachs".[2]

The bank's plummeting reputation is a result of a series of events: the role it played in causing the financial crisis, and its "arrogant and unapologetic attitude" in its wake, when CEO Lloyd Blankfein described the bank's activities as "God's work".[3] It was also accused by US authorities of defrauding investors out of $1billion,[4] faced fines of £17.5 million for failing to tell UK regulators that it was under investigation for fraud,[5] and was sued by three ex-employees for sexual discrimination.[6]

Under fire, Goldman Sachs responded with the biggest advertising campaign in its history, "to help the wider public understand what we do for our clients."[7]

Yet, as banking commentator, Bethany Mclean, notes: "No outsider can tell how the firm really makes its money. It is a fear that Goldman has the game rigged, even if no one can ever prove how. Not just because of its political connections, but also because of its immense size and power."[8] Recent efforts at transparency – its disclosure of revenue from trading and investing[9] - do little to allay fears. "They stopped short of doing something really big", said one banking insider.[10]

What was big, though, was the firm's remuneration and bonus pot for 2010, a whopping $15 billion or an average of $430,000 each.[11]

Afghanistan has nearly $1 trillion in mineral deposits, according to a study, but there are doubts the war-torn and graft-prone country can manage the windfall offered by the untapped riches.

President Hamid Karzai said in January that the deposits could help the war-ravaged nation become one of the richest in the world, based on preliminary findings of the United States Geological Survey.

The final results, reported in the *New York Times* Monday, found previously unknown reserves of lithium, iron, gold, niobium, cobalt and other minerals that the paper said could transform Afghanistan into a global mining hub.

"The natural resources of Afghanistan will play a magnificent role in Afghanistan's economic growth," Jawad Omar, spokesman for the country's ministry of mines and industries, told AFP.

"The past five decades show that every time new research takes place, it shows our natural reserves are far more than what was previously found," he said.

Afghanistan's potential lithium deposits are as large of those of Bolivia, which currently has the world's largest known reserves of the lightweight metal, the Times said.

There is ever-growing demand for lithium, which is used to make batteries for everything from mobile phones and cameras to iPads and laptops. Future growth in electric and hybrid cars could create still more demand.

Afghanistan has so much of the metal that it could become the "Saudi Arabia of lithium," according to an internal Pentagon memo quoted by the *New York Times*.

The iron and copper deposits are also large enough to make Afghanistan one of the world's top producers, U.S. officials said.

"There is stunning potential here," General David Petraeus, head of the U.S. Central Command which oversees Afghanistan, told the newspaper. "There are a lot of ifs, of course, but I think potentially it is hugely significant."

Little has been exploited because the country has been mired in conflict for three decades, and is today embroiled in a vicious insurgency by Islamist rebels led by the Taliban.

The country would have to find a way of bringing the minerals to markets but its infrastructure is rudimentary, with only one national highway connecting north to south and its ramshackle roads often targeted by Taliban bombs.

Analysts worried the country, hobbled by rampant corruption and a weak central state, was not ready to manage its potential mineral wealth.

"I highly doubt it will be able to either properly manage these resources or use the riches to build a more peaceful and prosperous Afghanistan for all Afghans," Janan Mosazai, a political analyst, told AFP.

Green power corrupts

June 05, 2012 – 8:00 PM

1 Comment

Diana Furchtgott-Roth

Popular in Opinion

1 Examiner editorial: Walker's win should inspire political leaders across the country

2 Green power corrupts

3 Dim Bulb: Bill Press

4 Bus snobs try to torpedo cheaper bus rapid transit

5 U.S. policy should encourage oil and gas exploration

Power corrupts, even at highest levels of government. Even in the White House. That's the message from the government's energy loan guarantees, as revealed by a little-reported House Government Reform and Oversight subcommittee hearing last month.

At issue was the approval of loan guarantees for BrightSource Energy, a politically connected corporation whose chairman, John Bryson, became Obama's secretary of Commerce last October.

John M. Woolard, president and CEO of BrightSource Energy, testified that his company's $1.6 billion loan guarantee for a solar power plant "was awarded completely on the merits of the project."

But Chairman Jim Jordan, R-Ohio, produced an email from Woolard to Energy Secretary Steven Chu's senior advisor, Matt Rogers, that hints the White House might have been involved. Dated January 4, 2010, the email states that Peter Darbee, CEO of Pacific Gas & Electric, had himself spoken to President Obama: "Darbee at PG&E talked directly to Obama about the program's challenges and the bad situation it puts him in." By "bad situation," Darbee meant that his company needed solar power to comply with California's law to produce 20 percent of its electricity from renewables by 2017 (later raised to 33 percent by 2020).

Woolard also wrote to Rogers: "Please don't distribute this, but I thought you might want to know there is a large group in NYC focused on this transaction and DOE ability to execute. Things are not good and there is a sizeable group of private equity and investment banks writing a letter to Chu about the status of the program and the inability to get loans through -- can you suggest a good time to talk?"

Coincidentally, the following month, Chu announced conditional loan guarantees of $1.37 billion for BrightSolar to build three utility-scale solar power plants on federal land in the Mojave Desert, to be the largest solar power electricity generating complex in the world.

But conditional loan guarantees don't equal loans. Over a year later, in March 2011, BrightSource still had no loan. Woolard asked Jonathan Silver, executive director of the Energy Department's loan guarantee

THE WALL STREET JOURNAL.
WSJ.com

SMALL BUSINESS | DECEMBER 15, 2009

Venture Capitol: New VC Force

By NEIL KING JR.

When tiny Fisker Automotive Inc. hit a financing glitch last year, threatening its plan to build a fancy gasoline-electric hybrid car in Finland, it turned to the U.S. Department of Energy.

The DOE had a bolder idea. Why not also step up the company's plans to develop a less-expensive model, and assemble it in a closed U.S. auto plant?

Within months, Vice President Joe Biden, the former senator from Delaware, was helping lure the embryonic car company to a shuttered General Motors Co. factory four miles from his house in Wilmington, right across the tracks from Biden Park. Soon, Fisker Automotive, a two-year-old business that has yet to sell a car, won loans from the federal government totaling $528 million.

Fisker had joined a flock of other businesses seeking cash from the biggest venture capitalist of all, the U.S. government.

The DOE hopes to lend or give out more than $40 billion to businesses working on "clean technology," everything from electric cars and novel batteries to wind turbines and solar panels. In the first nine months of 2009, the DOE doled out $13 billion in loans and grants to such firms. By contrast, venture-capital firms -- which have long been the chief funders of fledgling tech firms, taking equity stakes in the start-ups that will pay off if they go public -- poured just $2.68 billion into the sector in that time, according to data tracker Cleantech Group.

Thus, while much attention has been focused on the federal government's involvement in banking, Washington also is gaining sway in another swath of the economy. By financing clean-tech ventures on a large scale, the government has become a kingmaker in one of technology's hottest sectors.

Some young companies are tailoring their business plans to win DOE cash. Private investors, meanwhile, are often pulling back, waiting to see which projects the government blesses. Success in winning federal funds can attract a flood of private capital, companies say, while conversely, bad luck in Washington can sour their chances with private investors. The result is an intertwining of public and private-sector interests in an arena where politics is never far from the surface.

In Delaware, "We had five individuals beating the band -- the three members of the [congressional] delegation, the governor and the vice president," said the state's chief of economic development, Alan Levin. "We had in the vice president a secret weapon, except there is nothing secret about Joe Biden."

A spokeswoman for Mr. Biden said he made no direct appeals to DOE on Fisker's behalf before the loan was approved, though he did talk to the company several times afterward to put in a plug for his home state.

At the DOE, Matthew Rogers, who helps oversee the department's loans, said proposals are vetted by "deal teams" insulated as much as possible from outside pressure. "Lots of people can call the [energy] secretary, but that doesn't mean that any of that necessarily flows down to the deal-team level," he said.

More than 40 auto-related companies have sought government money to build parts or vehicles, ranging from hybrid roadsters and delivery vans to all-electric three-wheelers that could go 120 miles on a charge. They are chasing $25 billion in federal low-interest loans for a sector that has attracted less than a tenth that much in venture capital over the past five years, according to Cleantech.

"The existence of an 800-pound gorilla putting massive capital behind select start-ups is sucking the air away from the rest of the venture-capital ecosystem," said Darryl Siry, former head of marketing at Tesla Motors Inc., a San Carlos, Calif., company that got a $365 million DOE loan in June to build high-end electric cars. "Being anointed by DOE has become everything for companies looking to move ahead."

Bright Automotive Inc. is still seeking anointment. Based in a small warren of offices outside Indianapolis, Bright looked set to take off in September 2008. Investors were poised to give it more than $100 million to move ahead on a lightweight hybrid delivery van, and it had lined up major corporations as potential customers.

When the financial crisis hit in that same month, investors bowed out. Though a few have since tiptoed back, enabling Bright to build a prototype, its principal hope for now lies in the DOE, from which it is seeking a large loan to get under way.

"We are caught in this blender of historically new forces, somewhere between the public and private worlds," said Bright's chief executive, John Waters. Without a government loan, private investors are reluctant to jump in, he says, while the DOE loan team is wary of backing ventures that haven't already won significant support in the private sector.

The DOE acknowledges it looks to back companies that already have substantial private funding, with the hope that federal money will in turn attract more private investment.

Fisker, based in Irvine, Calif., got rolling two years ago with seed money from two of Silicon Valley's largest venture-capital firms, Palo Alto Investors LLC and Kleiner Perkins Caufield & Byers. They and some smaller investors put up nearly $160 million to move Fisker's first car, called the Karma, off the design table and into early production. But to fine-tune the engineering and put it into full production, Fisker needed at least $200 million more.

In December 2008, Fisker turned to the DOE's $25 billion Advanced Technology Vehicle Manufacturing loan program, which Congress had funded to launch new, high-efficiency vehicles.

Fisker applied for about $170 million to get the Karma rolling. It also put in a second application, hoping eventually to win financing to build a cheaper model, code-named the Kx, which the company didn't envision bringing to market until around 2015.

DOE officials and their advisers expressed strong interest in the Karma proposal, say people involved in the talks, but they were wary of the Kx. Its engineering remained vague, and Fisker was far from having a prototype.

By late spring, DOE was pushing ahead briskly on the Karma loan, say people involved in the deal. But the Karma presented a political challenge: It was already being assembled, under contract, at a plant in Finland. Though it used mainly U.S.-made components, so a federal loan would help U.S. parts makers, the boost for U.S. workers would be limited.

DOE then came to Fisker with a surprising proposal: Find a U.S. site to build the Kx, and DOE would agree to fund both projects together. Fisker could then start gearing up to make the Kx even before the Karma hit the market. Close advisers to Fisker said the issue of job creation had become key to officials within the administration.

"The government's interest sped it all up," said David Anderson, a partner at the Palo Alto Investors venture-capital firm, who followed the DOE process closely. "The government basically said, 'Let's make this happen sooner rather than later.'"

On June 1, GM said it was closing 14 plants, including the one in Delaware. This gave fresh urgency to the DOE's quest for Fisker, say officials involved in the loan discussions.

GM's Delaware factory, called the Boxwood Road plant and dating from 1947, once employed 5,000. It was the last auto assembly plant in the Northeast. State officials and politicians were determined to keep it alive.

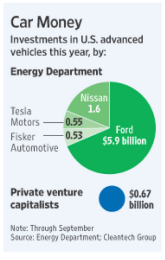
In the middle of August, they learned the plant had drawn interest from Fisker. CEO Henrik Fisker came to see it and dropped by the office of a Delaware senator, Tom Carper, a Democrat. The visit unleashed a flurry of activity. Gov. Jack Markell, also a Democrat, quickly called an old friend at Kleiner Perkins to check on Fisker. "Basically, we wanted to know, 'Are they for real?'" said Mr. Levin.

Kleiner Perkins itself has political roots. A leading partner, John Doerr, sits on President Barack Obama's economic advisory board, and another partner is former Vice President Al Gore.

The DOE, in August, hadn't yet ruled on Fisker's loan request. Delaware's governor and congressional delegation began peppering U.S. Energy Secretary Steven Chu with calls on Fisker's behalf. They also had repeated discussions with Vice President Biden and his staff, according to Mr. Levin and several others.

In early September, Gov. Markell told Fisker that if it occupied the shuttered GM plant it would get an array of state incentives worth up to $22 million, including $9 million in cash for utilities. He promised to buy the first car off the line.

On Sept. 17, he ran into Mr. Chu at an event in Pennsylvania. "I know, I know -- Fisker," Mr. Chu said as soon as he saw him, according to the governor, who said Mr. Chu told him he was "hearing from everyone in Delaware."



Five days later, Mr. Chu announced the government had signed a provisional agreement to lend Fisker nearly $170 million to complete engineering of the Karma, as well as $360 million to develop the less-expensive model Kx, which the company then began to call the Nina. Fisker still plans to assemble the Karma in Finland but will make the Nina in Delaware. Mr. Chu said the DOE funding would help reduce dependence on foreign oil as well as create "thousands of new American jobs."

People familiar with the loan say the government based the amount partly on its assessment that the Nina, which will sell for about $40,000 after government tax rebates, could draw world-wide annual sales of around 130,000 -- nearly twice Fisker's own projection.

