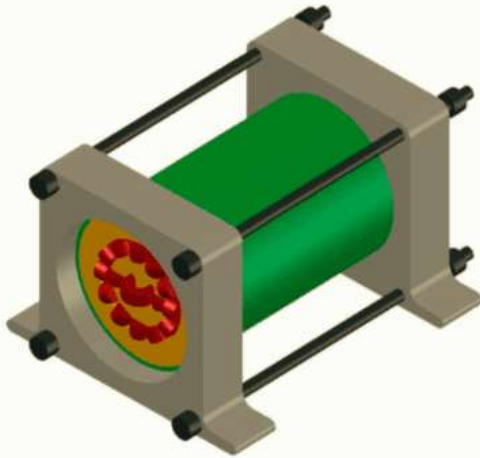


MOVING BEYOND OIL and a// Fossil and Radioactive Fuels!

A hard to believe, highly improbable, energy revolution: Fuel-free generators of electricity - some without moving parts. These will be 24/7/365 alternatives to intermittent solar & wind. They will allow future Electric Vehicles to sell surplus electricity when suitably parked. A new source of income. Rapid mass production will speed replacement of oil, gas, coal and nuclear power. Environmentally clean and safe.



A&I Power was recently awarded U.S. Patent 10,770,937 for a High Efficiency Power Generation System which can produce electricity 24/7/365 without moving parts. One example is illustrated above. The inventors are a pair of highly experienced Electrical Engineers. Their generators “can provide a sustainable supply of electricity with no emissions, that requires little maintenance” and have no need for fuel.

The invention relates to a method of generating electricity based on electromagnetic theory. The technology is a new application based on Faraday and Maxwell’s equations. “While traditional systems suffer significant loss in energy due to the inefficient systems relying on mechanical components and combustion, A&I technology solves this problem by maximizing efficiency while perfectly obeying the laws of physics.”

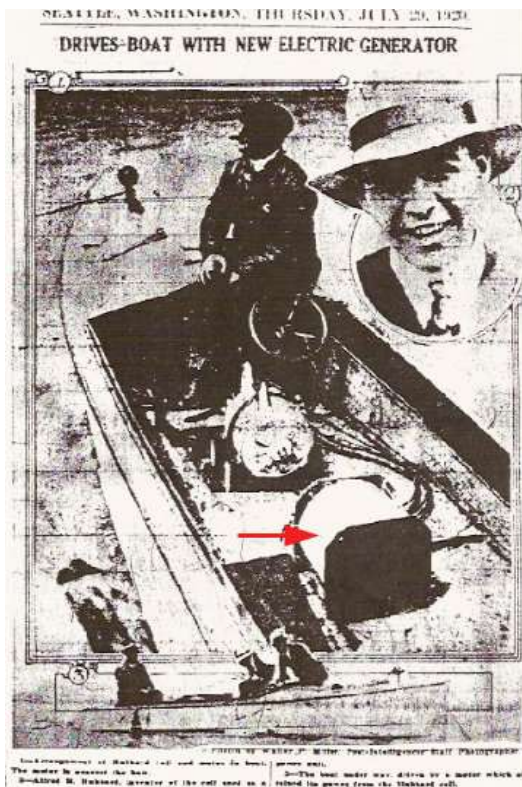
Here are a pair of short videos introducing A&I Power:

https://www.youtube.com/channel/UCrJFUnMJ4xWiYiarBn5dj_w/videos

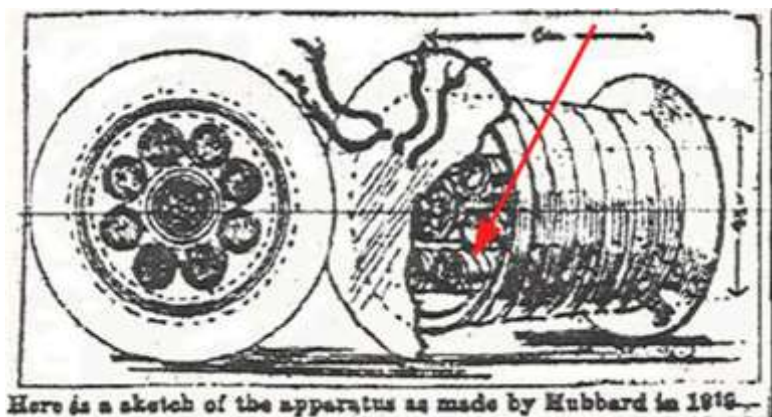
The Hubbard Coil: The first self-powered generator – was inspired by Nikola Tesla’s published work..

