

What is organic hydrogen energy?

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What did certain billionaires declare war on America's domestic energy back-up plan?

CLIPS FROM VARIOUS PUBLICATIONS ON THE TOPIC:

- Battery industries have spent over \$73 Billion on disinformation and lobby campaigns to keep it from happening.
- A cartel of Silicon Valley VC's that control the battery market, will stop at nothing to sabotage it.
- The most powerful thing in the galaxy, our Sun, is powered by it.
- You can get it from any organic material, or body of water, anywhere, in any country, any place on Earth.
- If the "H"- word is even mentioned once, in any blog, anywhere on the internet, it triggers alerts in hundreds of hired "Meat Puppet" farms where assigned blog trolls rush to the blog to cut-and-paste their assigned disinformation text in order to create doubt and concerns about it.
- Unlike the competing solutions, It leaves no toxic waste, does not cause cancer and turns into drinkable water as it's only waste material.
- The new Feature Film: **"MERCHANTS OF DOUBT"**, reveals the names and tactics behind the disinformation campaign against it.
- Secretary of Energy: Steven Chu held financial interests in the competing technologies and actively sabotaged every effort for it under his regime. 15 U.S. Senators worked with him, on delaying it, because they also held stock in the competing effort.
- Almost every taxpayer cash award winner that Steven Chu's Dept. of Energy gave money to had an investment in the War in Afghanistan and the lithium, indium and other minerals from Afghanistan, which they planned to use in their "Cleantech" companies to obsolete this competing solution. Some say that was an "organized crime"-level corruption effort to claim to do a "feel-good" thing in order to get free taxpayer cash without a big ruckus.
- It has hundreds of technical, national security, job, economic and infrastructure advantages over any competing solution.
- It affects hundreds of trillions of dollars of global markets.
- According to the CIA, If the West loses control of the Middle East: IT WILL BECOME THE SINGLE MOST IMPORTANT THING ON EARTH!

What is it?

CLEAN, SAFE, NON-TOXIC, PERMANENTLY SUSTAINABLE HYDROGEN AND FUEL CELLS POWERED BY WATER!

RECOMMENDED BY THE UNITED STATES CONGRESS:



AWARD WINNING:



CONGRESSIONAL COMMENDATION IN THE IRAQ WAR BILL TO REDUCE DEPENDENCE ON FOREIGN MATERIALS:



HUNDREDS OF ADVANTAGES OVER LITHIUM ION BATTERIES:

By spending billions of dollars trying to kill hydrogen, and the people around it, they are killing families, children, economies and the future of the world

A modern fuel cell and hydrogen system beats batteries on every front including

FIRE– Batteries catch on fire constantly and have been the result of massively more fires and explosions than hydrogen. AT&T 's U-verse TV service now has an exploding battery problem, making it necessary for the firm to **replace 17,000 backup batteries in its nationwide network.** **The Federal Government has OUTLAWED Lithium Batteries on airplanes because they explode unexpectedly so often. Batteries blow up when-ever they want to.**

Lithium ion batteries have crashed airplanes and killed the passengers. Fuel cells never have.

Lithium ion batteries have set children on fire. Fuel cells never have.

Lithium ion batteries give off cancer causing fumes. Fuel cells do not.

Lithium ion batteries give off brain-damage causing fumes. Fuel cells do not.

Lithium ion batteries give off liver damaging fumes. Fuel cells do not.

Lithium ion battery waste can kill your pets or children. Fuel cells only waste material is drinkable water.

Panasonic, and other lithium ion battery companies have been charged with corruption, racketeering, dumping, price fixing and other charges by the Department of Justice.

Life Span- Hydrogen power systems run massively longer and provide massively greater range per charge than batteries.

Fuel cells run up to 20 times longer than lithium ion batteries.

Run Time – The run time of batteries constantly shortens while hydrogen does not.

Memory Effect- This effect is not present in hydrogen systems

Recharge Time- modern hydrogen systems are instant recharge.

