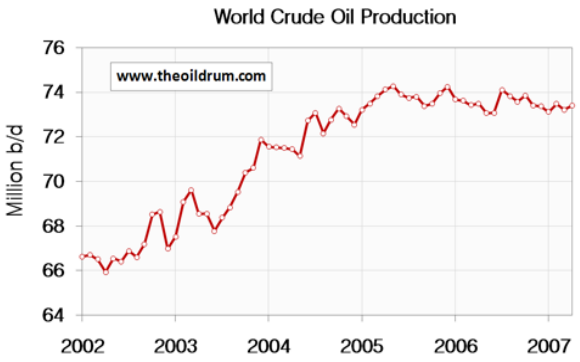
Introduction to Innova

History

Until a few hundred years ago, humans lived foraged a lifestyle as hunter-gatherer's. Suddenly we started to find and develop agricultural methods where we could grow things that we didn't need to eat that day, we could store them for many months or even years. Subsequently we started to live more sedentary lifestyles and consequently began development of new technologies.

Then in the 1700's, we basically hit the energy jackpot when we figured out how to use coal, and then subsequently, in the 1800's, oil, and in the last century, natural gas. Now the question is, what is going to replace fossil fuels?

What very few Americans know is that everyone right now has 200 to 300 energy slaves standing behind them doing work that we take for granted: the average food travels 1,500 miles to get to our plate, and that all uses energy. All these things are subsidized by a one-time endowment of fossil energy that is so powerful that for all human intents and purposes, it is indistinguishable from magic.



People are beginning to recognize that we live on a finite planet, and we have virtually, infinite wants and perceived needs. But those two trends are butting up against each other, and the question then becomes what are we going to do about it?

We've been so endowed with natural resources for 60, 70, 80 years; we have not really thought that this was a problem. There have been some recessions and even a great depression, but we've always reset from that. We build our institutions and our expectations assuming, that this sort of subsidy will continue in the future, and now we've built a lifestyle that is no longer sustainable. We have built an entire industrial civilization on the assumption that there will be more every year.

Today

Technology today is in a race with depletion and depletion is winning. The World uses 86 million barrels of oil a day. By 2015 that is expected to grow to over 98.5 million barrels of oil a day. We have breached the psychological barrier of one hundred dollars a barrel in early 2008. Oil prices have quintupled in the past six years. The United States alone uses 21 million barrels of oil each day, roughly 25% of all of the oil produced in the world. The projections are over 27 million barrels a day by the year 2020. The United States consumes

over 43% of the world's motor gasoline. No new gasoline refinery has been built in the U.S. since 1976. Even if all of the corn and soybean crops produced in the United State were converted for fuel, it would only be enough to meet 20 percent of consumption demands. The country, the world, is demanding another solution.

Why Not Hydrogen?

Innova Labs asks the question – "What about Hydrogen?" The energy contained in one gallon of water exceeds 2.5 million barrels of oil when equated in terms of atomic energy. Within 25 to 30 years, energy experts foresee that Hydrogen will become the de-facto and inevitable main source of energy on Earth. Currently internal combustion engines account for over 45% of the petroleum used in the USA. The internal combustion engine is approx. 26% efficient – 1 quart/gallon of gasoline effectively goes to the engine; the remaining 74% is rejected as heat & emissions through the radiator & exhaust.

One of the primary concerns often associated with Hydrogen is the safety factor. Hydrogen is very safe to use. Hydrogen is the most abundant and lightest of gases in the universe and prefers to combine with other elements. Due to this fact, hydrogen disperses and combines with other elements very quickly. The technologies and systems that are used by INNOVA produce low-pressurized hydrogen on demand and in specific amounts as required and used by the engine, and therefore is safe within its designed specifications.

Properties of Hydrogen

There are several important characteristics of hydrogen that greatly influence the technological development of hydrogen in internal combustion engines. Innova Labs has learned through trial and error and has made quantum leaps in the sustainability of hydrogen technology by utilizing the unique properties of hydrogen in a proprietary manor. In an effort to briefly explain the primary drivers we find so promising and exciting about hydrogen we have briefly listed the primary characteristics below.
the range, reliability and functionality of our canisters.