Tesla alluded to the fact that his ultra-sensitive receiver could be modified to pick-up, store, and amplify natural electrical vibrations. It would work night and day and in any weather. Containing not a single moving part, it would have the unnerving appearance of just “sitting there” and putting out electricity.

At least three current inventions can perform that remarkable feat. They can quickly change the world.



Just over a Century ago, in 1919, at Portage Bay on Lake Union, Seattle, Washington, Alfred Hubbard, a young student of the work of Nikola Tesla, demonstrated a surprising generator of electricity. The device was about 14 inches long and 11 inches in diameter. It powered a 25 Hp electric motor, which pushed an 18-foot boat containing no batteries, continuously around the bay for several hours. This demonstration was witnessed by thousands and ended because wires connecting the generator to the motor in the boat overheated.



Hubbard made the above sketch of one of his smaller generators, which was used for ordinary household electrical appliances. It had a very simple design with eight cylindrical primary coils each of which was wound on a solid iron bar and connected in series. These primary coils surrounded a slightly larger secondary coil wound around a hollow tube filled with metal bars or wires. This smaller device was about six inches (150 mm) tall and about five inches (125 mm) in diameter. Each core had one layer of thick insulated wire.

Later in 1919 the Seattle Post-Intelligencer carried a first page spread titled, "Hubbard's New Energy Device No Fake." Rev. Father William E. Smith, professor of physics at Seattle College, a Catholic institution, was quoted by the Post Intelligencer as stating he had examined the Hubbard device carefully, had tested it as fully as his means allowed. Father Smith said, "I unhesitatingly say that Hubbard's invention is destined to take the place of existing power generators, and that within a few years it will have advanced the whole theory and practice of electricity beyond the dreams of present day scientists."

"After this Hubbard went up to Everett and put one of his coils in an automobile. The auto was a standard car with the engine left out and a motor, ordinary electric motor, in its place. The coil was small enough to go under the hood of the engine. The auto started off up a steep grade on a dirt road. It ran around the streets." The coil generated at least 30 kW (40 Hp) As with the boat, the car apparently employed no batteries – MG

Hubbard demonstrated the ability to continuously generate electricity without fuel more than 100 years ago. Imagine the implications had his work been successfully mass produced.

A small number of self-powered generator technologies now exist. One advanced design in development will specifically confirm Hubbard's achievement.

Modern autonomous generators are under development. Some are turbines. See FUEL FREE TURBINES on this site. Others are electromechanical, with moving parts. Hubbard and at least three contemporary inventors have proven moving parts are not necessary. Three are near-term candidates for production.

To quote the inventor of the design inspired by Hubbard's achievement: "The Hubbard generator is an outstanding and incredibly efficient device. Its operation is based on the primary, limiting properties of charges and fields. The secret of this device remained unsolved for a century and now I have managed to make significant progress in theory. The combination of parametric resonance and unique geometry allows you to apply the internal infinite energy of electricity."

"Forces arise as a result of the interaction of field and charge. This is the Lorentz force. The field accelerates the charge. The accelerated charge excites the field. Another field. This chain of interactions can be arranged in space in such a way that the process of free vibrations will either damp or increase.

The first case is well known, but the second is quite specific and is described in the theory of parametric resonance. Yes, it is also known, but much less common.

Typically, parametric excitation requires commutation, that is, work. But in the presence of an "infinite source" of the field (not energy), the commutation can be replaced by periodic phase relations in the circuit.

Such an "infinite field source" is also known and is also widely used. These are ferromagnetic materials. Their domains are such sources.

And it becomes possible to create such an electricity generator that will work as long as the ferromagnetic properties of the core are preserved.

Hubbard's secret is not in the new physical principle, but in the unusual geometric, spatial positions of the coils. This allows you to get a feedback loop, which is not possible in normal cases."

ADVANTAGES OF AN AUTONOMOUS GENERATOR

Point-of-use power plants can produce electricity at less than 1 cent per kilowatt hour.