Charge life- Modern hydrogen systems can recharge massively longer than batteries before end of life.

Nano powder batteries have cancer causing powder that falls into the pores of the Chinese factory workers skin and gives them potentially fatal diseases

Lithium ion battery mining deals in the Middle East have been thought to have caused massive corruption and possibly led to the rise of ISIS.

Cost- The cost per 300 mile range for a hydrogen car system is massively lower than a battery system. A hydrogen powered car TODAY that will drive 300 miles without a refill is 50% of the price of a battery car that will drive 300 miles without a refill.

Energy from “sour-grid”- A modern hydrogen system can be charged from a completely clean home energy system.

NASA spent over 182 million dollars to research and decide what kind of power system should power all of the manned space-craft, in space. They knew that the failure of these power systems will result in death. They chose FUEL CELLS for all of the spacecraft.

Can't make energy at home- Hydrogen can be made at home. Batteries cannot.

Storage Density – Modern hydrogen technology has a massively higher storage density than batteries.

Bulky Size- Hydrogen systems are dramatically less bulky than batteries.

High Weight- The weight of batteries is so great it reduces the range of travel of a vehicle which causes the use of wasteful energy just to haul the batteries along with the car. Hydrogen energy systems weigh far less.

Environmental soundness- The disposal of batteries after use presents a deadly environmental issue.

Self Discharge issues- Hydrogen does not self discharge like batteries.

Batteries cause a greater carbon footprint than hydrogen

Battery skills are mostly paid for by battery investors

The charge-keeping capability of a typical lithium-ion battery degrades steadily over time and with use. After only one or two years of use, the runtime of a laptop or cell phone battery is reduced to the point where the user experience is significantly impacted. For example, the runtime of a typical 4-hour laptop battery drops to only about 2.5 hours after 3,000 hours of use. By contrast, the latest fuel cells continue to deliver nearly their original levels of runtime well past the 2,000 and 3,000 hour marks and are still going strong at 5,000+ hours

The electrical capacity of batteries has not kept up with the increasing power consumption of electronic devices. Features such as W-LAN, higher CPU speed, “always-on”, large and bright displays and many others are important for the user but severely limited by today's battery life. Lithium ion batteries, and lithium-polymer batteries have almost reached fundamental limits. A laptop playing a DVD today has a runtime of just above one hour on one battery pack, which is clearly not acceptable.

Batteries require coal be burned to charge them. One pound of coal has roughly 14,000 Btu of chemical energy in it. Any reference textbook says that. When that pound is burned in an electric powerplant, steam is made, which drives turbines at high speed, alternators are turned, and electricity is made. When everything operates well, all that turns out to be generally around 30% efficient, meaning that 30% of the chemical energy that started out in the coal has become actual electricity.

LITHIUM ION FINANCIERS ELON MUSK AND JOHN DOERR WILL DO ANYTHING TO STOP HYDROGEN AND FUEL CELLS:

[EKLON-MUSK-HYDROGEN-SABOTAGE](#)

MORE TECHNICAL REFERENCES:

The European Hydrogen Road Tour 2012 has had a clear message: 'hydrogen vehicles are already here and ready for mass production from 2014/15 onwards'. Seven vehicles – from Daimler, Honda, Hyundai and Toyota – participated in a number of events during the tour, with the most buzz generated around the Paris Motor Show. The tour culminates in Copenhagen today amid a flurry of announcements from the automakers about their fuel cell plans.

The reaction of some parts of the media to these is perhaps best encapsulated by an article published in the MIT Technology Review on Monday. Titled 'Hydrogen Cars: A Dream That Won't Die' it discusses the renewed interest of automakers in hydrogen fuel cell cars "as the auto industry wrestles with the limitations of battery-powered electric vehicles".