Mr. Fisker, a former designer of sleek sports cars for BMW and Aston Martin, said he is sure his company would have won DOE funding without the Delaware politicians' support but credits it with speeding the approval. He added that Fisker picked the Delaware plant because it made economic sense.

Though its first model, the Karma, won't be available for test drives for months, Fisker says more than 1,500 potential buyers have put down refundable deposits on the car, expected to sell for $88,000.

On Oct. 27, about a month after the DOE approved loans to Fisker, its executives and Delaware politicians gathered in Wilmington for an announcement. In the morning, Mr. Biden played host to United Auto Workers brass for breakfast at his house near the Boxwood Road plant.

Then they joined hundreds of auto workers and local dignitaries at the factory. Gov. Markell announced Fisker was buying it from the post-Chapter 11 remnant of GM called Motor Liquidation Co. for just $18 million. The deal includes a high-end paint facility and other equipment that industry experts say would cost more than $300 million to replace.

In a rousing speech, Mr. Biden recalled how every election year, including his first in 1972, "I would stand here at this gate and shake hands at every shift." He told of many "long talks" he said he had had with Mr. Fisker. He called the project "a metaphor for the rebirth of the country."

Afterward, Mr. Fisker escorted the dignitaries behind a curtain for their first look at a mock-up of the planned second model, the Nina. It was a sporty car body, bright red, but with no drivetrain or engine. Gov. Markell, though, was impressed. "It was just a beautiful car," he said.

Write to Neil King Jr. at neil.king@wsj.com

Printed in The Wall Street Journal, page A18

THURSDAY, SEPTEMBER 30, 2010

Goldman Sachs discloses ownership in Talison Lithium Corp.

Talison Lithium Ltd's ore stockpiled at one of it's plants in Greenbushes, Australia>>>

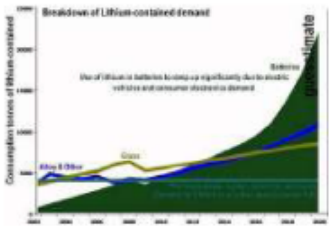
Talison Lithium Limited - Press Release TORONTO, Sept. 28 The Goldman Sachs Group, Inc. ("GS & Co."), 200 West Street, ("GS Group"), 200 West Street, New York, NY, 10282 New York, NY, 10282 GS&Co. & GS Group are hereinafter referred to collectively as the "Offeror".

2. The designation and number or principal amount of securities and the offeror's securityholding percentage in the class of securities of which the offeror acquired ownership or control in the transaction or occurrence giving rise to the obligation to file the news release, and whether it was ownership or control that was acquired in those circumstances.

In connection with a plan of arrangement completed on September 22, 2010 involving Talison Lithium Limited (the "Company") and Salares Lithium Limited ("Salares"), the Company acquired all of the issued and outstanding securities of Salares in exchange for either ordinary shares in the capital of the Company ("Shares") or the equivalent number of exchangeable shares (which may be exchanged for Shares on a one-for-one basis) (the "Arrangement"). Further details regarding the Arrangement are set out in the joint press release of the Company and Salares dated September 22, 2010, which has been filed with the applicable regulatory authorities and is available on the Company's SEDAR profile at www.sedar.com.

Prior to the Arrangement, the Company was a private issuer and the Offeror and certain direct or indirect subsidiaries of GS Group beneficially owned and controlled 11,270,431 Shares (the "Offeror Shares"). The Offeror did not acquire any additional Shares in connection with the Arrangement. On September 23, 2010, in connection with the Arrangement, the Shares commenced trading on the Toronto

Goldman Sachs: Americas: Clean Energy: Energy Storage TNR.v, CZX.v, RM.v, LI.v, WLC.v, CLQ.v, TSLA, HEV, AONE, FCX, RTP, BHP, SQM, FMC, ROC, F, GM,



We have another report on Energy Storage space which provides a view from Goldman Sachs on the sector this time. In Lithium space we have our own fast developing story, when Japanese Trading Houses are in a rush to secure Lithium supply.

"Asian lithium rush continues. One more Junior in Lithium is gone from the market for potential deals. We were not following geothermal as source of lithium so close as it is more risky than well defined extraction from brines and hard rock lithium deposits. Chemistry should be right and the process is much more complicated, but this move by Itochu shows that Japanese conglomerates are ready to go the distance in order to secure Lithium supply from different sources. After Korean Kores deal with lithium One we have on our radar screens two juniors involved in Lithium Brines in Argentina and Nevada are left for J/V deals: International Lithium and Rodinia Minerals. Japanese are using recent soft markets to grab all available lithium projects on the development stage and with this rate of deal announcement all reliable Canadian juniors in Lithium could be engaged by the end of this summer."

Goldman Sachs: Americas: Clean Energy: Storage: Batteries

Posted by Sally at 1:50 PM

Reactions:

Labels: Alternative Energy, Batteries, CleanTech, Electric Cars, Global warming, Green Energy, Green Mobility Revolution, Hybrid Cars, Lithium

1 comments:

Retirefunds said...

Thought you would like to know that, yesterday, Sept 29th 2010, Goldman Sachs disclosed a 12.78% ownership share of Talison Lithium (TSE-TLH)

Cheers

But the government cut off the loan to Fisker after $193 million when Fisker failed to meet its ambitious sales and production goals. Then, a Consumer Reports test dealt the Karma another blow.

"It is low. It is sleek. It is sensuous," the Consumer Reports' video narrator says.

20 comments

"It's also broken," the narrator adds as a clip of the Fisker Karma being towed on a flatbed airs.

Fisker blamed the car's lithium ion battery, which happened to be made by another government loan recipient, A123 Systems.

A123 got a $249-million taxpayer loan. This year's first-quarter losses totaled $125 million.

The industry's misfortunes have seriously undermined President Obama's goal.

"We can replace our dependence on oil with biofuels and become the first country to have a million electric vehicles on the road by 2015," Obama said in January 2011.

To get to one million, the White House pinned its hopes on 11 models of electric vehicles -- including the Karma. Our CBS News investigation found that six of the 11 -- Ford Focus, Ford Transit Connect, Fisker Nina/Atlantic, Tesla Model S, Tesla Roadster and Think City -- either haven't made their first delivery or are already out of business.

Others aren't even close to the government's 2015 projections. For example, 36,000 Fisker Karmas and 505,000 Chevy Volts were supposed to be made. But current projections slash the Karma's 2015 number in half to 18,000 and put the Volt at one-eighth of the goal at 62,000.

(See chart below)

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"I think these forecasts were very unrealistic, and history is showing that scaling an automobile company is much more difficult than many of these people thought," Craig Carlson, industry analyst and managing director of Carlson Group, Electric Vehicles, told CBS News.

When told about the CBS News projection that only 300,000 electric vehicles would be on the road instead of the proposed 1 million, the Energy Department's David Sandalow said, "Well, let's hope that we can move faster. And if we don't hit that goal in 2015, let's hit it in 2016."

CBS News pointed out that the Energy Department hoped that Think City would produce 57,000 cars, but only built 263 and went out of business. Ford Transit Connect was supposed to make 4,200 vehicles, but only built 500 and filed for bankruptcy.

But, Sandalow reminded that there were some successes.

"And General Motors sold more than 5,000 last year," he said. "And so did Nissan. Around the world this industry is exploding. Innovation involves risks. Any type of new industry is going to encounter some successes and some failures."

Even falling far short of a million, backers say electric cars will take off as people realize how much fun and cheap they are to drive. Just to be sure, the president wants to invest $4.7 billon more tax dollars in electric vehicle incentives.

The Christian Science Monitor - CSMonitor.com

Goldman Sachs culture 'toxic'? Letter confirms suspicions about Wall Street.

Polls show that Americans hold a very low opinion of Wall Street, and a damning public letter of resignation from a Goldman Sachs executive could only amplify that perception.

A Goldman Sachs sign is seen at the New York Stock Exchange. A Goldman Sachs executive director published a withering resignation letter in The New York Times, saying the investment bank is a 'toxic and destructive' place where managing directors referred to their own clients as 'muppets.'
(Brendan McDermid/REUTERS/File)

By Ron Scherer, Staff writer
posted March 14, 2012 at 4:47 pm EDT

New York

The opinion article in The New York Times has a simple headline: "Why I am leaving Goldman Sachs," written by Greg Smith, identified as a former executive director.

Mr. Smith, with more than decade at the firm, then goes on to describe the culture at Goldman Sachs "as toxic and destructive as I have ever seen it."

He says he knew it was time to leave when he could no longer look students being recruited by Goldman Sachs in the eye and tell them Goldman was a great place to work. Instead, he describes a place where making money off the firm's clients became the mantra.

Smith's description of the firm fits with Main Street's perception of Wall Street these days. Despite the run-up in the stock market, many people view Wall Street as a place where fat cats rake in huge bonuses, and lobby aggressively against attempts by Congress to rein in their activities.

"Wall Street is not held in high regard so this is certainly not going to help," says Dennis Jacobe, chief economist at the Gallup Organization in Washington. "I think one of the things that is under-perceived on Wall Street and many of the financial sectors is how badly the financial crisis has hurt the reputation of everyone involved with Wall Street."

In a survey published last December, Harvard's Center for Public Leadership ranked Wall Street at the bottom in terms of American's confidence in its leadership. Congress, the media, and the White House all ranked higher.

Even long-time Wall Street observers agree that the perceptions are distinctly negative.

"Wall Street is not doing a very good job of explaining its importance to the economy and the good it does," says public relations executive Richard Torrenzano of the Torrenzano Group and a former spokesman for the New York Stock Exchange. "It helps corporations and new organizations raise money in a public environment, and that money is used to build new plants, create jobs, and really help the quality of life in which we live."

However much good Wall Street does is far overshadowed by the public's memory of 2008 financial crisis, which ultimately lead to the Great Recession.

"People will always be suspicious of banks," says Hester Peirce, a senior research fellow at the Mercatus Center at George Mason University and a former Securities and Exchange Commission official. "Part of the reason is that Main Street has suffered so tremendously, and people are still mad at the banks getting all the money they got."

At the height of the financial crisis, Goldman Sachs, like other large financial institutions, borrowed money from the federal Troubled Asset Relief Program (TARP). And, like other large banks, it repaid those loans with interest.

Also, at the height of the financial crisis in 2008, Warren Buffet's company, Berkshire Hathaway, invested $5 billion in Goldman Sachs. Part of Mr. Buffet's investment was in the stock, which he purchased for $115 a share. On Wednesday, the stock was selling for $120 a share, off about $4 a share.

Goldman Sachs, which made a profit of about $1 billion in the fourth quarter, is known for its intense work ethic and cutthroat culture. Each year the investment bank culls its ranks of underperforming executives and traders. However, in the past, the firm has also sent many of its alumni to Washington, including former Treasury Secretaries Robert Rubin and Henry Paulson.

"Many have worked there or wanted to work there," says Ms. Peirce. "Goldman is elite but all the big banks have the reputation of people working very hard."

Goldman officials are also politically active. In the 2012 cycle, Goldman Sachs, through its political action committee as well as individual contributions, is the top organizational donor to Mitt Romney's presidential campaign, according to the Center for Responsive Politics/Open Secrets. Goldman Sachs and its officials have made 232 donations totaling $426,780.

In a letter to their employees on Wednesday, Goldman Sachs executives Lloyd Blankfein and Gary Cohn disputed Smith's characterization of the firm. "Needless to say, we were disappointed to read the assertions made by this individual that do not reflect our values, our culture and how the vast majority of people at Goldman Sachs think about the firm and the work it does on behalf of clients," wrote the two men in a letter posted on the firm's website.

The Goldman Sachs officials said that as far as they knew, Smith, whom they never identified by name, had not expressed any misgivings through any of their anonymous channels. "If an individual expresses issues, we examine them carefully and we will be doing so this case," they wrote.

The Goldman Sachs letter to its employees also noted that two weeks ago, Goldman was named one of the best places to work in the United Kingdom, where Smith resides.

Critics of Goldman Sachs blame its problems on a fixation with short-term profits. "It is just this short term grab for profits," says T.J. Faircloth, director of research at Boston-based Corporate Accountability International, which monitors corporate behavior. "We see this across the board with other corporations."

This jibes with Smith's view of the big firm. In his op-ed, the former executive writes, "Today, if you make enough money for the firm (and you are not currently an ax murder) you will be promoted into a position of influence."

Smith says he hopes his op-ed acts like a warning shot to the company's board of directors.

Energy & Genius

The Saudi Arabia of Lithium

Brendan I. Koerner, 10.30.08, 06:00 PM EST
Forbes Magazine dated November 24, 2008

The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the periodic table.

Mounds of magnesium chloride ring SQM's mine, creating the illusion of snow in the ultra-arid *salar*.

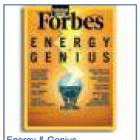
The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the periodic table.

Nothing grows in the heart of the Salar de Atacama. this ancient Chilean lake bed 700 miles north of Santiago may be the driest place on Earth, a wasteland strewed with salt-encrusted rocks that resemble cow pies. Annual rainfall on the *salar* (which in Spanish means "salt lake") rarely tops a few millimeters. The cloudless skies combine with the high altitude, 1.4 miles above sea level, to produce punishing solar radiation, capable of frying exposed flesh in minutes.