What is Next?

Innova Labs is in a race to answer some of the most pressing issues ever seen by our planet. There must be an answer to the looming energy crisis set before us. We believe the answer is Hydrogen.

Our Mission

It is INNOVA Lab's Mission to provide the best in sustainable alternative energy and innovative clean products. Providing services and tools to individuals, businesses and governments, so that they can contribute to the global footprint in a positive way. Thereby, helping us change the world, as we currently know it for the future of our children and theirs.

Products & Services

Our products uses a proprietary super conductive fluid that works in combination with a special electrolyzer reactor system to produce scalable amounts of hydrogen (on demand) in a virtually maintenance free environment. This system is designed to extend the range of, or replace any combustion engine fuels and has consumer, commercial and military

applications. This system also has home use and fuel generation only applications. This system reduces emissions and the overall environmental impact as well as extending the

life of the engine. This system can be powered in many ways, including wind, geo and solar. The HydroSTAX products are modular and easily scaled and configured for many applications.

This includes, but is not limited to: Automotive, Trucking, Agricultural, Military, Homeland Security, Aviation, Boating & Shipping, Household Use, Hydrogen Fuel Generation and actual Power Generation.

About Us

We have benefited from guidance and leadership from multiple strategic partnerships within both the consumer and military environments. Through these comprehensive relationships we have been able to complete a vast array of industry specific field tests that were completed exclusively for INNOVA by top experts including Roush, Mercedes Benz and United States Navy.

The following are some of our initial tests done under cooperation with strategic partners and through independent Pilot Program. The data compiled has been and continues to be used for modifications and constant improvement and refinement of the INNOVA product offerings.

Evaluation

Scarcely a day goes by that we don't hear some mention of fuel cells or the new "hydrogen economy". The environmental advantages of a hydrogen economy are so promising that

the push toward hydrogen is strong. In the coming decades, the United States (and the World) will need new energy supplies and a better energy infrastructure to meet growing demands for alternative power and transportation fuel. Hydrogen electrolyzers and fuel cells offer one of the most promising paths toward meeting those goals:

- Hydrogen is a versatile energy carrier that can be used to power many end-users' energy needs.

- The use of Hydrogen will eventually help reduce U.S. dependence on foreign oil.
- HydroSTAX can provide pollution-free energy for both transportation and electric utilities.
- HydroSTAX operates quietly, and is reliable, easy to maintain, and safe.
- Hydrogen poses fewer environmental dangers than those associated with petroleum.
- Innova Labs products are scalable and modular; they can and have been utilized for many applications. Including vehicle, engine and power generation.

With breakthroughs in storage and hydrogen technology developments, such as those being worked on by INNOVA, we are already heading toward a hydrogen economy. This includes research to develop materials, processes, and reactor-based systems for many industries, as well as hydrogen production, delivery and storage options.

Furthermore, non-conventional energy sources, such as solar and wind energy will remain available for an infinite period. Of tremendous worry for all of us is the decline of conventional energies. The rate of global fossil fuel consumption is higher than the rate of nature's fossil fuel production; resulting in the scarcity of fossil fuel and its potential uses, specifically, but not exclusively related to transportation. Of equal importance, is the pollution associated with the ever-increasing use of fossil fuels resulting in a possible decline in the quality of life on our planet. The result is a constant search for alternative fuels to solve energy shortages and to provide energy without pollution.

The alternative fuel most frequently discussed is hydrogen, because it is a clean burning form of energy. In the last decade alone hydrogen has attracted worldwide interest as a secondary energy carrier. This has generated comprehensive investigations on the technology involved and how to solve the problems of production, storage and transportation of the gas.

Hydrogen is:

- The most abundant element in the universe.

- Light and clean.
- The richest in energy per unit mass, and unlike electricity, it can be easily stored.