Automakers are rather less whimsical than that. Interest has certainly been revived – but it is the interest of the press and the public, not that of the automakers, that needed reviving. For the most part, automakers' investment in fuel cell technology over the last few years has been relatively steadfast. To call this a 'dream' is to mischaracterize long-term strategic planning.

It is true, however, that plans sometimes have to change. While battery electric vehicles have been effective in demonstrating the reality of the electric car, they are not yet living up to expectations. Talking to Reuters ahead of the Paris Motor Show, Hyundai's fuel cell group director Tae Won Lim said, "Battery electric car makers entered the market too early without resolving problems such as range anxiety and costs. It was a hasty approach". Few can really dispute that. Nissan executive Andy Palmer told reporters last week that sales of the all-electric Nissan Leaf continue to disappoint: "The uptake isn't as strong as we first hoped". GM saw record sales of its Chevrolet Volt in August, shifting 2,800 – but it appears this is off the back of steep discounts, cutting the cost of the car by almost 25%. Sales still fall well short of expectations: GM hoped to sell 45,000 this year.

Toyota, meanwhile, has dramatically scaled back its plans for battery vehicles. The eQ, Toyota's all-electric version of the iQ initially slated for mass production, will now see a very limited production run of about 100. "The current capabilities of electric vehicles do not meet society's needs, whether it may be the distance the cars can run, or the costs, or how it takes a long time to charge," Takeshi Uchiyamada, Toyota's Vice Chairman commented on the 24th of September.

Enter the fuel cell electric vehicle (FCEV). In an interview five days later, Gerald Killmann of Toyota Europe said that the company is planning to begin series production of a fuel cell Toyota Prius in 2014, and from 2015 to market the car in Japan, the US and Europe. Of course challenges remain; Toyota is relying on policy support to ensure these early markets have sufficient hydrogen refueling infrastructure, while the company itself needs to bring the cost of the car down substantially, cutting 30 to 40% off the current 'price' of just under €100,000 – but this is clearly considered achievable. As for pure electric vehicles, Toyota, Killmann said, will revisit battery cars "when better batteries become available".

In fact, in the space of the week leading up to the Paris Motor Show, Toyota, Hyundai and Honda all reconfirmed their long-stated intentions to commercially launch FCEV in the very near future. Toyota announced an improved stack, to be used in the sedan-type FCV scheduled for launch around 2015 (exactly how this fits in with plans for the fuel cell Prius must still be clarified – Toyota has also been seen road testing its fuel cell technology using its existing Lexus platform).

At a press conference Honda's President and CEO, Takanobu Ito, reiterated the company's plans to release its next-generation FCEV "sequentially in Japan, the US and Europe starting in 2015". He also said the company regards FCEV as "the ultimate environmentally-responsible vehicle". And Hyundai announced it will begin small series production of its fuel cell ix35 in December of this year, building up to 1,000 ix35 FCEV on the road by 2015 and mass production beyond that. Hyundai's fuel cell programme was launched in 1998, targeting series production of fuel cell vehicles by the end of 2012 and consumer sales by 2015, and it has kept a remarkably steady eye on this target.

Daimler has been no less committed to fuel cell technology, and is something of a veteran of taking it on the road: in the first half of 2011 the Mercedes F-Cell World Drive took three Mercedes-Benz B-Class F-CELL fuel cell vehicles around the globe. It was a convincing demonstration of the readiness of the technology – and the need for hydrogen refueling infrastructure. Daimler has also been targeting a 2014/15 commercial release date and appears to be on-track. During the course of the 2012 European Hydrogen Road Tour, a Daimler representative again confirmed in a panel discussion that the company plans to commercially launch its fuel cell vehicle around 2015, although this was not accompanied by an official statement.

Daimler has since early 2010 had a strategic partnership with Renault–Nissan, and rumours emerged in the German press last week that this

collaboration may now be extended to fuel cell technology. If so, it wouldn't be a first for Daimler: the company has been working closely with Ford on fuel cell development in the form of the Automotive Fuel Cell Cooperation Corp. (AFCC). Ford's FCEV commercialisation plans are longer term, but Nissan has been more prominent of late, announcing a next-generation fuel cell stack last year and showing its TeRRA fuel cell concept car at the Paris Motor Show this year.

