

# Hydrogen \* Smart Drive







# TERRA SPIRIT

Verein zur Förderung außergewöhnlicher Ideen

# SEKTION UMWELT & ENERGIE

## **Hydrogen Smart Drive**





The very new direction of power supply is a clean way of gaining high or low temperature and drive power with hydrogen.

**Hydrogen Smart Drive** is an Open Source-Project. Non of it will be protected by a patent and non of it will be hidden in drawers. Results, mesurement datas and contstructional drawings, the whole Project will be published. A chance for everyone to push forward our idea, improve it or even get it ready for serial production.

Hydrogen Smart Drive works with the technology of a normal heat pump and the technology of a combustion engine, just without exhaust gases, because its fuel is hydrogen, which disaggregates to water directly in the engine while burning under high pressure and about 4000°, and it even produces during this process extra lowpressure. So the pistons of the Hydrogen Smart Drives have two impacts to gain additional drive capacity, which changes the Hydrogen Smart Drive into a multiple engine like:

### a heat pump, an airconditional system and/or a motor

The Hydrogen Smart Drive extracts power from the ambient heat and raises it to a higher or lower temperature level (heating or cooling). From the difference beetween warm and cool, extra operating power can be created.

Plenty of Thermal energie exists and is stored in our environment, in the air, the water and in the ground.

Naturally humanbeings sense and define "warmth" from 20°C upward. Warmth in terms of phisics is everything across – 273°C. Ambient heat on a grand scale is rarely used, beause we are missing suitable engines. We can change this with the Hydrogen Smart Drive. With the Hydrogen Smart Drive we can give the energy supply a very new direction without harming our ecosystem at all.



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Demonstrating in succesive examples what energy potential currently radiates unused to the universe.

### Case example 1:

From a small hydro power plant at a stream should gained during wintertime additional heat for the community. 2 m³ water per second flow through the turbine. A Hydrogen Smart Drive would be able to cool down the water around 0,25°C without harming any living beeing like fish in their environment.

How much heat could be gained additive?

2 MW or heat for more than 150 domestic homes

### Case example 2:

A car with a condenser zone of 1 m<sup>2</sup> drives 100 kilometers per hour. Each second 27,7 m<sup>3</sup> air passes the cooling fins. Supposed a Hydrogen Smart Drive would cool down the passing air fom +15 to -20° and converts the obtained difference in temperature with a power efficiency of just 15 percent into engine output.

How high would be the engine power of the vehicle?

146 KW or 198 HP