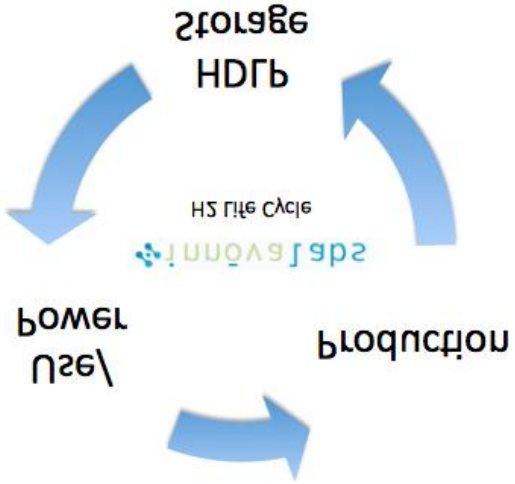
Hydrogen gas is now considered the most promising fuel of the future. It will soon be used in many applications including the generation of electricity, heat your house and cook your food, fuel for your cars and trucks, complete hydrogen powered industries, jet planes, and eventually to power complete towns and cities.

In the engine, hydrogen:

- Lowers operating costs by increasing fuel efficiency

- Lowers particulate and gaseous emissions
- Increases the range of any internal combustion engine (ICE)
- Induces a cleaner, more efficient burn
- Removes carbon residue and sludge buildup
- Spark plugs and valves stay cleaner - longer
- Reduces frequencies for oil changes (engine oil stays cleaner, longer)
- Results in fewer maintenance problems, especially with fuel injector systems
- Causes less bearing wear
- Increases horsepower and torque

Produce - Store - Use



Product Overview - Storage

INNOVA Labs Storage Canisters

We will now focus our energies on our high volume (and high purity) hydrogen storage. This is where our LPH2SC (Low Pressure Hydrogen Storage Containers) will come to the market in various sizes and for many applications.

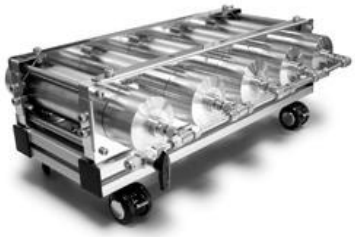
Our Hydrogen Storage Devices are:

- **Safe -** even a gunshot will not result in gas explosion
- **Stable, low pressure -** automatic pressure regulation
- **Compact and scalable -** 10X smaller than traditional storages (see images)
- **99.99% purity hydrogen -** automatic purification of 4N gas to 6N

- **Incredible lifetime –** recharge capabilities far exceed batteries life

With the latest achievements in hydrogen storage technology using various alloys, substrates and nano-sciences, as well as the unique techniques of alloy loading, we will offer the most advanced hydrogen storage systems. Our canisters can safely store hydrogen in the solid state and release it steadily at ambient temperature without an additional energy source - an important issue for fuel cell application and combustion engine support. The enhanced discharge gas flow rates of our canisters and tanks make them a highly competitive gas supply source for a large variety of applications.