Battery electric vehicles in their current incarnation are less than practical for most drivers on three counts: range, 'refuelling' time, and cost. Fuel cell technology will solve the first two of those problems. As for the third, costs of both batteries and fuel cells will come down and are expected to converge with the costs of other drivetrain technologies around 2025. Why pursue electromobility at all? Increased efficiency of the internal combustion engine, biofuels and hybrids will take us a considerable way towards decarbonising transportation, but a completely new form of propulsion will be needed to take us all the way. Automakers invest in fuel cell technology to ensure they stay in the game in coming decades.

(For an overview of automotive fuel cell technology development and the various automakers' plans for commercialisation, have a look at our recent report 'Fuel Cell Electric Vehicles: The Road Ahead'.)

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"America must stop polluting itself by fueling vehicles with gasoline. I urge President Bush to form a new special commission to plan the conversion to hydrogen. Hydrogen does not poison the air, and it is in everlasting supply. ...The newly-announced energy program doesn't deal adequately with the awful damage to our air and health that utilizing gasoline, a fossil fuel, is doing. President Bush's special commission should consist of the most credible visionaries in business, the environmental movement, politics and the scientific community, to design an energy policy that is truly sustainable and healthy. Nothing is more important for our children."

— Dennis Weaver

"This argues strongly for a swappable battery "deposit/return" fast-charge business model. If energy storage systems are built around smaller, interchangeable modules, which could be swapped easily and quickly by hand or with simple equipment, then during the period of battery

evolution toward “acceptable” EV range, entrepreneurs could acquire (possibly via lease) equipment to recondition, test, recharge, and swap the standard modules, as well as an initial stock of modules. The cost to enter the business would be low, guaranteeing that as many charged-module purveyors as possible would spring up to cater to the demand, perhaps as sideline businesses at other establishments: traditional service stations and garages, auto-parts stores, quick-lube places, Costco, etc. If the key equipment and modules were leased (from Tesla Energy Group, perhaps?), the cost of exit could also be low, meaning that, as easily as participants entered the market when demand was high, they could leave the market as demand fell, resuming full focus on their main business or going into other businesses entirely, in an orderly, reasonable fashion. Just few years after the range of new EVs reached the “acceptable” level, auto parts stores, garages and EV dealerships might be the only places left where one could get a replacement battery module or a quick “swap charge,” which would be appropriate for the number of vehicles that might still need them from time to time.

In contrast, build-out of an infrastructure sufficient to provide true quick-charging would take time, be expensive, and leave quick-charge stations holding the bag when the bottom dropped out of that market. If I were running TEG, I would be about discovering what the optimum form factor and size/weight/current charge capacity would be for a swappable module, then designing and producing the best such module I could. Future Tesla cars could be designed around those modules, and other manufacturers’ vehicles could also use them. Someday, technology may advance to the point that such modules would no longer be necessary, or even cost-effective. But as an enabling technology to get a mass EV industry going as soon as possible, I think this particular development is critical. We’ll see what the future holds”

trong>Hawaiian Hydrogen Bill Passes in Unanimous Floor Vote

**Hawaiian House and Senate Approve
\$200,000 Hydrogen Kick-Start Appropriation
Championed by Energy and Environmental Chair**

**China, Italy United
Over Energy Project
by Zhao Shaoqin – China Daily**

The two countries will sign a strategic memorandum of co-operation on developing hydrogen energy, the China-Italy Workshop on Hydrogen said yesterday in Beijing.

The workshop was sponsored by the Ministry of Science & Technology and the Italian Embassy to China, and organized by the China Energy Research Society. About 80 experts from both countries discussed technical problems related to hydrogen production, storage and utilization.

