

## Aerohydrolic model



### Introduction:

The principle of electricity production of wind turbines and solar panels are systems studied in the alternative of source factors, whether there is wind or if there is sun.

Therefore, storage batteries will be subject to the cycle of charge and discharge and storage.

These costs are based on a centralization-distribution-distribution model.

A nuclear power plant supplies a charging station and then the vehicle connects to a charging station, consumes its charge, and then returns to recharge according to a time factor.

So this model requires exponential electricity production which, if we wanted to adapt it to mobility in general, would simply be impossible.

It is enough to multiply the consumption per year of a vehicle by the total number of vehicles (in France 40 million gives 30 terawatts for 5000 km/year), it is a production in addition to current consumption which would imply an aberrant deployment of a wiring network that no one could finance and which would limit the movement of the vehicle at its border.

Today, the time it takes to recharge the batteries is decreasing, no one is talking about the longer waiting time to be able to charge their vehicle. The cost of maintaining renewable energies and nuclear and others is never mentioned, as well as that of the vehicle's batteries.

The time to produce electricity is much faster than that of use, which supplier will manage the "dip". Worse, a blackout on the entire transport is possible, which would lead to a chain of consequences.

## **The aerohydrolic charger :**

The Ulpiene system generates its own natural element source continuously, switching to KW/h instead of KWc/h.

We are no longer talking about potential power, just watts output, per unit and cumulative.

This result allows a different approach directly to the battery, for now we will work on constant and floating charges.

## **The concept :**

The assembly is powered by a battery, it is connected to a positive displacement air pump motor.

The generator produces alternating current that is converted into direct current. Part of this current will be brought to a current slightly higher than that of the battery, at its constant charge, thus breaking the charge-discharge cycle and increasing its lifespan in the process.

A balance has just been created.

The generator will benefit from this balance to become autonomous. At the same time, it will produce a significant surplus of electricity, permanently and that we will be able to use under a chosen configuration.

You can also connect to a grid and inject the production to feed a grid.

## **The principle:**

An adapted vehicle, with electric propulsion, using a battery, with its on-board charger. The kinetic energy is recovered and then distributed in several possible configurations.

It benefits from the total energy output to the generator, it now has its own independent electrical circuit.

## **Prototype for urban vehicles**

The volts will be transformed to the constant charge of its battery. This will allow, theoretically, to travel a greater number of kilometers, as long as the balancing voltage has not been established with the capacitors (to be debated the management of the surplus electricity).

## **Floating Load :**

When stationary, the vehicle will continue to charge until it reaches its floating load. At this point, a sensor will cut off the power to the air pump, shutting down all the generators or can redirect it to another network. The driver will take back his loaded vehicle, perfect for an urban journey, work, transport... while capturing CO<sub>2</sub> thanks to the filters.

The aerohydrolic model is multifunctional, mobile and independent. As the constant flow is adjustable, this energy can be controlled.

## **Consumption :**

This energy does not consume raw materials, the cost of electricity production is 0, the production cost of the unit is less than 800 euros.

The production elements of the unit are easily found or can be carried out in Europe. This mobility model can be considered because it is feasible and above all essential for the capture of CO<sub>2</sub>.

## **Natural phenomenon :**

To create this phenomenon, it must be reproduced in a constant way in order to be able to recover its potential energy in a constant way.

Experience in an open system :

Take 2 filled glasses of water and a straw.