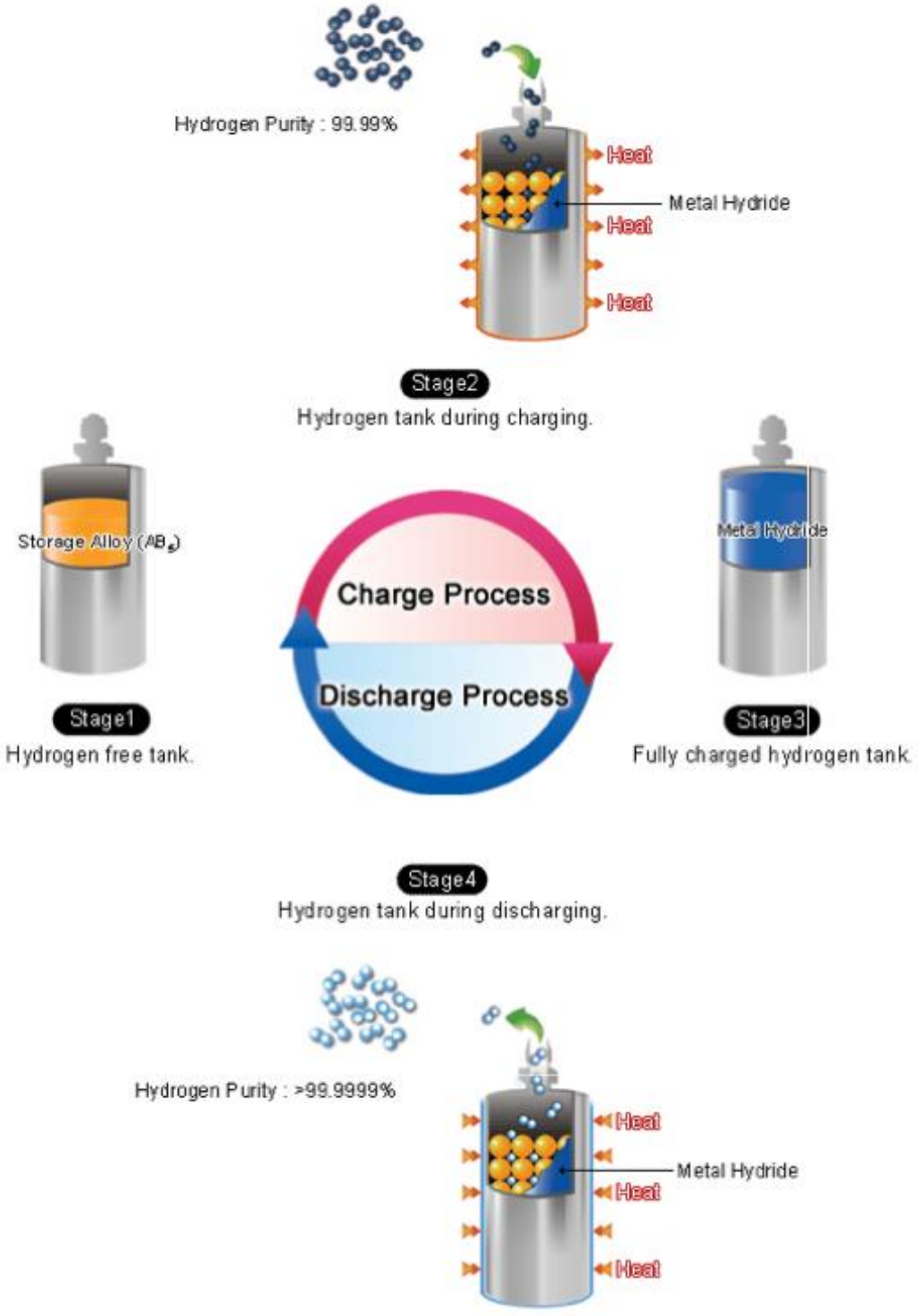
At present, this type of storage is considered as the safest one. Even gunshot tests with fully hydrogen charged tanks do not result in any combustible reaction, which clearly demonstrates the safety level of the product. Unlike the high-pressure hydrogen cylinders, here hydrogen is bonded with the alloy chemically. So, it will take hours, before the system will release it fully in event of gas leakage caused by system's damage.



The system life cycle is incredibly long – our storage is able to pass thousands of charge/discharge cycles without any essential changes in working technical characteristics.

Due to the latest low-pressure storages from INNOVA, it has become possible to absorb hydrogen fuel directly from our autonomous hydrogen production stations (of any size or scale), which are powered by any renewable energy source – solar, wind, geo, hydro, etc. In the future, mankind will be able to create clean fuel himself by running one closed "water-hydrogen-water" cycle, and the driving force will come from infinite renewable energy sources. It will be the beginning of an off-grid energy century, where cities, communities, villages, and even people themselves will no longer need to buy electricity or fuel from the traditional sources. They then become totally free from grid electricity and centralized power plants. Moreover, all these separated renewable energy sources, combined with INNOVA charging and storage systems, can be connected into one energy network under one central control system.

Our Charge/Discharge Cycle



Product Overview – Scalable Charging Stations

The INNOVA charging stations will be able to produce hydrogen in a wide range of volume's and on multiple scale's in an effort to maixmize opportinities from the smallest operations base to considerable remote villages. By using solar, geo, wind and/or any alternative energy source, the hydrogen produced by these stations can be used for a vartiety of applications – including, but not limited to, expeditionary, remote and stationary power.