- More affordable than solar energy and independent of sunlight.
- More reliable than wind energy. Can operate 24 hours a day and 7 days a week, all year.
- There are no harmful emissions, whatsoever.
- Does not use any fuel to generate electricity.
- Variations can replace all coal, nuclear, natural gas and other fossil fuel-based power plants.
- There are no daily operating costs as the technology is self-sustaining.
- Operate efficiently for many years, perhaps with occasional replacement of parts.
- Easy to install anywhere, indoors, outdoors and underground.
- Can provide independent electricity to residential, commercial and industrial buildings. Connection to a external power grid can become optional.
- Does not discharge any toxic chemicals that will require expensive clean-up.
- Can produce clean and free energy for buildings, Power Plants, Electric Vehicles, boats, ships and aircraft, with unlimited range which will put an end to the current worldwide oil, gas and coal dependence.
- These technologies can produce electricity at a lower price than any power-generating system currently being used anywhere in the world.
- The free, clean and renewable energy generated by Autonomous Generator technology can bring down the cost of generating power for electricity and transportation by about 90% worldwide. This will enable the cost of manufacturing goods and services to be drastically reduced and also the cost of transporting goods and services, including food, will be negligible. The end result will be a dramatic reduction in inflation, automatic stimulation of economic activity in terms of increased productivity, high employment rate and resurgence in national prosperity worldwide.
- The huge amount of money saved from importing oil, natural gas, coal, uranium and other expensive energy products, which range from millions to billions of dollars annually, can be re-invested into each country's economy which can lead to exponential acceleration of national wealth.

☀ The threat of global warming and its catastrophic impact on human economic growth can begin to be reversed by removing the carbon footprints created by all fossil-fuel emissions, thereby restoring the protective ozone layer and rejuvenating the health of the planet. This will greatly benefit all nations.

☀ The current global recession and the heavy burden of unemployment fostered on many national governments can be relieved by the extensive manufacturing, distributing and servicing of products created by Autonomous Generation technology which can provide employment, each year, for several million people in the U.S.A. and millions more worldwide.

☀ It can increase the profit of wise electric utilities as well as transportation and delivery companies, worldwide.

☀ All existing fossil fuel-based power plants, automobile engines, marine engines and aircraft engines can be replaced with clean energy worldwide, which will effectively bring an end to the current global oil dependence and eliminate the inevitable energy crisis.

☀ The all-electric systems being developed will replace the present gasoline & diesel internal-combustion engines within a few years and ensure great savings to individuals and institutions worldwide because vehicle owners will no longer need to buy fuel.

A WORLD FREE FROM FOSSIL FUELS AND OIL DEPENDENCE!

“The secret of change is to focus all of your energy not on fighting the old, but building the new.” Socrates

Millions of students are aware of the fact that their lives are at hazard. They have accepted the climate science underlining that reality. Those with an interest in learning valid (but not yet generally accepted) new science - may find that by studying revolutionary energy science they can change the world - faster than most with traditional science or engineering backgrounds assume is possible.

Imagine the benefit to car & truck owners - and the impact on the economy - when owners typically save at least \$2,000/year on fuel and can earn substantial income while parked. Vehicles are typically stationary about 23 hours each day.

Parking lots and municipal garages will become multi-megawatt power plants.

This will happen in spite of a ranting Troll and a legion of skeptics.

Millions of cars, trucks & buses, selling power when parked, can gradually replace any need for centralized power. This heralds the end of coal, natural gas & nuclear power plants.