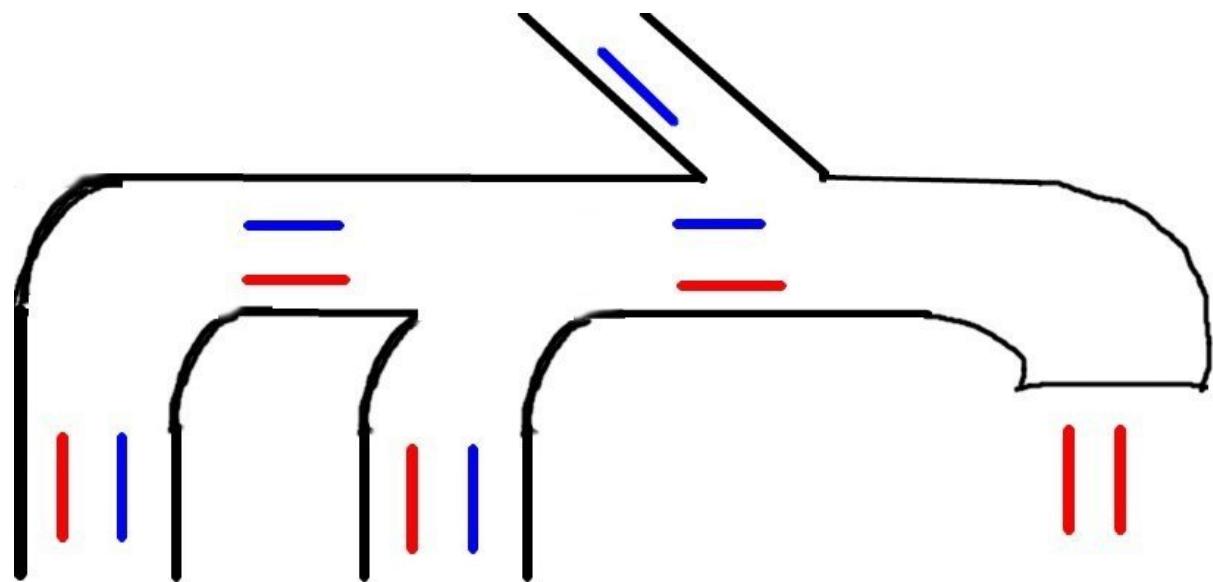
1- Slowly blow the entire contents of your mouth into the first glass of water.

Bravo, you have just reproduced the system of a compression air pump. In our unit, the water would evacuate in a jerky shape and equal to the volume of air pushed by the piston, a system that is essential for a tire but cannot be used in an open system.

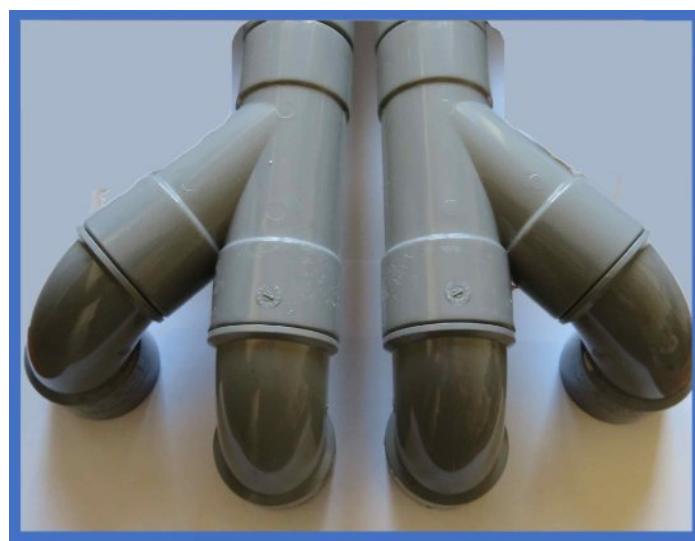
2 - Blow out the whole of it, contained in your mouth, into the straw at once. Congratulations, you have just reproduced the system of a positive displacement air pump. In our unit, we will qualify it as an aerohydrolic system, the constant volume of air allows a constant interaction on the water, a usable system.

Namely, the so-called diaphragm positive displacement air pumps benefit from a longevity of use that allows them to be used in our electricity production unit.

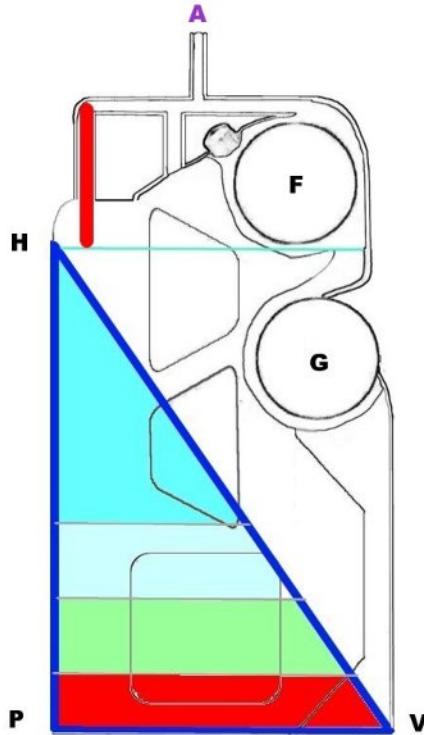
As a precautionary principle, it is advisable to change the membranes every year, but it can go beyond that. The price of maintaining the aerohydrolic unit is zero or even derisory.