NOTE: All products and systems are scalable up or down.

Current Hydrogen Production Solutions

HydroSTAX – Can be used individually for under the hood and onboard applications.
OR

Autonomous Stations

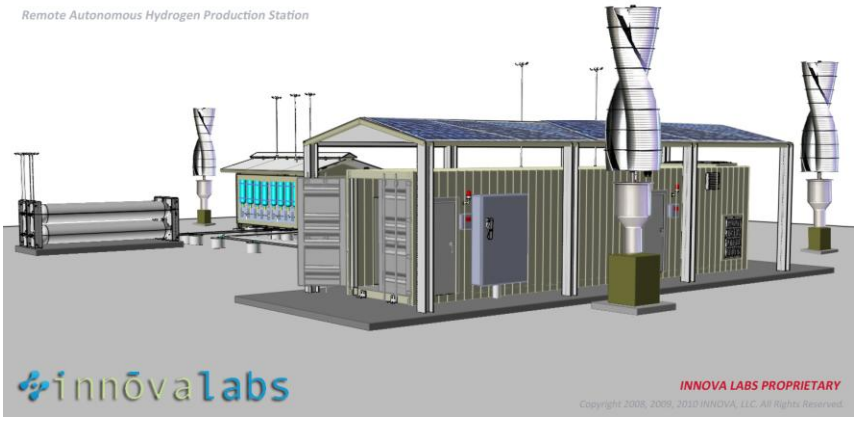
Uses:

- Direct Injection / Supplementation – For Large GenSets, FOB, and Home Scales
- Charging Bottles, Tanks, Canisters and Cartridges, Aerostat and Balloon Filling. Can work alone or with any fossil, bio or alternative fuel source.

Hydrogen Storage Solutions

HDLPH2 Canisters & Cartridges

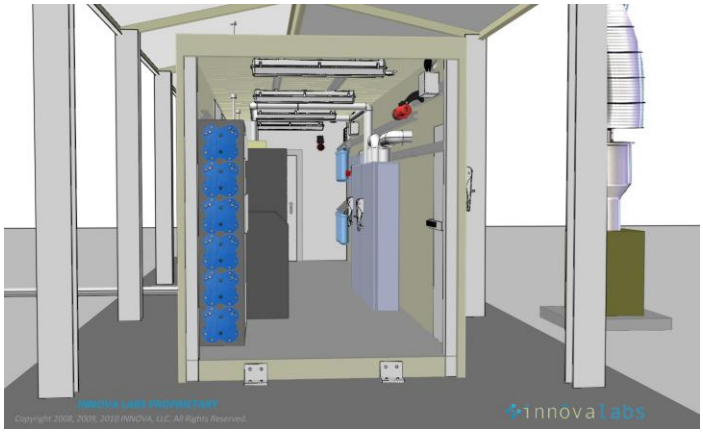
Hydrogen Power Solutions



- Very light weight and small footprint
- AC, DC or Both
- We are working with many types of engines – orthodox or unorthodox – piston driven systems as well as rotary, radial, liquid piston, and axial. We constantly explore and research for the latest in engine technology.
- Rack, Rail or Pak Mounts available.
- Because of the nature and way H2 combusts, very little atmosphere is needed. Therefore, our power systems can be contained underground for security or where visibility or landscape issues are prevalent.
- This lineup is totally hydrogen powered – no fossil or alternative fuel needed.

- Fuel Delivery can be a separate Module or built into the GEN itself.
- All items can be custom configured to meet your demands and requirements.

PowerPak – Backpack Power System – Using Down East Molle Polymer Frame – 800-1200 W - approx. 45 lbs. without canisters. One PowerPak can hold power module as well as a small amount of H2 (for single man operations) and a second PowerPak can hold Canisters and/or Cartridges and perform as the Fuel Delivery System itself.



MicroGEN – 1500W – 2KW approx. 55 pounds*

Little GENnie – 3KW approx. 65 pounds*

GENnie – 5 KW approx. 90 pounds*

Big GENnie – 10KW approx. 110 pounds*

*Using current piston driven engines – weight and footprint can be reduced significantly using other engine technologies.