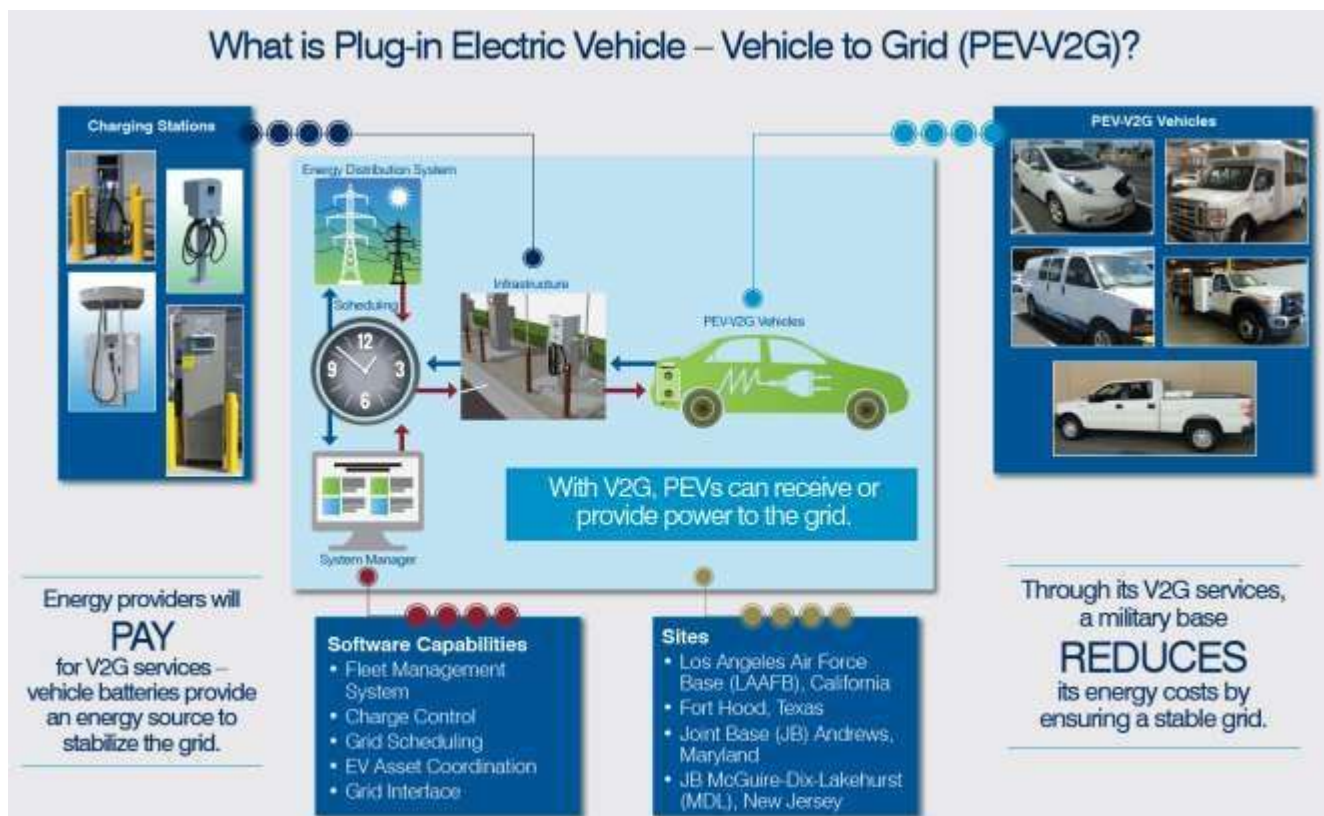
See below to understand how that would work.

U.S. Air Force Unveils World's Largest Electric Vehicle-to-Grid Fleet

We've talked about the profound change the electric vehicle will bring to the power grid. The military is showing how it's done with the world's largest vehicle-to-grid project to date. The Los Angeles Air Force Base in California has acquired 42 plug-in electric vehicles, the most the military has ever assembled in one place. The cars, trucks, vans and a bus will be able to supply 700 kW, enough to power 140 typical American homes on a hot summer afternoon. Recently unveiled, the project marks the first time the Department of Defense has swapped out a base's entire non-tactical vehicle fleet with such vehicles. The military will use the new fleet to show how electric vehicles can serve and strengthen the California grid.

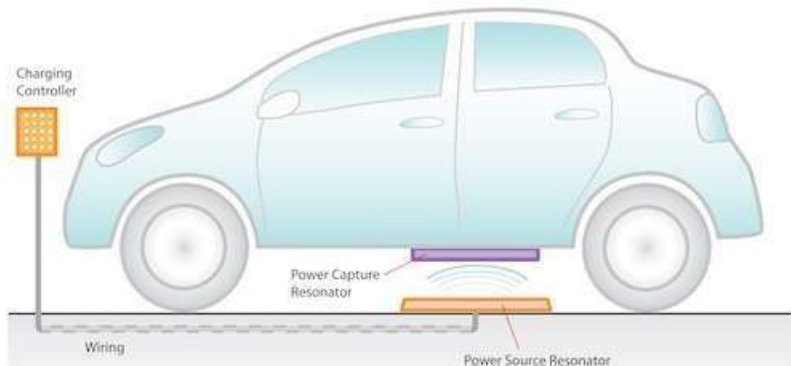
What's profound is that *the grid acts as a customer to the vehicle*. The vehicle can sell power to the grid. The vehicles also can help the grid function more smoothly by supplying ancillary services – frequency and the like. *The vehicles can therefore earn revenue* that helps offset energy costs at the base, as well as enhance grid reliability and power security. *In addition, the vehicles act as a low-cost mobile power source that helps the base keep the power flowing if the central grid fails.*

With autonomous generators most future cars could be electric. Fewer batteries are needed and they will constantly be charged. Range will be unlimited. Municipal parking garages can be megawatt power plants.



Vehicle to Grid (V2G) power: A few electric cars, equipped with two-way plugs, can sell 10 kW of electricity from the batteries to a few utilities today. The car owner can perhaps earn up to \$1,800 each year. The new technologies mentioned here might greatly increase those earnings.

Wireless, Vehicle to Grid (V2G) technologies, originally developed and proven for electric buses, can now be adapted to any such systems that prove practical. They will be able to transmit substantial amounts of electricity to the local utility, which can, without any physical connection, purchase the power. Fuel-free systems could help owners earn much more – eventually perhaps paying for the vehicle.