Humans would steer clear of the Salar de Atacama were it not for the precious brine that bubbles 130 feet below its surface. When first pumped from the ground, the brine looks like slushy, dirt-stained snow, of the sort that piles up on Manhattan sidewalks after a spring flurry. But when left to broil beneath the desert sun, the water in the brine slowly evaporates, leaving behind a yellowy mineral bath that could easily be mistaken for olive oil.

This greasy solution yields the substance that makes modern life possible: lithium. The lightest of all metals, lithium is the key ingredient in the rechargeable batteries that keep cell phones and laptops humming. Chile is the Saudi Arabia of lithium. According to the U.S. Geological Survey, this single ancient lake bed contains 27% of the world's reserve base of the metal.

The Lithium Gold Rush
Saudi Arabia's Next Act
Mr. Ethanol Fights Back
Beaker Fuel
A Mighty Wind/Carbon Hangover
Shell's Radical Rig
Special Report: ENERGY+GENIUS



Energy & Genius
The Saudi Arabia of Lithium
The Octopus
Complete Contents

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Until recently lithium was a minor commodity, used in small quantities by manufacturers of glass, grease and mood-stabilizing drugs. But demand has skyrocketed in recent years, as BlackBerrys and iPods have become middle-class staples. Between 2003 and 2007 the battery industry doubled its consumption of lithium carbonate, the most common ingredient used in lithium-based products.

The lithium bonanza may just be starting. Lithium-ion batteries are integral to the automobile industry's plans to wean itself off fossil fuels. The hotly anticipated Chevrolet Volt, a plug-in hybrid car slated to debut in 2010, will use a lithium-ion battery alongside a 1.4-liter gas engine. Mercedes plans to roll out a hybrid version of its S-Class sedan in 2009 and will similarly rely on lithium-ion technology to produce superior mileage. **Nissan** (nasdaq: NSANY - news - people) is working with NEC to mass -produce lithium-ion batteries for hybrids, in hopes of churning out 65,000 per year by 2010.

Since a vehicle battery requires a hundred times as much lithium carbonate as its laptop equivalent, the green-car revolution could make lithium one of the planet's most strategic commodities. The rush is on to find and develop new sources of it, a race that has mining companies scouring the globe's remotest corners, from the high-altitude deserts of Chile and Bolivia to the wilds of northern Tibet. The prospectors seem undeterred by the possibility that lithium's automotive heyday could be cut short by the cost and complexity of lithium-ion batteries. They prefer instead to focus on optimistic forecasts. Kevin McCarthy, a commodity chemicals analyst at **Bank of America** (nyse: BAC - news - people), sees the potential for double-digit annual sales growth for lithium carbonate at least through 2012.

Such rosy short-term predictions have investors swooning over Sociedad Quimica y Minera de Chile S.A., or SQM, the Chilean fertilizer and mining company that produces nearly a third of the world's lithium carbonate and whose leather-skinned employees brave the Salar de Atacama for the sake of gadget lovers. In the past three years the Big Board-traded shares of SQM have climbed from $11 to $22. In the first six months of 2008 SQM reported a profit of $191 million, up 103% from a year earlier, on sales of $787 million, up 41%.

Comment On This Story

SQM is controlled by Julio Ponce Lerou, who heads Pampa Calichera, a Chilean investment group; he is also the ex-son-in-law of Augusto Pinochet, Chile's military dictator for 17 years. But **Potash Corp. of Saskatchewan** (nyse: POT - news - people) has coveted SQM since at least 2002, and it now owns 32%, roughly the same amount as Ponce Lerou and the maximum allowable under SQM's bylaws. Ponce Lerou controls SQM via a deal he struck with Kowa, a Japanese firm that owns 2% of SQM's shares. But he has also had to take on a huge amount of debt to increase his stake in Pampa Calichera, which Standard & Poor's placed on negative credit watch in July. That turmoil might open the door for Potash, which briefly seized control of SQM in 2005.

Energy & Genius
Power Supply
Fuel Demand
Fuel Supply
Power Demand

The lithium craze explains only a portion of Potash's interest in taking over SQM. The Chilean company gets 58% of its revenue from fertilizers, compared to 11% from lithium. But it's clear that investors are intrigued by SQM's rapidly expanding operations in the Atacama desert. Chile boasts at least ten more salars that have yet to be explored for lithium reserves. If GM is right and drivers are willing to pay a steep premium for lithium-powered cars, SQM could be poised for a windfall.

But the lithium industry is still young, even embryonic. China, which produces 23% of the world's lithium carbonate but most of it at a far higher cost than Chile does, recently started extracting brine cheaply from a Tibetan salar. This operation has already had an impact. When SQM's lithium revenue fell 10% in the first quarter of 2008, the company blamed "the growing presence of Chinese producers."

SQM's lithium fields are ringed by blindingly white knolls of magnesium chloride, a salty substance that looks suitable for skiing. These magnesium hills, the by-products of a neighboring potassium chloride plant, provide an excellent vantage point from which to view the rectangular lithium ponds that stretch out toward the dull-brown Andes. From atop the tallest of these snowy mounds, one can see dozens of rectangular man-made ponds, each one bigger than a hockey rink.

The plastic-lined ponds, arranged in neat grids, are filled with brine in various states of evaporation. Ponds awash in the freshest brine are tinged a brilliant turquoise; others, nearly ready for harvest, are richly yellow around the edges. Scarcely any human intervention is needed; the sun does all the work. After the brine reaches a lithium concentration of 6%, which takes not quite a year, it is pumped into tanker trucks and driven three hours west to a plant near the Chilean coast. There the solution is purified and dried until all that remains are crystals of lithium carbonate. These crystals are then granulated into the finished product coveted by battery manufacturers, a fine white powder resembling cocaine.

The solar energy keeps SQM's costs to an estimated $1,260 per ton of lithium carbonate. It sells that ton for up to $12,000.

Lithium production wasn't always this simple, or this cheap. For almost half a century, starting in the early 1950s, the world's primary source of lithium was North Carolina, much of it from a mine in the town of Kings Mountain. The soft metal, vital to the military's H-bomb program, was laboriously extracted from spodumene, a silicate mineral occasionally used as a gemstone. By the mid-1970s the U.S. was producing about 2,900 tons of lithium per year.

Around that same time an Exxon chemist named M. Stanley Whittingham was working on a novel rechargeable battery, one that volleyed lithium ions between anode and cathode. Whittingham's design took advantage of the fact that lithium stores an unusually large amount of energy for its volume, making it ideal for portable electronics. Though Exxon failed to commercialize the technology, probably because it couldn't easily eliminate the risk of fires, the engineering world realized that lithium might someday go places.

Foote Mineral, which owned the Kings Mountain mine, hoped to get the jump on the lithium boom by expanding to northern Chile, where desert brines were rumored to contain vast, cheaply obtainable amounts. In 1975 Foote signed an agreement with the Chilean government, then run by Pinochet, to explore the Salar de Atacama. Nine years later Foote began extracting lithium from a sliver of the lake bed. (The Foote subsidiary that worked the salar is now owned by Rockwood Holdings of Princeton, N.J., which continues to produce lithium on the tract.)

Newly wise to the desolate salar's value, Pinochet's government decided to auction off the rest of the region's mining rights. The American firm Amax (now part of Freeport-McMoran) won the bidding but didn't develop the property. In 1992 Amax sold its rights to a former arm of the Chilean government that had recently been privatized and handed over to Pinochet's then son-in-law, Julio Ponce Lerou.

Lithium's boom had begun in earnest just a year before, when **Sony** (nyse: SNE - news - people) launched its first generation of lithium-ion batteries for consumer electronics. By the end of 1991 Sony was making 100,000 a month. SQM began selling lithium carbonate in late 1996, and within a matter of weeks, lithium carbonate prices fell by a third, to $2,000 a ton. The American lithium industry vanished overnight.

Sidebar:
White Gold

U.S. Identifies Vast Mineral Riches in Afghanistan

Tyler Hicks/The New York Times

A bleak Ghazni Province seems to offer little, but a Pentagon study says it may have among the world's largest deposits of lithium.

By JAMES RISEN
Published: June 13, 2010

WASHINGTON — The United States has discovered nearly $1 trillion in untapped mineral deposits in Afghanistan, far beyond any previously known reserves and enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself, according to senior American government officials.

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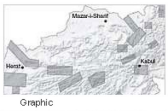

Graphic
Minerals in Afghanistan

The previously unknown deposits — including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium — are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States officials believe.

An internal Pentagon memo, for example, states that Afghanistan could become the "Saudi Arabia of lithium," a key raw material in the manufacture of batteries for laptops and BlackBerrys.

The vast scale of Afghanistan's mineral wealth was discovered by a small team of Pentagon officials and American geologists. The Afghan government and

Readers' Comments

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President Hamid Karzai were recently briefed, American officials said.

While it could take many years to develop a mining industry, the potential is so great that officials and executives in the industry believe it could attract heavy investment even before mines are profitable, providing the possibility of jobs that could distract from generations of war.

"There is stunning potential here," Gen. David H. Petraeus, commander of the United States Central Command, said in an interview on Saturday. "There are a lot of ifs, of course, but I think potentially it is hugely significant."

The value of the newly discovered mineral deposits dwarfs the size of Afghanistan's existing war-bedraggled economy, which is based largely on opium production and narcotics trafficking as well as aid from the United States and other industrialized countries. Afghanistan's gross domestic product is only about $12 billion.

"This will become the backbone of the Afghan economy," said Jalil Jumriany, an adviser to the Afghan minister of mines.

American and Afghan officials agreed to discuss the mineral discoveries at a difficult moment in the war in Afghanistan. The American-led offensive in Marja in southern Afghanistan has achieved only limited gains. Meanwhile, charges of corruption and favoritism continue to plague the Karzai government, and Mr. Karzai seems increasingly embittered toward the White House.

So the Obama administration is hungry for some positive news to come out of Afghanistan. Yet the American officials also recognize that the mineral discoveries will almost certainly have a double-edged impact.

Instead of bringing peace, the newfound mineral wealth could lead the Taliban to battle even more fiercely to regain control of the country.

The corruption that is already rampant in the Karzai government could also be amplified by the new wealth, particularly if a handful of well-connected oligarchs, some with personal ties to the president, gain control of the resources. Just last year, Afghanistan's minister of mines was accused by American officials of accepting a $30 million bribe to award China the rights to develop its copper mine. The minister has since been replaced.

Endless fights could erupt between the central government in Kabul and provincial and tribal leaders in mineral-rich districts. Afghanistan has a national mining law, written with the help of advisers from the World Bank, but it has never faced a serious challenge.

"No one has tested that law; no one knows how it will stand up in a fight between the central government and the provinces," observed Paul A. Brinkley, deputy undersecretary of defense for business and leader of the Pentagon team that discovered the deposits.

At the same time, American officials fear resource-hungry China will try to dominate the development of Afghanistan's mineral wealth, which could upset the United States, given its heavy investment in the region. After winning the bid for its Aynak copper mine in Logar Province, China clearly wants more, American officials said.

Another complication is that because Afghanistan has never had much heavy industry before, it has little or no history of environmental protection either. "The big question is, can this be developed in a responsible way, in a way that is environmentally and socially responsible?" Mr. Brinkley said. "No one knows how this will work."

With virtually no mining industry or infrastructure in place today, it will take decades for Afghanistan to exploit its mineral wealth fully. "This is a country that has no mining culture," said Jack Medlin, a geologist in the United States Geological Survey's international affairs program. "They've had some small artisanal mines, but now there could be some very, very large mines that will require more than just a gold pan."

The mineral deposits are scattered throughout the country, including in the southern and eastern regions along the border with Pakistan that have had some of the most intense combat in the American-led war against the Taliban insurgency.

A version of this article appeared in print on June 14, 2010, on page A1 of the New York edition.

Goldman Sachs, Citi, Recruit Iraq and Afghanistan Vets

Citi and Goldman among other banks were recruiting at a job fair aboard the USS Intrepid.

Tags: Goldman Sachs, Citi, career management, Wall Street jobs,

By Melanie Rodier *@mrodier* JUNE 24, 2011

As jobs decline on Wall Street, banks like Citi and Goldman are actively recruiting veterans of the Iraq and Afghanistan wars, according to Bloomberg News.

Citi and Goldman, together with Credit Suisse, Bank of America and Deutsche Bank were recruiting at a job fair hosted yesterday by the U.S. Chamber of Commerce for service personnel aboard the USS Intrepid, a museum in the Hudson River, Bloomberg said.

Last year, WS&T reported that Wall Street firms and hedge funds were actively recruiting former CIA and military intelligence officers in a bid to boost their security and risk management practices by looking for expertise outside the corporate world.

Former Afghan and Iraq war vets with intelligence operations experience are particularly in demand since they can bring new technology and techniques to research and analysis, Michael Bagley, founder and president of Washington D.C.-based financial intelligence firm, The OSINT Group, told WS&T.

From Bloomberg:

> Former Marine Corps captain Christopher Perkins, now head of Citigroup's derivatives operation in the Americas, said he dealt with budgets and negotiation while stationed in Japan, his first education in business practices. Citigroup hired him based on skills obtained in the military, not to burnish the firm's image, he said.
>
> "It's not about charity work," Perkins said. "It's about making the firm better."

Still, despite their skills the road to civilian work in the financial industry could be a very tough one for the veterans:

Financial sector layoffs are up 21 percent this year. Banks, insurance firms and brokers said they planned to eliminate 11,413 positions through May, according to Challenger, compared with 9,431 during the same period in 2010.