Carlo Rubbia, chairman of the Italian National Board for New Technology, Energy and Environment, said in his keynote speech that the development of hydrogen energy heralds a new road towards zero-emission of pollution in the industrialization era. Rubbia won the Nobel Prize in physics. Vice-Premier Li Lanqing met with Rubbia yesterday in Beijing, exchanging ideas on research and development of renewable energy. Rubbia called the possibility of producing clean energy from coal by removing carbon as “very promising and valuable.” Rubbia said such research efforts will greatly benefit China, a country that suffers from acid rain because of its heavy dependence on coal.

Ma Songde, vice-minister of Science and Technology, said China is actively developing different methods of producing clean energy, including hydrogen, to help co-ordinate its economic growth and environmental protection.

“The internal combustion engine
will go the way of the horse.
It will be a curiosity to my grandchildren.”

**Geoffery Ballard: Founder of Ballard Power Systems
Time Magazine**

**Congressional Hydrogen Energy Advocates Request Authorized Level
of DOE Funding**

**The Honorable Ron Packard
Appropriations Committee**

Chairman, Subcommittee on Energy and Water Development
United States House of Representatives
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman,

We write to urge your support for an increase in the Department of Energy's hydrogen research program for FY2000. As you know, Congressman Bob Walker of Pennsylvania led the effort in the 104th congress to see the Hydrogen Future Act of 1996 passed and signed into law. Although the Hydrogen Future Act of 1996 authorized \$35 million for the hydrogen research program in FY2000, the Department of Energy's FY2000 budget request for this program is only \$28 million.

Hydrogen as a fuel is on the cutting-edge of renewable energy sources. Used by NASA to power the Space Shuttle, hydrogen can eventually be used to meet most power needs, cleanly and economically. It can power airplanes and cars and provide heat for homes and businesses. Rather than relying on imported fuels, we can use hydrogen produced in this country to grow our economy without harming our environment. Expanding the use of hydrogen and other renewable energy sources will increase U.S. competitiveness, reduce U.S. dependence on foreign oil, and enhance our national security

Hydrogen is the most abundant of all the elements on earth. There is an inexhaustible supply of hydrogen that can more than meet all energy needs. And it can be used with no pollution. When hydrogen burns it generates only energy and water and therefore is a clean fuel. By using a device known as a fuel cell, hydrogen combines with oxygen to produce electricity.

The Department of Energy's hydrogen research program encourages the development of technologies to reduce the cost and adverse environmental impacts of energy use. This program will facilitate the introduction of hydrogen into our national energy strategy. The value of a non-polluting fuel source in our urban non-attainment areas cannot be overlooked. In the context of the overall FY2000 Department of Energy budget, our request for an increase of \$7 million for the hydrogen research program is modest in comparison to what foreign governments and companies spend to develop hydrogen technologies in world markets.

Should you require any additional information, please do not hesitate to contact us. Again, thank you for your consideration of this request.

Sincerely,

Senators: Howard 'Buck' McKeon, Brad Sherman, Virgil Goode, Jr. , Tammy Baldwin

Department of Energy Secretary Bill Richardson Endorses U.S. Renewable Energy Policy
On Earth Day

"The United States shares many of the goals of Earth Day 2000, especially the goal of developing technologies that can help protect our environment. The Earth Day 2000 theme, 'New Energy for a New Era,' accurately reflects the many challenges and opportunities we face as we head into the new millennium. All of us play a role in making Earth Day's ideals a reality. The way we heat and cool our homes and workplaces, power our industries, and fuel our vehicles produces 85 percent of the green house gases the U.S. pumps into the environment. These gases, in turn, contribute to climate change.

"Over time, we need to make a transition to clean, renewable energy sources and more energy-efficient goods and services. We need to make responsible energy choices. We need to tell the world about the many alternatives available today, right now, to revolutionize our energy future. "Native Americans have a saying: 'The real owners of the land are not yet born. That is a truth at the heart of Earth Day."