

Water Energy Transition

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GDS Technologies Model GDS5000
We have developed a portable water run generator that creates a large amount of energy to run our portable generators that generates power simply by adding water. Spending money on expensive gas is a thing of the past. We have found...

Water energy is breaking through!

Our vision is based on recent developments and information. To get you into our point of view, we'd like to share that information with you first.

Some recent developments

- a. GDS Canada offers a 5 kW generator running on water as fuel. Price: \$ 5000 , - .
See: www.gdstechnologies.ca .
- b. Euronews / Hi-Tech : Engine runs on water
- c. Since February 9th 2016 we are freed from the skeptics who believe that water can't be a source of energy by Euronews. Euronews shows a short documentary of inventor Ricardo Azevedo, who has developed an engine that runs on water. Now the whole world knows: water is a source of energy!
See www.euronews.com .
- d. March 6th 2016: WGNU Project 1601 'Water Energy Pioneers' shows that water is a fuel.
See www.watergas.eu.
- e. A developer from the network of Watergas.NU works on a house-heating system that runs at least for 2/3 on water as fuel. Nijmegen Municipality subsidizes this project.
- f. Another developer from the network of Watergas.NU offers IP concerning very efficient conversion of CO₂ to CH₄. We are now looking for partners to further development of this technology.
- g. Yet another developer will soon release a steam generator using water as source of energy.

From Vision to Program

Watergas.NU has developed a working program based on its vision. On the basis of an overall transition agenda Watergas.NU adopts a limited number of projects .

General outlook for the energy market

At present, the widely anticipated direction of the energy a mixture of gas , wind and solar energy. Solar, making a frog leap in housing (all electric (!?)), is now broken through a critical price level. This also applies to offices. Gas will remain in the industry (ref . Shell, Al Gore and others). Governments turn on wind power strongly to achieve the climate goals. Wind is dependent on grants and can sometimes get the wind.

Our vision

Water becomes a source of energy

New development : Resonance Technology

Resonance technology is a relatively new development in which electrolysis of water is realized with high yields of more than 100%. Resonance Technology turns water into a source of energy. Water is not only an energy carrier. Resonance Technology also ensures that hydrogen (H₂) is produced significantly cheaper. On the other hand resonance watergas can be used carbon dioxide (CO₂) is significantly less expensive to form into methane (CH₄).

Where does that extra energy of resonance technology come from? Watergas.NU has no physical explanation. We establish a link with new insights that currently arise in Physics, where new particles and energies are discovered. We call this energy field the 'Quantum Field' as umbrella term for new still unknown energies.

Our market outlook

Sun for Electricity, Water for Heat, Recycling CO2

Sun: Currently solar energy breaks the cost barrier. That creates an explosive growth of solar energy, especially for electrify homes and offices. The discontinuity of solar energy disturbs the electricity market: Imbalance!

Storage: energy buffering in the form of Power2Gas is in development, in which hydrogen is produced and stored, or in efficient batteries. Decentralised e-production leads to Smart Grids.

Water: Water(gas) provides four functions that are important for a more sustainable energy supply.

- 1.) As catalyst of combustion with less emissions and less fuel;
 - 2.) As energy carrier (hydraulic, chemical, physical);
 - 3.) As a source of energy (resonance technology);
 - 4.) As 'converter' of nitrogen ($N_2 \rightarrow NH_3$) and carbon ($CO_2 \rightarrow CH_4$).
- In terms of costs Sun and Water are comparable. 20% of the energy market relates to electricity. The rest, 80% of which is used in the form of steam and hot water. Sun mainly provides electricity and water supplies mainly heat.

Carbon: CO_2 is captured and converted with water to inter alia CH_4 .

- 1.) As a basis for plastics and lubricants;
- 2.) As methane gas for process industries (mixed with water gas).

Quantum Field: Soon to be discovered. Especially for electricity.

