

100% renewable energy

RH₂

Renewable Hydrogen

water
anywhere around us

H₂O

needs help to store

Renewable Energy

solar wind
hydro ocean
hot spring
etc.

electrolyze
water

abundant renewable energy
is stored as hydrogen

H₂

directly use
electricity

generate electricity, heat

recycle waste heat

fertilizer,
food

burn

turbine generator

generate electricity through a fuel cell

fuel cell car

hydrogen engine

The RH₂ positive spiral

Energy locally produced and consumed

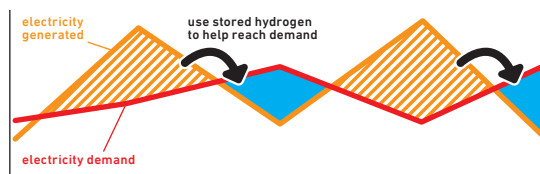
Each community can store energy with the best renewable energy mix available in their surrounding environment. It isn't necessary to produce energy far away and deliver it over distances. Energy becomes more flexible and close to our lives. When locally generated energy supplies close communities, dependence on distant centralized power houses decrease and the communities' energy security increase.

Clean water and air for all life

Water, oxygen, and hydrogen creates the endless cycle of energy. There are no toxic by-products and the air and water are left clean. Centralization of power and money is released for the common good. The endless cycle of energy does not create war or poverty and brings all life closer together.

Renewable energy supply fits the energy demand curve

Hydrogen created by electrolysis of water accelerates the potential of renewable energy. Once stored, hydrogen can release energy to fit the energy demand curve. Unlike batteries, hydrogen can store an unlimited amount of energy according to the volume of the tank.



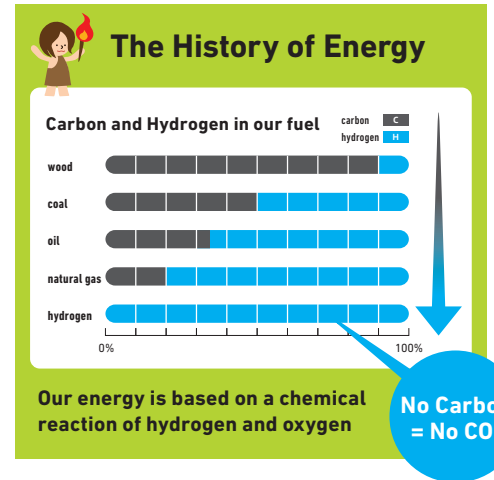
*There are other hydrogen production methods under research that do not use electricity. Examples are photocatalytic water splitting and biological hydrogen production from algae.

Renewable Hydrogen

Water = Energy for WorldShift



From wood to coal, then oil and natural gas.. With time the energy sources supporting development changed, except for one characteristic: nearly all of our energy is a hydrocarbon compound. Hydrogen itself holds a high energy density that provides enough energy for our lives, but is never found alone on earth. For it' s high energy density, hydrocarbon compounds like fossil fuels are burned to release the energy in hydrogen and also release carbon, which becomes carbon dioxide. It takes a long journey to reach hydrocarbon energy reserves. Drilling deep into the earth causes environmental damage. Fighting for possession when it is only found in limited amounts and locations causes conflicts around the world. Nuclear power is another that needs to end. The environmental impacts and violation of human rights from uranium mining, the risks of accidents, and the management of nuclear waste are all problems that tell us nuclear power is not the way of the future. Renewable hydrogen (RH2) is a sustainable energy cycle with renewable energy and water. Hydrogen is then stored from electrolysis of water. Energy is finally more democratic and peaceful with renewable hydrogen.



R Hydrogen in action around the world

As the impacts of climate change and environmental damage intensify through continuous use of fossil fuels and nuclear power, the world is shifting to natural energy with R Hydrogen to maximize it' s potential. Here, Australia and Canada are introduced from the many cases in action around the world.

Off-grid case: Griffith University, Australia

The Sir Samuel Griffith Center to be built at Griffith University (completion 2013) is the world's first solar hydrogen education research center. Powered by solar cells on the roof and windows, the building is designed to supply 100% of its electricity demand on site. Solar power is used as generated and for water electrolysis to make hydrogen.



Distributed case: Bella Coola, Canada

Run of river hydro-electric generator is used by the local electricity company, BC Hydro, in Bella Coola to generate electricity for the community. During off peak hours excess renewable electricity is used to generate hydrogen through electrolysis. During peak hours the renewable hydrogen is fed into a fuel cell generator to create electricity for the community.



For a R Hydrogen society in Japan and in the world

R Hydrogen is an idea achievable with the technology today. Even so, to witness visible change, a great mass of people must believe in what it can bring. The people engage and push the society, not the other way around. The official website awaits you with various information on R Hydrogen. Take a peak or read it through, it all begins by spreading the good news of R Hydrogen to as many as you can.

International NGO **RH₂ Network** [website](http://rh2.org/) <http://rh2.org/> [Follow us @rh2news](https://twitter.com/rh2news)

RH₂ Network is an International NGO spreading the idea of energy democracy and strengthening the potential of natural energy with renewable energy and R Hydrogen.

Contact us

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