In the meantime, competition among vets themselves vying to get a job is also hotting up: Unemployment among veterans rose to 12.1 percent in May from 10.6 percent a year ago, Bloomberg said.

And following President Barack Obama's announcement this week that he will withdraw 33,000 troops from Afghanistan by September 2012, competition among veterans looking for civilian jobs will soon be getting even tougher.

Printer Friendly

The Washington Post

Back to previous page

E-mails about clean-energy loans provide new details on White House involvement

By Carol D. Leonnig and Joe Stephens, Published: August 8 | Updated: Thursday, August 9, 7:23 AM

President Obama's staff arranged for him to be personally briefed last summer on a loan program to help clean-energy companies, two months before the program was thrust into headlines by the collapse of its flagship, the solar company Solyndra, records show.

About the same time, then-White House Chief of Staff William Daley resolved a dispute among administration officials over another project in the program, clearing the way for a $1.4 billion loan, according to documents and sources familiar with the situation.

The documents, a series of e-mails among Energy Department staff members involved in managing the program, provide new details about the level of White House involvement in the controversial initiative. White House officials have said in the past that final decisions about which companies would receive the loan guarantees were made by career staff members at the Energy Department, not political appointees.

Administration officials said Wednesday that the e-mails show that the White House involvement was appropriate and that there was no pressure on agency officials.

That loan program, a signature piece of the Obama administration's effort to stimulate the economy, has become a major issue in this year's presidential campaign. Republicans have charged that the program wasted critical stimulus money meant to create jobs, spending it instead on ill-advised projects that benefited Democratic fundraisers.

The documents, provided to The Washington Post by Republican investigators for the House Oversight and Government Reform Committee, show that White House aides asked Energy Secretary Steven Chu to deliver a June 27, 2011, presentation to the president on the status of the loan program. The interest in a presidential briefing came as other senior administration figures were challenging parts of the program and debating whether the Energy Department was cutting deals that gave "unjust enrichment" to private companies.

An Energy staffer explained that the president "wants to know its status" so he could be prepared when the loan program came up "at official events and political events where he interacts with [the] business community and Congressional members." The e-mail from the department's chief of staff, Brandon Hurlbut, went on to say that many people attending such gatherings "have some affiliation or interest in the numerous applications received that involve substantial funds."

The documents do not indicate whether the presidential briefing took place as scheduled and, if so, whether Obama offered guidance on the program's future.

'A right to know'

On Wednesday, Rep. Darrell Issa (Calif.) and other Republican members of the House Oversight and Government Reform Committee wrote to Obama requesting a "full and complete" explanation of his involvement in the issue and seeking additional internal documents, including a list of all private individuals with whom the president met to discuss loan projects.

"The American people have a right to know the level of involvement you and other senior White House officials had in the loan guarantee program," the committee members wrote. "Your interactions with business leaders at political events affected decisions to give billions of taxpayer dollars in loan guarantees to green energy companies."

Energy Department spokesman Damien LaVera said that the collection of internal documents provided thus far to congressional investigators "validates what we have said from day one: All decisions on loan applications were made on the merits after careful review by career officials and technical experts in the loan program."

Rather than revealing any White House pressure to give money to certain companies, the new e-mails show that "Department of Energy officials appealed to the White House to resolve legitimate disagreements between agencies" so the applications could move forward, LaVera said.

White House spokesman Clark Stevens added that "internal debates about complex programs like this should be expected, and the White House playing a role in assisting interagency discussion surrounding that process is entirely appropriate."

Solyndra, a Silicon Valley start-up that manufactured solar panels, received a half-billion dollar federal loan from the program before suddenly closing last August. A short time later, the FBI raided its offices as part of a criminal investigation into whether the company misled the government about its finances.

The government is expected to recover just $24 million of the $527 million that taxpayers lent the company. Republicans have accused the administration of favoring Solyndra because its largest investors were funds linked to Oklahoma billionaire George Kaiser, an Obama donor.

'Some serious gloating'

Other e-mail exchanges in the documents appear to show deep divisions between Chu and some senior Obama economic advisers over the program.

In June 2011, Chu asked Daley to settle a dispute among agency leaders over whether a $1.4 billion loan to a solar generation facility was consistent with the stimulus act. Chu was a major proponent of the Project Amp facility, which was proposing to use Solyndra as a sole supplier of solar panels at a time when Solyndra was in financial trouble.

Obama's senior economic leaders, including then-Office of Management and Budget director Jack Lew, expressed concerns that the project was spread over several years and did not have any immediate impact on the local economy. Lew, now Obama's chief of staff, told a DOE staffer after the Daley meeting that he was not opposed to the general idea of the project but was just "protecting the president."

After the meeting, Jonathan Silver, the director of the Energy Department's loan office, celebrated "total victory" over his administration opponents. He described in an e-mail to a colleague how Chu came as "close to an annihilation of the economic team's position as you could possibly hope for." Silver speculated that Daley had given the economic team "a fig leaf" and that the Energy Department's victory was cause to "do some serious gloating."

A draft of Energy Department talking points prepared for the presidential briefing highlights that the program had committed more than $34 billion and asserted that it had created or saved 68,000 jobs. Those talking points forecast little risk from the program, although Solyndra was already showing signs of distress: The department months earlier had negotiated a loan restructuring amid threats that the firm would have to liquidate for lack of operating cash.

"DOE expects that all loans will be repaid," one presentation slide said. "When loans are repaid, the benefits — including the creation of tens of thousands of jobs — will have been obtained at little cost to taxpayers."

Chu appeared eager to make sure that Obama heard about the disagreements over the program within the administration.

"We need to tell the President the truth, as we see it. We need to also present the other side's point of view as fairly as possible," the secretary wrote in an e-mail to Hurlbut.

Officials at the Treasury Department and the White House Office of Management and Budget often argued that government subsidies to clean-energy companies gave them too great of a return on investment, or an "unjust enrichment," Chu wrote.

"Many times, they felt that a 'better deal'' could have been brokered by DOE and asked us to renegotiate," he said.

If you're skeptical or concerned that fuel efficiency alone is not enough to entice Americans to buy electric cars, consider the Silicon Valley company Tesla Motors (pictured above). While their roadster is the first production automobile to use lithium-ion battery cells and travel more than 200 miles per charge, it is also capable of going from 0-60mph in under four seconds.

Not only will the Roadster leave most sports cars in the dust, the car recently set a distance record in April 2009 when it completed the 241-mile Rallye Monte Carlo d'Energies Alternatives with 36 miles left on the charge.

Even though the Roadster is probably too pricey for the average consumer at just over $100,000, Tesla has taken more than 1,000 reservations for the car and expects to begin production of an all-electric and more affordable sedan starting in late 2011.

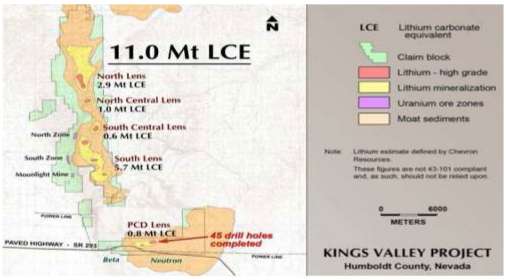
But just remember, the Tesla - as well as every other electric car - needs lithium. And demand for lithium is skyrocketing.

Lithium prices have nearly tripled over the past decade with 22% compound annual growth since 2000 for use in laptops, cell phones, and other electronics.

Demand is expected to continue rising, the recent lithium mania has been ignited by the fact that electric cars require about 3,000 times the lithium needed for an average cell phone, or 100 times the lithium used in a computer battery.

This huge spike in demand should propel lithium prices much higher over the next few years.

The best way to profit from the lithium boom is Western Lithium, which owns the largest known lithium deposit in North America. Take a look. . .



According to a recent investment report:

> The near surface lithium clay deposit is located in Nevada, USA and was initially discovered by the US Geological Survey and Chevron USA in the 1970's. Engineering work completed by Chevron, and later by the US Bureau of Mines in the 1980's, is now being advanced by Western Lithium.
>
> The company's flagship Kings Valley property has a National Instrument 43-101 resource estimate for the initial stage of development and in total hosts a historically estimated 11 million tonnes of lithium carbonate equivalent (LCE). The project has a well developed local infrastructure and Nevada has a long history in the metals and industrial mineral mining industry. The company plans a scoping study during Q3 of 2009, a pre-feasibility study with results from additional drilling during 2010 and projected production by 2013. A chart with the world's largest lithium deposits is below.
>
> While brine is usually the cheapest to mine and process, followed by clay and then pegamite (hard rock), it really depends on the quality of the material and presence of contaminants. It can be cheaper to develop a good rock or clay than a low-quality brine. Access to roads and infrastructure also play important roles in a project's economic feasibility. Western Lithium has a clear advantage to competition in this regard as their clay deposit is touted as high-quality (99% commercial quality) and the project already has all of the necessary road access and infrastructure needed to begin construction and production.

Western Lithium is well-funded and debt free, with $7.3 million cash on the books. They recently completed a $5.5 million private placement in May of this year and have a market cap of 70 million.

Yes, the stock is up a lot this past year. . . but I believe the lithium bull market is just getting started.

I think we'll witness something similar to a uranium-style bull market that lasted several years.

I personally own Western Lithium around $1 per share. I will continue to add to my position on dips.

Profitably yours,

Lithium and Obama's Electrification of America

Commodities / Metals & Mining Aug 13, 2009 - 02:50 PM
By: Richard_Mills


Commodities

America's future energy course is being charted today because of the ramifications of peak oil, because cars pollute too much, because of global warming, because America wishes to end her dependence on foreign supplied energy and to be blunt… Americans need jobs.

"A new energy economy is going to be part of what creates the millions of new jobs that we need," President Obama.

Because of these reasons a whole new industry, a domestic automotive and industrial lithium-ion battery industry, is going to be built.

President Obama recently said, when announcing US$2.4 billion in grants to accelerate the manufacturing and use of next-generation car batteries and electric vehicles, "I'm committed to a strategy that ensures America leads in the design and the deployment of the next generation of clean-energy vehicles. This is not just an investment to produce vehicles today; this is an investment in our capacity to develop new technologies tomorrow."

Obama's plan is to have one million electric cars on U.S. roads by 2015. JPMorgan predicts hybrid sales will reach 9.6 million cars three years later. Global Strategic Analysts predicts that the market for lithium-ion batteries is likely to grow at a compound annual growth rate of over 32% through 2010. With an increased demand for hybrid automobiles this growth rate will continue.

Commodity rules rule! Will electrification ignite a lithium boom?

Only time will tell. But with lithium batteries going to play a key role in the auto industry and eventually appearing throughout the electrical grid it's entirely plausible, in this author's humble opinion, that lithium is the next break out investment.

There's billions and billions of dollars, courtesy of the government's stimulus package, still to come (Washington has already handed out US$8 billion in loans) for advanced battery technology R&D companies and battery manufacturers. The auto industry is gearing up to make its first real go at marketing plug-in vehicles for the masses. The start flag has dropped and the race to build lithium-ion batteries for vehicles has started.

If the US does not develop a lithium-ion battery manufacturing sector at home it may very well be shut out of the electric car business – he who makes the batteries will also make the cars. Lithium demand will skyrocket as more and more hybrids roll down the assembly line. Current processing potential is limited, making it vulnerable to market disruption. And limited supplies could mean big profits for lithium miners and producers.

It's extremely hard to believe that any politician or lobbyist would consider sourcing the needed supplies for Obama's Energy Revolution from offshore suppliers and risk the same foreign dependence as they have today with oil. Politicians will fight tooth and nail to avoid importing lithium or lithium-ion batteries.

Because there is so much money being thrown around and because lithium is the key ingredient to make these future electric cars viable it shouldn't come as a surprise to anyone if investors are smiling with glee over the prospects of a huge boom in the prices of their favorite lithium explorers and producers.

Will the Electrification of America become unplugged?

The U.S. Government Accountability Office, in a report to congress, warned that by switching from gas-powered cars to lithium battery powered cars the U.S. might simply "substitute reliance on one foreign resource for another."

"Politicians ... ran on a plank based on ending foreign oil dependence, and it is unlikely that voters will want to meekly transfer this dependence to lithium." Said the Council On Hemispheric Affairs, Washington, D.C.

Obama said this during his election campaign…."Finding the new driver of our economy is going to be critical. There's no better driver that pervades all aspects of our economy than a new energy economy…That's going to be my No. 1 priority when I get into office." President Obama

Article

13 Battery Startups Hitting the Road With Lithium-ion

Mon Jul 20, 2009 3:00am EDT

content by earth2tech

By Josie Garthwaite - Earth2Tech

With billions of dollars in government funds coming down the pipeline for advanced batteries courtesy of the stimulus package, and the auto industry gearing up to make its first real go at marketing plug-in vehicles for the masses, the race to build lithium-ion batteries for vehicles has never been hotter.

Massive international battery makers may dominate the mobile device and laptop markets for lithium-ion batteries, but a growing number of companies — some founded just in the last year, others that have been around for over a decade — are hoping to carve out a piece of the battery vehicle market. They have their work cut out for them, however, as more established companies such as Sanyo, Hitachi and NEC are eying the same prize.