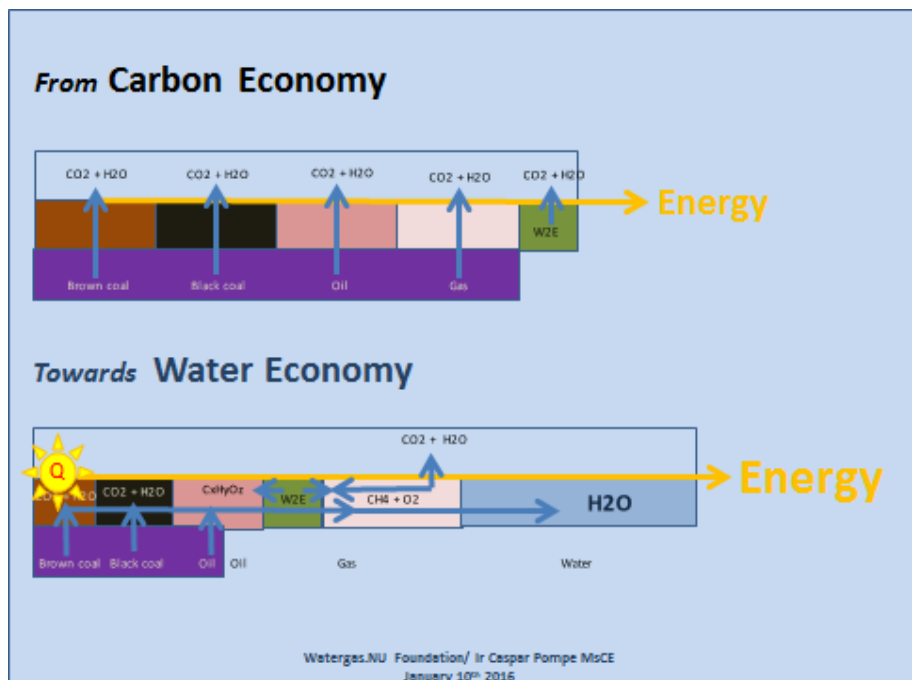
Keywords: magnetism, gravity, zero point energy, resonance.

Probably some special properties of water gas can be explained from quantum physics.

Waterenergy →

Transition towards

Circular Water Economy



Watergas helps to turn CO_2 into CH_4 → less emissions + more energy!

The transition to a truly circular economy is a turbulent time. What to do with existing capital resources? In the vision of Watergas.NU it is not necessary to write off all existing CH₄-using capital resources. Many capital resources (factories, power plants, transportation, real estate) however will have to be modified or even be demolished. Some 'green' technology will prove too expensive and can not compete with Sun and Water. Wind can turn into headwinds. Oil and gas reserves will partly be written off because they will no longer be used.

CO₂ is recycled with the aid of water (gas) in the form of methane (CH₄). Existing pipelines need not be written off as yet. However, the fossil base becomes narrower. Expensive biofuels may disappear from the market. Existing heating systems may become (partly) watergas-fired. CO₂-recirculation will result in a drastical net reduction of CO₂ emissions!

Already "tomorrow" watergas can reduce emissions in the transport sector.

Watergas.NU has formulated a transition program. We start with 'low-hanging fruit', which will contribute to reduce CO₂ emissions soonest.

Transition program

From Carbon to Water and Sun

1. **Watergas makes engines cleaner in transport ;**

(Short- term : reduction from 25 to 50 % CO₂)

When the car industry adapts the engine management system of automotive engines, this results in improved combustion and a reduction in fuel consumption of about 50%..

The Volkswagen XL1 appears to have water on board in the form of super-critical steam injection (?). The XL1 runs 125 km on 1 liter of fuel!

2. **Water energy for heating and electricity;**

There are several parties, including Watergas.NU trying to heat boilers wholly or partially with water gas. You can use solar energy to make a simple electrolysis watergas. One can already save considerably on natural gas. That is a first step. Next step is to make the process even more efficient with resonant technology. Finally, the boiler can be adapted to the hotter flame of watergas.

3. **Production of steam**

The recycling industry produces a lot of steam. The steam production can be multiplied by water energy (water pyrolysis) . Steam turbines produce electricity at competitive prices. We can use existing steam turbines. Heat networks transport steam for process industries and new residential areas .

4. **Post combustion gas treatment of existing power plants.**

Off-gasses of existing plants (e.g. waste recycling) can be treated with post combustion with watergas or water plasma gasification to reduce soot and PPM. Remaining CO₂ and H₂O may be processed to produce CH₄ to be recycled.

5. Methane from CO₂ and Watergas

Various technologies are developed for transforming CO₂ to methane (CH₄). Shell and SASOL have extensive experience in the Fischer-Tropsch process, which is often used for this transformation, but they are still too expensive apparently. We have information that one also can carry out a kind of F-T process with watergas, but at a much lower cost. It is of great importance to develop this transformation into a marketable process.

6. Water-plasma gasification of hydrocarbons

Plasma gasification is very efficient. In recent decades gasification technology is emerging. Crude fuels can be gasified, which thus reduce emissions significantly. In particular, water-plasma gasification is very efficient, due to the high enthalpy of water

7. Clean up of toxic waste and waste dumps

Old landfills and toxic waste are very efficiently gasified with water plasma. This provides both energy and space. In Europe, an EU program exists to encourage this. With water-plasma gasification it is not necessary to dry the aggregate (usually waste). Mixing high-calorific aggregates such as rubber-tires granulate, coal and lignite can be combined with treatment. Especially hybrid gasification is economically interesting.

Watergas.NU is looking for partners to participate in the development of projects in the above fields OR urges parties to address these issues themselves. You can earn A LOT OF money! (- Then, please don't forget us!).

Our Program

Mission statement

In general, the mission of Watergas.nu is to speed-up the use of water gas in various industries.