The repression can be concentric



## Unité par modèle :



### The Triangle of Interest

P - Pressure

V - Volume

H - Height

A - Air/liter

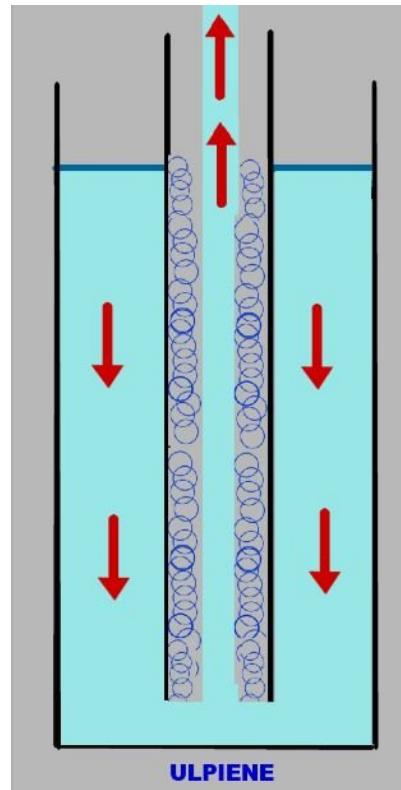
F - Kinetic energy produced

G - Energy produced by F recovery

We'll see how to interact with the red parts of the diagram. The air injected at low pressure comes out at the top in the same way since it is the amount of air injected and contained in the membranes.

There are two phenomena, the vacuum created by this massive influx of air will accentuate its replacement by water, pushed by HPV.

This upsets the natural adiabatic phenomenon in the upper red part. Thus, a different amount of air injected will produce different results.



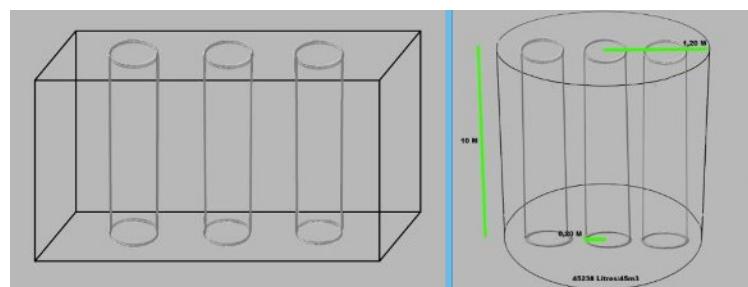
The HPV push → 

With a large quantity of air, a flow can be raised to 50% of its volume V. The advantage of raising its height allows you to place a larger wheel to be able to recover more kinetic energy.

At 40% you get more power than at 50% naturally.

A loss in height can be compensated for by adding a pump. This is in proportion to the triangle of interest, hence the project of a micro aerohydrolic power plant. On a single segment, the discharge pump is the first to multiply, then it is sufficient to multiply the segments in the same basin in order to recover the accumulation of all the kinetic energies.

The shapes of the pool can be multiple, a tank, etc...



## Apéndice

### The wheel

The impeller is designed in such a way that it can quickly evacuate water and absorb the impact of water on the blades.

### The generator

Work is underway on a generator adapted to this system to replace a generator designed for wind energy.

### Capture of Co2

In the end, the unit model should be able to treat 126 million tonnes of air per year.

### The container

A prototype container is being studied, but it can be improved. A compact container removes the chamber from the wheel.

### The boat, The truck, to people...

Unit model defined by the trio transmission, triangle of interest, multiplication.

### Transmission

Belt drive ratio with different possibilities.

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