As the money rolls out and competition heats up, here are 13 battery startups you should know about:

A123Systems: Massachusetts-based A123Systems, working with nanoscale materials licensed from MIT, has attracted big-name backers including General Electric, Motorola and Qualcomm. The startup had raised $132 million by late 2007, and last year filed for an IPO. But A123 has since revised its registration with the SEC several times (taking into account tumult on Wall Street and in the auto industry, and most recently the introduction of new government incentives) and has yet to go public.

Runner-up to supply cells for General Motors' Chevy Volt and winner of a deal with Chrysler to make modules and battery packs for the struggling automaker's planned plug-in vehicles, A123 is also working on energy storage systems for electric utilities and got its start with batteries for power tools. The company has its eye on at least two DOE programs, and has won state-level support as part of Michigan's efforts to lure battery manufacturing jobs.

ActaCell: Having raised $5.8 million in a Series A round led by DFJ Mercury and joined by Google.org last summer, ActaCell has been working toward a 2010 commercial launch. ActaCell's devices, which it expects to have a longer cycle life at lower costs than the competition, are based on technology developed at the University of Texas at Austin. The company has joined the National Alliance for Advanced Transportation Battery Cell Manufacture, a group of 50 U.S. companies that plan to invest more than $600 million in a battery R&D center in Kentucky, if DOE funds come through.

Boston-Power: Massachusetts-based laptop battery maker Boston-Power unveiled a new battery for plug-in vehicles in May 2009. The 4-year-old company hasn't released many details about this "Swing" model, other than to say that it will deliver "industry-leading capabilities" in areas such as energy density, lifespan, safety, cost savings and environmental sustainability.

While Boston-Power says it has enough manufacturing capacity to produce millions of cells per month in Asia, it aims to build a new lithium-ion battery factory within three years in Auburn, Mass., for both laptop and vehicle battery cells — if it wins approval from the DOE for about $100 million in grants. Otherwise Boston-Power plans to continue to grow and open more factories to meet demand, but probably not stateside.

CFX Battery: Co-founded less than a year ago by Rachid Yazami, research director of France's National Center for Scientific Research, Caltech professor Robert H. Grubbs and French chemist Andrew Hamwi, CFX Battery is working with technology developed at Caltech to produce prismatic (flat), cylindrical, thin-film and coin lithium-ion cells.

The Azusa, Calif.-based startup has reportedly raised $15 million and now says it is growing its team and seeking alliances with major equipment manufacturers as it develops batteries for not only electric cars but also medical devices, mobile phones, laptops, and military and industrial applications. Anticipating a lithium squeeze down the road and eying lower-cost alternatives, Yazami tells the New York Times that he is also "trying to develop a battery powered by nano particles of sodium and water."

Electrovaya: Mississauga, Ontario-based Electrovaya makes battery systems (cells, modules and interfaces) for hybrid and electric vehicles — including some of its own, such as the low-speed electric Maya 300 that rolled last month in a small ExxonMobil-backed car-sharing program. Working with nanostructured lithium-ion polymer technology, Electrovaya snagged three deals with Chinese manufacturers late last year, and also has agreements with India's Tata Motors and Norway's Miljo Innovasjon for highway-speed electric cars. The company was founded in 1996 and began trading on the Toronto Stock Exchange four years later.

Enax: Founded 13 years ago as a battery consulting service in Tokyo, Enax is now working on "lithium-ion cells especially for future hybrid and electric drives in automobiles" with battery giant Continental, which bought a 16 percent stake in the company last year. Enax claims the new batteries will be safer and have a longer service life than today's offerings, as AutoblogGreen reports. The company, which aims to provide batteries for "electric vehicles, submarines, fuel cell system, etc.," also supplies electrodes to other companies.

Envia Systems: Based in Hayward, Calif., early-stage Envia Systems raised a $3.2 million first round of financing late last year from Bay Partners and Redpoint Ventures to help with development of "high performance, low cost energy storage solutions using lithium ion batteries" for plug-in vehicles.

Imara: Founded in 2006, Menlo Park, Calif.-based Imara is working on small-format batteries for power tools and outdoor equipment, with the goal of eventually producing vehicle batteries after it builds "a solid economic base," VP Neil Maguire tells Triple Pundit. Still, the company has requested stimulus funds from the DOE to build a plant in Portland, Ore., to produce cells for plug-in hybrid vehicle batteries.

Imara has raised $20 million in venture capital (investors include Battery Ventures and fifth Power) and licenses its technology from SRI International. The company told us late last year that it aimed to use the funds to ramp up annual production capacity to at least 8 million cells by the end of 2009, with electrode manufacturing facilities in Menlo Park, Calif., and assembly for small-format batteries contracted out in Asia.

Mobius Power: Based in Fremont, Calif., Mobius Power aims to produce lithium-ion batteries with high energy density for mobile phones, notebook computers, backup power for the grid, and hybrid vehicles. Founded in 2007 with a reported $4.5 million investment from Walden International, Lightspeed Venture Partners and Sigma Partners, the company is not revealing many details, but says its "technology is based on innovative and patented developments in the research laboratories at a major U.S. corporation."

Sakti3: Sakti3 has been amassing funds and partnerships since we first wrote about its $2 million investment from Khosla Ventures last year. It remains tight-lipped about its technology, however, which stems from research led by CEO Ann Marie Sastry, who heads up University of Michigan's energy systems engineering program.

Sakti3 has won significant support from the state of Michigan and partnered with General Motors, a move designed to strengthen both companies' requests for government aid and a vote of confidence in the startup's cell tech. In a separate deal, Sastry is already helping to retrain 50 GM engineers at the University of Michigan. To reach commercial-scale manufacturing within three years, Sakti3 hopes to get a $15 million grant from the Department of Energy.

Seeo: Seeo has developed a nano-structured solid-state battery based on a solid polymer electrolyte that founder and technology director Mohit Singh says is more stable, safer, and has a higher energy density than lithium-ion batteries now on the market. For comparison, MIT's Technology Review explains, "[T]oday's lithium-ion batteries use lithium cobalt oxide electrodes and a liquid electrolyte…the electrode material can release oxygen when overcharged or punctured, causing the flammable solvent to catch fire and the battery to explode."

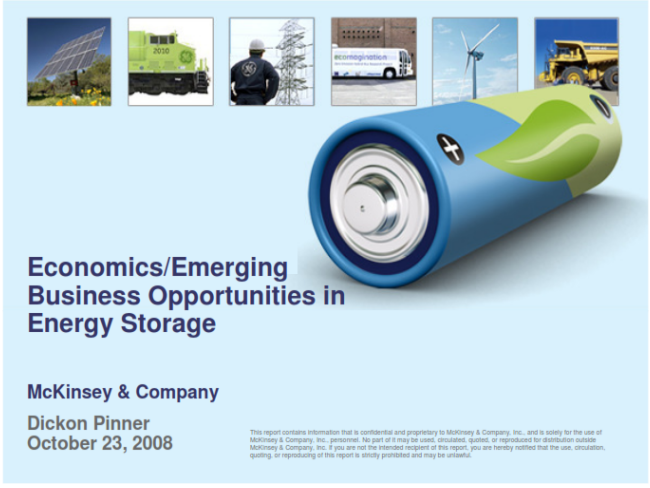
Singh developed the nanostructured polymer electrolyte as a post-doctoral fellow at Lawrence Berkeley National Labs, and says the batteries can deliver 300 watt-hours per kilogram (compared with less than 200 watt-hours per kilogram for a traditional lithium-ion battery) and can operate at a much higher temperature than the competition. The company has reportedly raised around $2 million in funding from investors including Khosla Ventures.

Planar Energy Devices: Founded in 2007 as a spin-out from the National Renewable Energy Laboratory, Planar is working on solid-state, high-capacity batteries. If $56 million in DOE funds come through, the startup plans to start production at a shuttered lithium-ion battery factory built over a decade ago in Gainesville, Fl.

When we wrote about Planar last fall it had one technology that it wanted to use for micro, mid-sized and large batteries — starting with military applications and smart cards. The company's thin-film batteries, designed with a "laminated safety separator" that Planar says protects cells from thermal and overcharge abuse, are supposed to charge in seconds, have a high energy density, last 400-500 life cycles and be safer than traditional lithium-ion batteries. These days Planar's focus seems to have shifted more to vehicle batteries, at least for the purpose of securing stimulus funds.

Quallion: Although Quallion has been around since 1996, making lithium-ion cells and batteries at high volume for medical and military applications, and in custom designs for aerospace and other applications, the company is a relative newcomer to the plug-in vehicle battery market. It has requested $220 million in stimulus funds from the DOE to build a factory in Palmdale, Calif., with capacity to produce 20,000 lithium-ion batteries a year for hybrid cars and trucks by 2012, according to the Los Angeles Times.

Co-founded by billionaire Alfred Mann, Quallion has won support for its aid request from a delegation of 17 California representatives in Congress, and the state Energy Commission, which has pledged to provide up to $9 million if the DOE gives the green light. As Automotive World reports, Quallion aims to produce lithium-ion batteries for cars as well as "batteries that replace engine idling as a stationary power source for heavy duty trucks" at the proposed Palmdale facility.



Economics/Emerging Business Opportunities in Energy Storage

McKinsey & Company

Dickon Pinner
October 23, 2008

A123 Withdraws DOE Loan Request, Says Adequately Funded, but Their 10-Q Disagrees

6 days ago by Jay Cole

In a regulatory filing yesterday (May 15th), A123, the supplier of battery packs to the Fisker Karma, and upcoming Chevrolet Spark EV, disclosed two very important, and two very divergent pieces of information.

The first of which is that they no longer want the government's money, 233 million of it, under the ATVM (*Advanced Technology Vehicles Manufacturing*) program:

> *"We have recently notified the DOE that we have elected to withdraw our application for a loan under the Advanced Technology Vehicles Manufacturing Loan Program. We believe that our manufacturing expansion needs in the United States will be adequately funded under the existing grant we received under the DOE Battery Initiative."*

That could be seen as good news, yet it their filing prior (10-K) they said:

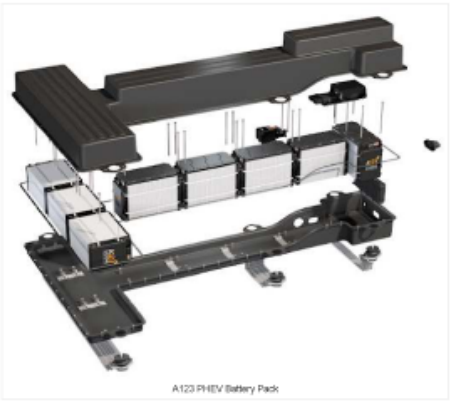
> *"We intend to take advantage of U.S. government and state programs established to increase domestic investment in the battery industry", included in these programs was the 233 million ATVM loan.*

So why the sudden change of heart? The company recently announced it had to undergo a extensive recall program (mostly related to batteries in the Karma), that would cost the company 51 million dollars, while separately announcing a inventory write down of 15 million related to the matter. Added to this situation is the fact the company had a net loss of 125 million dollars last quarter, and only had 113 million remaining in cash , before finding some private investment to infuse 50 million more dollars into the company.

The answer lies in two words, "going concern", as in that is how the company sees itself in its latest filing:

> *"...circumstances raise substantial doubt about our ability to continue as a going concern. Our management is taking actions to raise additional capital to fund cash requirements and evaluating other strategic alternatives. We are actively engaged in discussions with strategic partners for substantial investments in the company... Although our intent is to improve our operating efficiencies and to obtain additional financing, there is no assurance that we would be able to obtain such financing on favorable terms, if at all, or to successfully further reduce costs in such a way that would continue to allow us to operate our business"*

This is basically a mea culpa on the situation, where basically A123 is saying, *"We race is to stay liquid until new orders come online early in 2013 is on"*, and there is no possible way the DOE is going to allow you to borrow money to develop advanced technologies, if you are filing "going concern" statements. Good luck to A123, you are officially on your own.



A123 PHEV Battery Pack

Disclaimer: the author holds a long position in A123

Jay Cole

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A few glitches for electric cars

Your fancy new green machine is parked in the garage, but how are you going to charge it up?

by Peter Valdes-Dapena, CNNMoney.com senior writer
Last Updated: December 11, 2009: 4:10 PM ET

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NEW YORK (CNNMoney.com) -- If you're looking forward to parking a brand-new electric car in your garage soon, be prepared to spend some money getting that garage in shape.

Electric cars like the Nissan Leaf and Chevrolet Volt ideally use special "quick chargers" that have to be hardwired directly into high-power lines.

Nissan Leaf

Installing the chargers is not like putting in a ceiling fan. The equipment has to be fully approved, installed by a competent professional, and in most cases, a city or state inspector will have to approve it all.

Chevrolet Volt Quick Charger

You could plug your car into an ordinary wall socket, but not if you're in a hurry. Charging a Nissan Leaf would take up to 16 hours, and charging a Volt would take eight. With a quick charger, the job for either would be done in just a few hours. The Volt can also run on gasoline, but what's the point then of having an electric car?

Working out the kinks

Last summer, BMW rolled out an experimental fleet of 450 Mini-e electric Mini Coopers in the Los Angeles and New York City areas.

Unfortunately, by the time the first cars were being delivered, the quick charger equipment had not gotten an official seal of approval from the consumer safety group Underwriters Laboratory, something that's required in many localities.