Our Goals

The above- formulated vision gives direction to the objectives of the Watergas.NU Foundation. The main sub-goals are:

1. Information on watergas and its applications;
2. Support to watergas companies;
3. Research on properties and applications;
4. Initiate projects to accelerate development;
5. Acquire funds for the continuity of the Foundation

(Scientific) Research

It is of great importance that more scientific research on water gas is carried out on different aspects. Europe lags behind in this area. This is an important point!

WAVE-Cooperation.coop

Water - power equipment can be tested in the project WAVE Cooperation and operated. Later on WAVE-Cooperation is to become a special purpose company.

Addendum 2

Basic processes

Watergas is 'gas of water'.

Watergas is mostly applied as catalyst or energy carrier. But water turned into gas is a source of energy as well. This water-energy is based on resonance technology in which water is shaken apart and transformed into a gas. This 'Watergas' is produced with different technologies, resulting in watergases with different properties. At room temperature we know the normal 'HHO', produced with resonant-electrolysis (Meijers et al.) and radiolyses (Kanzius and Ohmasa). Another technology is thermolysis, in which extreme heat vibrates the water molecule to fall apart into hydrogen and oxygen. Watergas (HHO) is about 4 times more powerful than Hydrogen (H₂). Watergas has a flame propagation in the order of 1000 m/sec, while hydrocarbons burn with a rate of 1 m/sec. That is why watergas and hydrocarbons are often combined.

Hydrocarbons tame watergas

Jewelry industry uses watergas torches for welding, but the gas is mixed with spirit of acetone to tame the torch.

Watergas enhances hydrocarbons

On the other hand combustion of hydrocarbons is enhanced with watergas. In the USA it is very popular to get more miles per gallon by adding watergas to the air inlet. Soot and PPM emissions are reduced drastically in the process.

Engine of Stanley Meijer – car running on OH₂?

In the (still) small world of HHO or Hydrogen-on-Demand pioneers are trying to re-discover the patents of Stanley Meijer. One of the patents deals with his Dune Buggy, that is reported to run for 100% on water. Considering that Meijer was far ahead in the field of resonance technology, this claim sounds okay. But closer scrutiny of the patent learns that Meijer adds a non-combustable gas in the process. Which gas is a secret he took with him into his grave. Aaron ... proposes that the non-combustable gas is nitrogen. In the drawings of the patent one sees a chamber in which the hot exhaust gas (H₂, N₂, O₂ and vapor) is mixed with HHO in a process room filled with iron wool. This suggestion makes sense, since NH₃, (ammonia) or CH₄ and other carbonhydroxides decrease the heat of watergas combustion.

Watergas is catalyst, e-carrier and ... source of energy!

When watergas is led over a paladium catalyst, the gas is returned to water while discharging heat¹. Normal electrolysis-watergas is a very efficient way of power to gas, with efficiencies of around 98%. Resonance Technology (see below) is far more efficient. So, with resonance water is turned into a source of energy.

¹ see www.watergas.eu/ ...

Haber-Bosch Process² - production of NH₃

About a century ago the German researchers Haber and Bosch developed a process to transform atmospheric nitrogen and hydrogen into NH₃ at a high temperature and pressure in combination with an iron catalyst. This NH₃ is used for artificial fertiliser and to make gun powder! Interesting history!

Fischer-Tropsch Process³ – production of CH₄

Two other German scientists developed a process to produce CH₄ from Carbonmonoxide and Hydrogen, also with an iron-based catalyst. Currently research is done on a modified 'Fischer-Tropsch process in which steam (H₂O) and CO₂ are combined to produce CH₄ and other basic carbon hydrates. BMW⁴ makes fuel from CO₂, but production costs are high.

Watergas.EU et al.: HHO + CO₂ → CH₄ + O₂? Yes!

The question arises whether watergas can be used for the production of methane (CH₄)? One of the HHO-experts in the network of Watergas.EU offer to develop their knowledge on this reforming process in a joint venture. We look for partners.

Resonance Technology: watergas as source of energy!

Most 'normal' HHO-generators have yields of around 100%: on the turning point from energy carrier to energy source. However, some producers know how to produce resonant-electrolysis watergas much more efficiently. With a minimal input of electricity water molecules are vibrated until they fall apart. The latent energy of water is liberated. REF's (Resonance Efficiency Factor) of over 20 are reported. Several resonant technologies can be applied, such as radiolysis, thermolysis and plasmolysis.

² https://en.wikipedia.org/wiki/History_of_the_Haber_process

³ https://en.wikipedia.org/wiki/Fischer%E2%80%93Tropsch_process

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https://www.sbc.slb.com/~media/Files/SBC%20Energy%20Institute/SBC%20Energy%20Institute_Hydrogen-based%20energy%20conversion_FactBook-vf.pdf