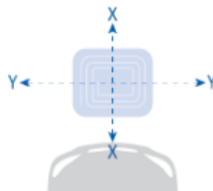
Cars fueled by *autonomous* energy systems will provide substantial power to the local utility, or a home or business, when suitably parked. Reversing systems such as that illustrated above. No plug or wires required.

**Power Transfer as Efficient
as Conventional Plug-in**
(90-93% grid to battery)



**Park-and-Charge
X-Y Flexibility**

Misalignment allowance: ± 10 cm side to side,
 ± 7.5 cm front to back



**Charges as Fast
as Conventional Plug-in**
3.6→7.7→11→22 kW→



**Powers Through Materials
(In-ground placement)**
Asphalt, cement, snow, ice, etc.
Static or dynamic



**Spans Sports cars, Sedans and SUVs
with Single Design and No Moving Parts**
10-25 cm vehicle ground clearance (Z1, Z2 & Z3)



Bi-Directional Power Transfer

Use large battery on EV to:
• Stabilize grid
• Power home



Illustrated above: For more information, see: <http://witricity.com/products/why-magnetic-resonance/>

Energy conversion systems that will enable future vehicles to become power plants, promise to provide explosive growth. Imagine the dramatic economic impact and the power that can be available in emergencies.

Electric School Bus Fleets Test the US Vehicle-to-Grid Proposition

Electric school buses could be the "killer V2G app," says Electric Highland Transportation CEO Duncan McIntyre.

"Electric school buses just might be the breakout vehicle-to-grid (V2G) technology in the United States. At least, that's how Duncan McIntyre, CEO of Highland Electric Transportation, sees it.

McIntyre, who founded renewable energy procurement and analysis marketplace Altenex in 2011 and sold it to Edison International in 2015, started Highland Electric two years ago to build a "business entirely around the school bus electrification market."

The idea is to replace the upfront and ongoing costs of EV buses and charging infrastructure with a fixed annual fee, equal to or less than a school district's current budget for owning, fueling and maintaining their existing diesel-fueled fleets. Highland finances the arrangement and recoups the investment by finding ways to earn money from the new fleet's battery capacity when the buses are not on the road.

A major part of that equation relies on tapping their energy storage capacity for soaking up low-cost overnight or midday power — and more importantly, discharging it during grid-stressed evening peaks. That's the big difference between V2G technologies, which actively tap EV batteries, and the far more common "V1G" approach of simply throttling or halting EV charging to reduce grid impacts.

Out of all the EVs out there, "we think electric school buses are the killer V2G app," McIntyre said in an interview last week. Not only do the nearly 500,000 school buses in North America spend most of their time parked, "they're idle in the middle of the day, they're idle in the evening, and they're idle all summer," a schedule that fits almost perfectly with emerging grid needs."

Why V2G has been slow to take off

"Vehicle-to-grid isn't a novel technology in the U.S. One of the most widespread V2G technology platforms today was initially developed at the University of Delaware back in 2007. San Diego-based Nuvve has built that foundational technology into a platform orchestrating EV grid services in Europe, Japan and the U.S., including a commercial V2G operation in Denmark that's been running for four years.

Europe is home to multiple V2G projects actively bidding into energy markets. But in the U.S., V2G opportunities have been limited by a number of factors, said Jacqueline Piero, Nuvve's vice president of policy. Adding bidirectional power flow adds complications that state interconnection regulations and U.S. grid operator market structures aren't designed to handle.

But these bottlenecks have started to open. California recently revised its interconnection rules to include V2G systems, laying the groundwork for broader adoption, she said. Mid-Atlantic grid operator PJM has followed up its University of Delaware V2G pilots with tests with BMW and General Motors is participating in a pilot launched by Virginia utility Dominion Energy."

These breakthrough technologies will boost V2G

Autonomous 24/7/365 generators are an important part of our development and licensing program. On-board power generation will provide electric cars, trucks & buses with unlimited range and a reduced battery pack. Equipping these vehicles with V2G capability will enable them to sell electricity or power buildings when suitably parked. They will have no recharge expense. Where utilities cooperate each can earn substantial income from V2G. This is a paradigm shift for transport. Worldwide market demand for such vehicles could follow an exponential curve.

Most of the inventions on this website are highly improbable innovations. Several are now emerging. A few revolutionary new technologies will be sufficient to greatly accelerate replacement of fossil fuels. Since they reflect controversial science, most have been slowed by disbelief and severely inadequate capital.