"It took us a little longer than we anticipated," said Rich Steinberg, BMW's director of electric vehicle operations.

Dr. Lyle Dennis, who lives in suburban New York and commutes to his medical practice in New Jersey, leased one of the Mini-e's and said it took about a month for him to finally get his charger installed and approved. But really it wasn't that inconvenient, he said. He just plugged the car in to a regular outlet for as long as possible, which gave him enough power to get work, where he plugged it in again to fill up for the trip home.

"I was able to drive it pretty much every day," Dennis said.

But those who were affected by the glitch are also the ones most likely to forgive, said Sebastian Blanco, editor of

6 most efficient cars and trucks

These vehicles top their classes in fuel economy while offering strong performance, too.
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"The people in the [electric car] community, they certainly know about the problem," he said. "but they're also the ones that are the most excited about electric cars."

Dennis, for instance, runs two popular electric car blogs -- gm-volt.com and allcarselectric.com -- in his spare time.

But the broader market of car buyers are likely to be turned off by any additional hassles, said Charlie Vogelheim, executive editor of Intellichoice.com. "They all become detriments to making the sale," he said. "That's the type of thing that slows it down going into the mainstream."

Cars like the Chevrolet Volt and Nissan Leaf, which are expected to hit the market late next year, aren't expected to sell in large numbers, and they probably won't be profitable for years, but they're key for good public relations. The media and the general public will be watching and waiting to see how well they're received.

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Laying the lines for acceptance

Nissan and GM have been working with city and state governments to prepare them for the arrival of electric car so their customers don't hear, "You need your what inspected?" when they call city hall.

Both automakers are also working on public infrastructure for electric cars. But they admit that parking lot charging stations are more important for creating public acceptance of electric cars -- to do away with worries about running out of juice -- than for actual use.

"We believe that 80% of charging is going to happen at home and at the workplace," said Mark Perry,director of product planning for Nissan.

How little setbacks, problems and hassles will affect public acceptance of electric cars ultimately depends on how the auto companies handle these issues as they arise, said Blanco, but he sees change coming no matter what.

"Little setbacks will not be enough to hold back the tide of people who really want these cars," said Blanco. ■

First Published: December 11, 2009: 6:14 AM ET

Energy & Genius

The Saudi Arabia of Lithium

Brendan I. Koerner, 10.30.08, 06:00 PM EST
Forbes Magazine dated November 24, 2008

The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the periodic table.

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Mounds of magnesium chloride ring SQM's mine, creating the illusion of snow in the ultra-arid *salar*.

The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the periodic table.

Nothing grows in the heart of the Salar de Atacama. this ancient Chilean lake bed 700 miles north of Santiago may be the driest place on Earth, a wasteland strewed with salt-encrusted rocks that resemble cow pies. Annual rainfall on the *salar* (which in Spanish means "salt lake") rarely tops a few millimeters. The cloudless skies combine with the high altitude, 1.4 miles above sea level, to produce punishing solar radiation, capable of frying exposed flesh in minutes.

Humans would steer clear of the Salar de Atacama were it not for the precious brine that bubbles

The Lithium Gold Rush
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A Mighty Wind/Carbon Hangover
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Special Report: ENERGY+GENIUS

Tesla Battery Failures Make 'Bricking' a Buzzword

Sunday, March 04, 2012
By BRADLEY BERMAN, The New York Times

AN uproar recently ignited on automotive blogs over a post about a Tesla Roadster whose battery needed replacement after its owner parked the car, low on charge and unplugged, for more than two months. The battery, which had fully discharged, could not be revived.

While controversy has swirled around the incident -- with bloggers arguing about an owner's responsibility to keep the battery charged and the motivation in making the details public -- Tesla has confirmed basic facts about the situation.

The incident made a buzzword of "bricking," a term from the high-tech industry typically used to describe electronic devices rendered useless by corrupted software. In this case, it was the 1,000-pound lithium-ion battery pack of an electric Roadster -- a car that sold for about $110,000 but whose production has now ended -- that became, effectively, a brick.

At a conference for electric vehicles last month in San Diego, Tesla's chief technical officer, J. B. Straubel, told reporters that all batteries could be subject to this total failure mode, but fewer than 10 Roadsters might be "susceptible" to the problem. He added: "If you ran your conventional engine without oil, whose fault would it be? It would be the owner's."

Since then, technical experts and electric-car enthusiasts have debated whether it is possible for an electric car's battery pack to become irreversibly depleted, and under what circumstances. Coming just weeks after fires in Chevrolet Volt lithium-ion packs resulting from federal crash tests under laboratory conditions, the failures gave fodder to critics who have questioned the viability of battery-powered cars. Here are answers to some questions raised by the Tesla battery situation:

Q. How exactly did this all begin?

A. A description of a Tesla Roadster in California whose battery suffered a total failure was posted on theunderstatement.com. The crux of the matter was Tesla's denial of warranty coverage because the owner had not plugged in the car while it was parked, as specified in the owner's manual and other materials. A replacement battery from Tesla's Los Angeles service center was offered at "around $40,000," according to a letter to the owner from Tesla's vice president for service, J. Joost de Vries.

Q. How many Tesla Roadsters have experienced this failure?

A. According to J.B. Straubel, Tesla's chief technical officer, "less than 10" cars are "susceptible" to bricking. Several incidents of total battery failure that left cars completely incapacitated have been alleged in online reports by owners. A Tesla spokeswoman, Khobi Brooklyn, said she could not confirm the number of battery failures.

Q. Why would an electric car's batteries run down if the car was not being driven?

A. All modern vehicles, not just electric cars, have systems that draw power even when the car is shut off and parked. Clocks, antitheft alarms and audio systems are just a few of the devices that may be powered at all times by a conventional car's battery.

Cars with electric powertrains, including plug-in hybrids, typically have battery-management systems that are always active. These babysitters monitor and regulate the battery's temperature and charge level. The auto engineer's challenge is to minimize these drains on the battery -- called parasitic losses -- while keeping all systems running.

Q. Under what conditions would an electric vehicle battery become drained beyond saving?

A. An electric car's battery will fail totally only under extreme circumstances, according to Tesla. This occurs if the battery has been discharged "for an extended amount of time." Chemical changes that take place will make recharging impossible.

The electronic vehicle log from the Roadster with the failed battery recorded a span of 36 days from when the state of charge reached zero percent until Tesla said a complete replacement was needed.

Q. Why couldn't the Tesla Roadster batteries be recovered?

Response to the CARB ZEV Expert Panel Position on Lithium-Ion Full-Performance Battery Electric Vehicles

Andrew Simpson PhD
Tesla Motors Inc.
San Carlos, California
23rd March 2008

Overview

This document provides a rebuttal to the CARB ZEV Expert Panel's position on the market potential for lithium-ion full-performance battery electric vehicles (Li-Ion FPBEVs).

The Expert Panel assessed the mass-market potential of Li-Ion FPBEVs based on the current status of the technology, as well as automotive OEMs' and battery suppliers' research, development, demonstration and marketing efforts. They concluded that Li-Ion batteries had good potential to meet all performance requirements of small, midsize and large FPBEVs as well as meeting cycle life goals. However, they argued that Li-Ion FPBEVs were still handicapped by their high battery costs and low customer acceptance due to limited range and long recharge time. They also suggested that no large-scale OEMs or battery developers were pursuing commercial FPBEV technology. The Panel therefore concluded that market development for Li-Ion FPBEVs had stalled and that, despite impressive technical advancement, the mass market potential of Li-Ion FPBEVs was still inherently limited. In short, they judged that Li-Ion FPBEVs were not a legitimate ZEV candidate technology for mass market penetration.

However, the Panel failed to acknowledge the healthy growth in niche FPBEV markets that can tolerate the cost, range and charging time of Li-Ion FPBEVs. This is exemplified by products from Tesla Motors and other emerging OEMs such as TH!NK. In combination, these niche markets provide a significant volume and pathway to mass market readiness, as well as propelling high-energy Li-Ion batteries much further along the R&D trajectory.

Furthermore, the expert Panel did not subject competing ZEV technologies (i.e. fuel cells) to the same stringent criteria for mass-market viability as they did FPBEVs, thereby injecting a significant technology bias in the comparison and results. Li-Ion FPBEVs are arguably much closer to mass-market readiness than other ZEV technologies when compared from a technology-neutral standpoint.

Overall, Tesla Motors feels that the Expert Panel failed to acknowledge the near-term market potential for Li-Ion FPBEVs and the tremendous progress of emerging OEMs in bringing these vehicles to market. Tesla Motors believes that Li-Ion FPBEVs deserve more recognition as a legitimate ZEV technology with rapidly-growing mass-market potential.

Commentary on Specific Aspects of the Expert Panel Report related to Li-Ion FPBEVs

The Expert Panel Report contains several specific observations regarding the viability of Li-Ion FPBEVs. Tesla Motors has provided a targeted response for each item, citing relevant data from its technology and business plans as well as public information from its competitors.

Will electric cars ignite a lithium boom?

Some suggest the lithium supply could eventually be tighter than oil is today

Tags: electric cars, lithium

During last year's American presidential campaign, John McCain laid out his plan to jump-start the electric car industry with a US$300-million reward for whomever could build a better battery. His then rival, Barack Obama, roundly mocked the scheme, calling it a "gimmick." But it turns out that Obama's biggest problem with the plan may have been there weren't enough zeros in the prize.

Any day now, the U.S. Department of Energy is expected to announce the winning recipients of grants to foster a domestic automotive battery industry, and this time the pot is worth US$2.4-billion. Washington has already handed out US$8 billion in loans to Ford, Tesla and Nissan to promote cleaner vehicles—which the latter plans to tap to build an automotive battery plant in Tennessee. And just last week Ontario jumped in to pledge incentives of as much as $10,000 per car to lure drivers into buying electrics.

With such vast sums sloshing around, it's no surprise that companies and investors are rubbing their hands over the prospect of a boom in the market for lithium. This unique metal, so soft you can cut it with a knife and so reactive it can become explosive when it comes in contact with water, is a key ingredient in the next generation of car batteries, and as plug-in hybrids and electric cars hit the mass market, some are wondering where all that

lithium will come from. "There have been a lot of worries out there that all this money that is being spent on lithium-ion battery technology is going to create shortages," says Jacob Grose, an analyst at Lux Research. In other words, if the fear now is Peak Oil, could the crisis next decade be Peak Lithium?

Lithium-ion batteries are far from new. For two decades they've increasingly found their way into iPods and laptops, which now account for 20 per cent of the lithium market. (The rest goes to ceramics, glass and pharmaceuticals.) For the same reasons gadget-makers use them—lithium-ion batteries are lighter than other types, and kick out twice the power—more and more car companies plan to put them into their plug-in hybrids and electric cars.

Along with the environmental benefits, a key driver in this push is to reduce the West's dependence on Middle East oil. But it turns out that with lithium-ion batteries, the U.S. will still be forced to rely on foreigners. China is a major source of the mineral, as are Chile and Argentina, where it is extracted from brine pools. The world's largest undeveloped lithium deposit is located in Bolivia, which has already indicated it won't let foreign companies mine its reserves, and that could be a problem. Bolivia is hardly a friend to the U.S.—the government of President Evo Morales recently accused America's ambassador of trying to break up the country and expelled him. In a report to Congress last month, the U.S. Government Accountability Office warned that by switching from gas-powered cars to lithium battery cars the U.S. could simply "substitute reliance on one foreign resource for another."

This could be a major concern if supplies become strained—and some say they will be as electric cars catch on. Obama aims to have one million electric cars on U.S. roads by 2015, while JPMorgan predicts hybrid sales will reach 9.6 million three years later. Japanese carmaker Mitsubishi has said demand for electric cars could surpass supply by 2015, and a commonly-cited 2006 report by William Tahil of Meridian International Research, entitled The Trouble With Lithium, suggests the lithium supply could eventually be tighter than oil is today.

However, others question such predictions. For one thing, though Tahil's report is repeatedly referenced in news reports, there are good reasons to be suspicious of its contents. An earlier study by Tahil on the 9/11 terrorist attacks offered "incontrovertible proof" the towers were destroyed by "nuclear explosions." Even ignoring Tahil's bizarre research history, his report assumes virtually every car sold each year—all 60 million of them—will be electric.

"People who argue we'll have peak lithium make huge assumptions about the size of the market," says Kent Furst, an analyst at the Freedonia Group. The U.S. Geological Survey's lithium analyst, Brian Jaskula, agrees. Should electric cars become wildly popular, he says, there is still enough supply to meet demand for the next decade. That doesn't include the lithium in Bolivia, a large Nevada lithium mine proposed by Vancouver-based Western Lithium, or potential deposits in Canada.

Besides, while engines constantly consume oil, a lithium battery can power a car for years. If lithium supplies do become an issue some day, by then other battery technologies may have taken over, says Bob Kruse, a executive with GM's clean energy vehicle program. While the Chevy Volt electric car debuts next year, the company is already working on the second- and third-generations of the car, testing other types of batteries. "I don't think we're in danger of running out of lithium any time soon," he says.

PreviousThe DNA discount

empty casing and sheets of copper-colored material were found in the chamber, as shown in figure 5.

FIGURE 4. EXPENDED CELL WITH METALLIC BEADS ON POSITIVE TERMINAL

FIGURE 5. EXPLODED CELL AND ITS CONTENTS

DOT/FAA/AR-06/38

Office of Aviation Research
and Development
Washington, DC 20591

Flammability Assessment of Bulk-Packed, Rechargeable Lithium-Ion Cells in Transport Category Aircraft

Harry Webster

September 2006

Final Report

U.S. Department of Transportation
Federal Aviation Administration

FIGURE 7. HIGH-SPEED VIDEO CAPTURE OF FIRST EVENT

FIGURE 8. HIGH-SPEED VIDEO CAPTURE OF SECOND EVENT

FIGURE 9. HIGH-SPEED VIDEO CAPTURE OF EXPLODING CELL

4.2 MULTIPLE CELL TESTS IN THE 64-CUBIC-FOOT CHAMBER

A series of tests were conducted to determine the flammability of multiple cells, simulating the tightly packed configuration that would be found in bulk shipment. The tests were conducted using the 5.25″ fire pan, 50 ml of 1-propanol, and a wire basket suspending the cells 3″ above the fire pan. The cells were tested in groups of 4, 8, and 16 in both 50% and 100% charged states.

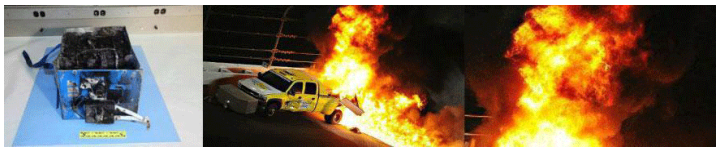
4.2.1 The 50% Charge.

Each test resulted in similar peak temperatures, measured 12″ above the fire pan, of approximately 1200°-1300°F. The duration of the peak temperature increased with additional cells, but the actual peak did not significantly vary. This peak is about 500°-600°F above that of the 1-propanol fire alone. Peak heat flux was under 0.5 Btu/ft^2-sec. The heat generated by the burning electrolyte was usually enough to cause the adjacent cells to vent. Generally, the cells would eventually reach the Second Event; however, once the alcohol fire was exhausted, the electrolyte did not ignite. Cells at a 50% charge rarely exploded. Figure 10 shows a typical test with eight cells.

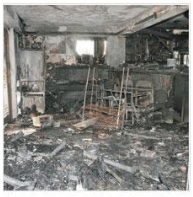
Keywords: Lithium ion battery, ionic liquid, electrolyte, safety, thermal stability

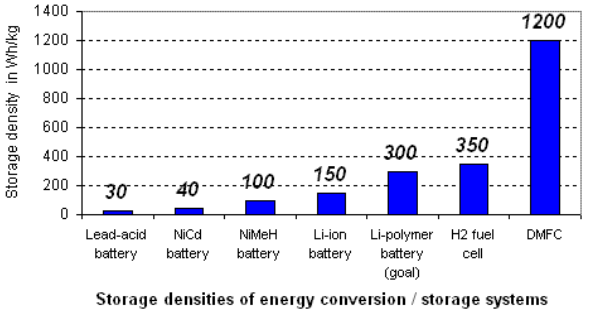
1. INTRODUCTION

Lithium ion batteries have been widely used on personal computers and mobile phones for their high-voltage, high-energy-density characteristics [1-4]. Especially, the rapidly need for cleanly resource and crisis of energy, lithium ion batteries attract more attention as the power source of electric and hybrid electric vehicles. However, Lithium ion batteries have not been large-scale applied to electric vehicles for the safety issues, the volatile and flammable organic solvent organic solvents is the main components of electrolytes in lithium ion batteries, the cases of flaming, smoking or thermal runaway caused by electrolytes are the main reason for the safety problem. Therefore, electrolyte system, which has more stable features, is necessary to be found.



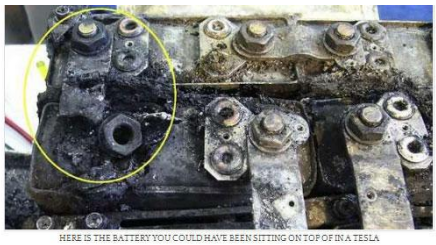
Here is what the Lithium Ion Batteries did to their home:





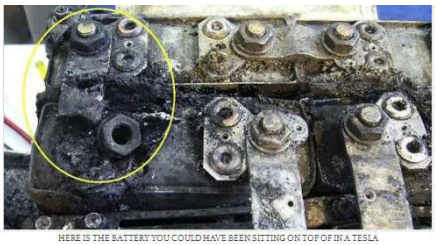
Storage densities of energy conversion / storage systems

Assumptions: H_2 fuel cell efficiency: 40 %, DMFC efficiency: 25 %.
Source: Samsung / SFC Smart Fuel Cell



HERE IS THE BATTERY YOU COULD HAVE BEEN SITTING ON TOP OF IN A TESLA

THIS IS THE TESLA MAGIC CARPET OF DOOM. THIS WHOLE THING IS FULL OF LITHIUM. YOUR WHOLE FAMILY IS SUPPOSED TO SIT ON TOP OF THIS!!



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now? Fisker's insurance company is balking at paying for this saying: "You knew this would happen".

These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:
http://updates.ialopnik.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and

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WEALTHDAILY EDITORS ARCHIVES REPORTS
EXPERTS: Brian Hicks Steve Christ Ian Cooper

Wealth Daily

Investing in Lithium Mining Stocks

How To Profit from the Lithium Boom

By Brian Hicks
Friday, October 16th, 2009

Editor's Note:

While Western Lithium remains a buy, the *Pure Asset Trader* team tells me they have 2 rare earth trades — and possibly a third — they're looking to issue over the next two weeks... with an opportunity to double if not triple your money in mere months.

Ian Cooper heads up this team. And when they talk energy, our readers are all ears. That's because they've closed 33 winners in 35 tries this year. The gains have been exceptional.

For more information on the *Pure Asset Trader's* next move, click here.

For now, here's the lithium piece I wrote a few months ago. This market is just heating up. And as you'll see below, it's a call that's already made readers a quick 30% gain.

Warren Buffett stunned the market back in September 2008 when he announced that he was investing $250 million in a Chinese electric car company.

I say *stunned* because Warren Buffett seemed to violate one of his own rules of investing: Invest in companies you understand.

He admitted that he doesn't know a thing about electric cars.

So why did he invest?

Because maybe, just maybe, he knows that electric cars are a guaranteed winner.

I'm not recommending GM, Nissan, or any other automobile stock that's developing electric cars. . .

Instead, I'm going to recommend the commodity that is vital to the battery technology that'll be used in electric cars: **lithium**.

My play is a tiny mining outfit called Western Lithium (WLC.V: WLCDF). The stock currently trades for about $1.08 a share.

If you're skeptical or concerned that fuel efficiency alone is not enough to entice Americans to buy electric cars, consider the Silicon Valley company Tesla Motors (pictured above). While their roadster is the first production automobile to use lithium-ion battery cells and travel more than 200 miles per charge, it is also capable of going from 0-60mph in under four seconds.

Not only will the Roadster leave most sports cars in the dust, the car recently set a distance record in April 2009 when it completed the 241-mile Rallye Monte Carlo d'Energies Alternatives with 36 miles left on the charge.

Even though the Roadster is probably too pricey for the average consumer at just over $100,000, Tesla has taken more than 1,000 reservations for the car and expects to begin production of an all-electric and more affordable sedan starting in late 2011.

But just remember, the Tesla - as well as every other electric car - needs lithium. And demand for lithium is skyrocketing.

Lithium prices have nearly tripled over the past decade with 22% compound annual growth since 2000 for use in laptops, cell phones, and other electronics.

Demand is expected to continue rising, the recent lithium mania has been ignited by the fact that electric cars require about 3,000 times the lithium needed for an average cell phone, or 100 times the lithium used in a computer battery.

This huge spike in demand should propel lithium prices much higher over the next few years.

The best way to profit from the lithium boom is Western Lithium, which owns the largest known lithium deposit in North America. Take a look. . .

Ownership Questions Dog ENER1 (HEV) As It Competes For Loans And Grants

Posted by Alison Kroulek | # |
08:40:27 am on March 23, 2009

Ener1 seems like it would be one of the companies most likely to benefit from the stimulus plan. After all, the company makes batteries for electric cars and it has a manufacturing plant in Indiana, so it benefits American workers. Plus, the market for these batteries should take off as America tries to reduce the amount of fossil fuels used to power our vehicles. Here's how Barron's describes Ener1's growth potential:

> If Ener1 were to win 5% to 12% of a million-vehicle battery market, the company estimates, it could pull in $2.1 billion in annual revenue with 15% margins (based on earnings before interest, taxes, depreciation and amortization). "If you want to apply a 15 times multiple to that cash flow, which in any normal market is a reasonable growth market, you're talking about a $4.5 billion equity-market cap," says CEO Charles Gassenheimer.

To help expand its facilities here, Ener1 has applied for a $480 million loan from the US Department of Energy and plans to apply for some of a $2 billion dollar grant that is part of the Advanced Battery Manufacturing Initiative in the stimulus plan.

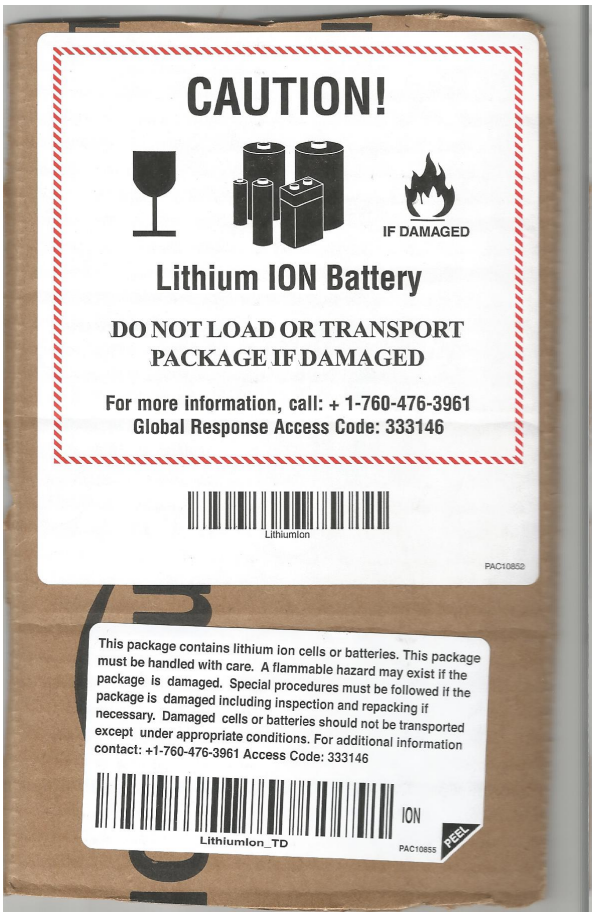
However, questions about the company's ownership are complicating the application process. Here's how the Barron's article I linked to above explains the problem:

> As of late February, some 62% of Ener1's outstanding shares were owned by privately held Ener1 Group. In turn, 66% of Ener1 Group — a recent participant in a $5.7 million loan to Think Global, which is trying to emerge from bankruptcy — is held by Bzinfin, a British Virgin Islands company whose "indirect beneficial owner" is Boris Zingarevich, a Russian businessman. Zingarevich has close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin.

This is a concern for the Department of Energy. There are fears that if Ener1 develops a successful battery, all of the research and development funded with DOE loans and grants could be transferred back to Russia, especially since there are also military applications for the technology.

Speaking to Barron's, Ener1 CEO responded to these concerns by denying that the Russian investors have any influence on the decisions the company makes. Here's how he explains the situation:

> Gassenheimer says that Zingarevich joined the company "when the two founders ran into financial difficulties… If it were not for Boris, this company would not be alive today. He's been a tremendous partner, a patient investor. It's nice to have someone with this level of patience that is fully committed to the story." He adds that Zingarevich "as a matter of SEC rules…is deemed to 'beneficially own' a majority of our shares" but has



Panasonic

- Contact

Filed in archive Companies, Startups, Strategy by Drea on June 15, 2009 | No Comments

Ener1 Wants to Win Lithium Ion Battery Race

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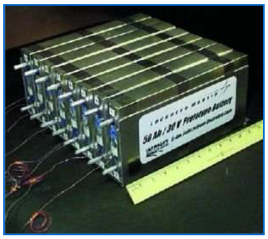

Image: CarSpace

RUSSIAN OWNED

Lithium ion battery manufacturer Ener1 (HEV) could become the country's first lithium ion battery mass producer–if it wins a $480M Department of Energy loan. CNNMoney has more:

Ener1's newly opened production facility near Indianapolis could employ 3,000 workers. Like other renewable energy companies popping up in the Midwest, people are hoping Ener1 can replace some of the fast-disappearing auto and other manufacturing jobs.

Its lithium-ion battery technology is praised for being one of the best available. But Ener1 must compete for big contracts against larger, mostly Asian firms with much more experience in this field. The company has applied for a $480 million government loan to expand its facility and hopefully allow it to land a big contract. If that happens, Ener1 says it will go on a hiring spree.

Many of its competitors, including Japan's Panasonic and NEC, South Korea's LG, and a joint venture between U.S.-based Johnson Controls (JCI, Fortune 500) and the French company Saft, have been making batteries in high volumes for decades. (Ed: The WSJ reports that these are mainly for small devices like laptops and mobile devices. The lithium ion specialty remains a new one.)

If Ford or General Motors are going to buy batteries for an electric car, they need confidence the company they're buying from can deliver. The lack of experience may be one reason why GM decided to go with LG when choosing a battery supplier for its much-hyped Volt.

As the automobile industry prepares to shift from gas to electric power, grant-hungry battery manufacturers are lining up to gather $2.4 billion worth of loans and grants from the Department of Energy. The WSJ has more:

At the (application) deadline last week, the department said it had received 165 (grant and loan) applications. Companies vying for the federal money include General Motors Corp., Dow Chemical Co., Johnson Controls Inc. and A123 Systems, a closely held battery maker backed by General Electric Co. and others. States including Michigan, Kennucky and Massachusetts are also weighing in with applications, usually in alliance with their favored battery makers.

When the winners are decided, as soon as the end of July, the Energy Department may anoint Livonia, Mich., or Indianapolis or Glendale, Ky., as the future U.S. hub of car batteries. A 2008 study by researchers at Alliance Bernstein forecast the current $9 billion-a-year auto-battery market, based on lead-acid batteries, could reach more than $150 billion by 2030.

The Obama administration is trying to position the United States to become the world's foremost manufacturer of lithium ion batteries. If the plan works, Ener1's domestic first-mover advantages could poise it to control the global LI battery industry. "Ener1 estimates it could win 5-12% of a million-vehicle battery market, creating $2.1B in annual revenue with 15% margins," according to Seeking Alpha. As it stands, nobody knows yet whether the DOE will give it the necessary grant.

There's an interesting twist to this potentially All-American story. Seeking Alpha reports that…

…66% of Ener1 Group is held by a company whose 'indirect beneficial owner' is Boris Zingarevich, a Russian businessman with close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin. Foreign control theoretically shouldn't matter to the Department of Energy, but it is looking to foster an American advanced-battery industry, not a Russian-controlled one. This is especially true since advanced batteries are likely to have military uses in addition to civilian ones.

For now, Ener1 remains optimistic. And the lithium ion battery story is just beginning.

The Christian Science Monitor - CSMonitor.com

Goldman Sachs culture 'toxic'? Letter confirms suspicions about Wall Street.

Polls show that Americans hold a very low opinion of Wall Street, and a damning public letter of resignation from a Goldman Sachs executive could only amplify that perception.

A Goldman Sachs sign is seen at the New York Stock Exchange. A Goldman Sachs executive director published a withering resignation letter in The New York Times, saying the investment bank is a 'toxic and destructive' place where managing directors referred to their own clients as 'muppets.'
(Brendan McDermid/REUTERS/File)

Crashed Tesla explodes into a massive fireball

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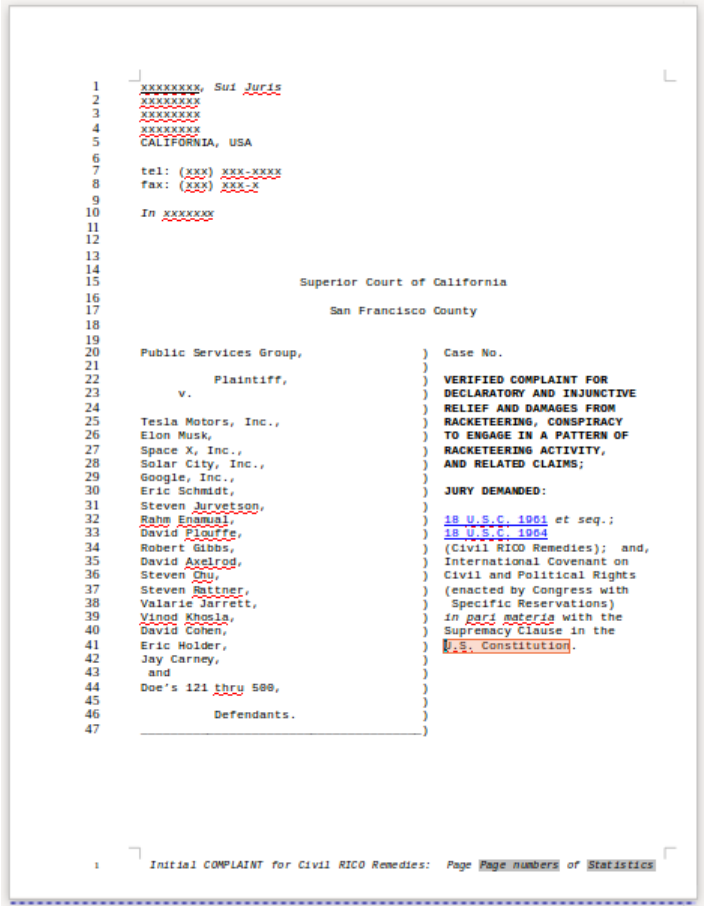
BY NICOLE GALLUCCI

After crashing into a tree, a Tesla Model S violently burst into flames causing cells from its lithium-ion battery to explode.

The video above shows parts of the batteries, which can burn for up to 24 hours, bursting into flames after the crash and shooting into the air like fireworks. The single-vehicle crash, which killed the driver and a passenger, occured Thursday morning in Indianapolis



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CALIFORNIA, USA

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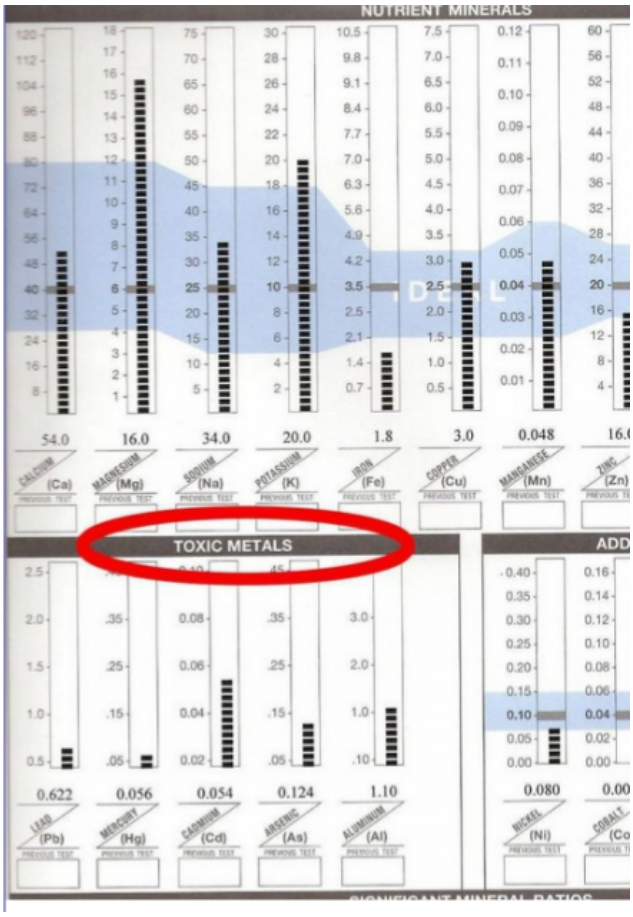
In xxxxxxx

Superior Court of California

San Francisco County

Public Services Group, Plaintiff, v. Tesla Motors, Inc., Elon Musk, Space X, Inc., Solar City, Inc., Google, Inc., Eric Schmidt, Steven Jurvetson, Rahm Emanuel, David Plouffe, Robert Gibbs, David Axelrod, Steven Chu, Steven Rattner, Valarie Jarrett, Vinod Khosla, David Cohen, Eric Holder, Jay Carney, and Doe's 121 thru 500, Defendants.	Case No. **VERIFIED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND DAMAGES FROM RACKETEERING, CONSPIRACY TO ENGAGE IN A PATTERN OF RACKETEERING ACTIVITY, AND RELATED CLAIMS;** **JURY DEMANDED:** 18 U.S.C. 1961 *et seq.*; 18 U.S.C. 1964 (Civil RICO Remedies); and, International Covenant on Civil and Political Rights (enacted by Congress with Specific Reservations) *in pari materia* with the Supremacy Clause in the U.S. Constitution.



3 workers **burned** at **Tesla** plant - SFGate

Hot metal spilling from a malfunctioning aluminum press **burned** three **employees** at the **Tesla** Motors factory in Fremont Wednesday, sending the workers to a hospital.

SF sfgate.com/bayarea/article/3-workers-burned-at-Tesla...

3 **Tesla** Motors **employees burned** in industrial accident

3 **Tesla** Motors **employees burned** in industrial accident The accident follows three reports of **Tesla's** Model S sedans catching fire, but appears unrelated

firerescue1.com/fire-products/vehicles/articles/1604028-3...

Tesla Motors accident: Hot metal burns three workers at ...

FREMONT -- Three **Tesla** Motors **employees** were injured when a low-pressure aluminum casting press failed Wednesday afternoon at the company's Fremont factory.

mercurynews.com/breaking-news/ci_24516306/tesla-accident-...

Tesla CEO Elon Musk Visits Injured Workers at Hospital | NBC ...

Two workers at **Tesla** Motors' plant in Fremont remain hospitalized at a San Jose burn unit after they were injured by a hot-metal spill caused by an equipment failure.

nbcbayarea.com/news/local/Fire-Ambulance-at-Tesla-Plant-...

Workers **burned** at **Tesla** car plant | Technology | The Guardian

Three **Tesla** Motors **employees** were injured when a casting press containing hot aluminium failed at its San Francisco Bay area factory, officials said.

theguardian.com/technology/2013/nov/14/workers-burned-tes...

Tesla Motors Workers **Burned**, Cal-OSHA Continues Investigation ...

Cal-OSHA has continued it's investigation into the **burned** workers at the San Francisco Bay **Tesla** Motors factory. Three **employees** suffered burns after a casting

natecintl.com/blog/tesla-motors-workers-burned-cal-osha...

required to meet certain conditions before closing, the conditional commitment will require Solyndra to meet an equity commitment as well as other conditions prior to closing. Today's action signals the Department's intent to move forward on Solyndra's application for $535 million loan guarantee provided the company meets its obligations.

Before offering a conditional commitment, DOE takes significant steps to ensure risks are properly mitigated for each project prior to approval for closing of a loan guarantee. The Department performs due diligence on all projects, including a thorough investigation and analysis of each project's financial, technical and legal strengths and weaknesses. In addition to the underwriting and due diligence process, each project is reviewed in consultation with independent consultants.

Secretary Chu initially set a target to have the first conditional commitments out by May – three months into his tenure - but today's announcement significantly outpaces that aggressive timeline. Secretary Chu credited the Department's loan team for their work accelerating the process to offer this conditional commitment in less than two months, demonstrating the power of teamwork and the speed at which the Department can operate when barriers to success are removed.

U.S. Department of Energy, Office of Public Affairs, Washington, D.C.

United States Department of Energy
Office of Public Affairs
Washington, D.C. 20585

News Media Contact(s):
(202) 586-4940

For Immediate Release
March 20, 2009

Obama Administration Offers $535 Million Loan Guarantee to Solyndra, Inc.

Investment Could Lead to Thousands of New Jobs

Washington, DC – Energy Secretary Steven Chu today offered a $535 million loan guarantee for Solyndra, Inc. to support the company's construction of a commercial-scale manufacturing plant for its proprietary cylindrical solar photovoltaic panels. The company expects to create thousands of new jobs in the U.S. while deploying its solar panels across the U.S. and around the world.

"This investment is part of President Obama's aggressive strategy to put Americans back to work and reduce our dependence on foreign oil by developing clean, renewable sources of energy," Secretary Chu said. "We can create millions of new, good paying jobs that can't be outsourced. Instead of relying on imports from other countries to meet our energy needs, we'll rely on America's innovation, America's resources, and America's workers."

Secretary Chu is moving aggressively to accelerate important Department of Energy investments that can create jobs and transform the way America uses and produces energy. This allows the Department of Energy to offer its first loan guarantee within the first two months of the Obama Administration. This loan guarantee will be supported through the President's American Recovery and Reinvestment Act, which provides tens of billions of dollars in loan guarantee authority to build a new green energy economy.

Solyndra's photovoltaic systems are designed to provide the lowest installed cost and the highest solar electricity output on commercial, industrial and institutional roof tops, which are a vast, underutilized resource for the distributed generation of clean electricity. Solyndra's proprietary design transforms glass tubes into high performance photovoltaic panels which are simple and inexpensive to install. By replacing power generated from fossil fuel sources, the electricity produced from the solar panels will reduce emissions of greenhouse gases.

Based in Fremont, CA, Solyndra is currently ramping up production in its initial manufacturing facilities. Once finalized, the DOE loan guarantee will enable the company to build and operate its manufacturing processes at full commercial scale.

Solyndra estimates that:

- The construction of this complex will employ approximately 3,000 people.
- The operation of the facility will create over 1,000 jobs in the United States.
- The installation of these panels will create hundreds of additional jobs in the United States.
- The commercialization of this technology is expected to then be duplicated in multiple other manufacturing facilities.

Secretary Chu is offering the loan guarantee by signing a "conditional commitment" today, following approval this week by the Department of Energy's Credit Review Board. Just as homebuyers who have been approved for a loan are

that a car was on fire near a café on Brokelandsheia. We came out with the fire brigade and police, but it turned out that this car was burned out when the emergency services arrived at the scene." Apparently, going fast isn't the only thing a Tesla does well — it burns fast too.