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Environmental inventions are like swallows. One does not make a summer. Must be many and traveling in the same direction. For this has been invented SPAWHE. Without SPAWHE worldwide environmental authorities work in the dark, as blind, in the book "BLINDNESS" of Jose Samarango.

When I retired in 2006, I decided to devote myself to the design of new purification systems, based above all on the synergies between different scientific and technological disciplines. I understood that the current purification and energy plants are not complete and do not fully express their potential due to the absence of synergies which, unfortunately, in many cases, cannot be produced in the component factories, which are used to build the plants, but they must be carried out directly on the territory, integrating with the characteristics of the environment in which it operates. In the nearly ten-year experience of the inventor, I have produced about thirty-two national patent filings, one has been transformed into a European filing, four into international filings, but I have never found public and private partners, who have understood the importance of synergies. I had to give up carrying out my projects, not because of the opposition but because of the silence collected by the authorities, entrepreneurs and science. However, the modest progress in the fight against global warming are giving reason to my environmental proposal. These solutions are summarized in the website <http://www.SPAWHE.eu>, which is an acronym for a complete industrial system to combat global

warming, where SP = Sinergic Plants, AW = Artificial Welling, HE = hydroelectric energy. Studying the HE system, I had to deepen the concepts that generate hydraulic underwater currents, the compressibility of the liquid, the principle of communicating vessels, therefore, I realized that hydropower could also be produced with hydropower submerged, that would have low production costs and also a protective effect of the environment, bringing in polluted seabed oxygen of surface waters. In these plants you can produce energy by the intubation in series of a pump and one turbine that exploit together the energy position of high water over those in the in the seabed. In fact, the pump turns into kinetic energy of the energy position of the water intubated ( $mgh > 1/2mv^2$ ) and the turbine coupled to an alternator transforms it into electrical energy. This energy is the most powerful renewable energy but it is actually much cheaper than coal and is simple to produce. Probably afraid to producers of other renewable energies. The undersigned has decided not to extend the patent of international level so that everyone can produce, but nobody seems to want to do it. But I have insisted on the same subject, patenting terrestrial applications that use the same hydraulic principles. It is necessary to overcome the current public contract specifications that force the contractors to do monstrous works to produce hydroelectric power with hydraulic jumps. In fact, the latest inventions of myself change completely the way we produce hydropower, introducing the water recycling system, in fixed and mobile versions. With the invention of the dual supply pumps on the suction side, you can turn all the existing water lifting equipment in water recycling plants in open vessel, where the outlet geodetic level coincides with the inlet level. Today, the hydraulic lifting the major energy absorbers of the planet, we can say that doing the sum, of the energy that we will save and what we will produce using the force of gravity and the hydrostatic head in the turbine, The energy performance of the plants becomes hundreds of times higher of

fossil energy produced in the current thermal plants (which are the current producers of energy at lower cost, particularly, with gas and coal, regardless of the fact that pollute and produce CO<sub>2</sub>). But also the cost of hydroelectric plants is reduced by hundreds of times because to produce this type of energy is not necessary to flood the mountain valleys and even build dams, which are works of high engineering, but from the point of view of environmental and economic, in most cases, the real disaster. While the new system, being able to produce energy even in a condominium, we will not need large power supply networks and hydraulics. But applying the same principles in hydraulic mobile plants in pots indoors, in a few decades, we will not need even distributors of fuels along the roads. In fact, the current generators of hydroelectric pressurized with compressed air or gas, may be mounted on the means of transport. They do not consume water, which will be recycled with low energy consumption by means of low prevalence for the pump with dual power supply (because the water is not compressed, and does not lift, but it recycles in circuits in which is made to coincide the pressure head in suction and delivery). These perpetual current generators will consume only a small percentage of air or pressurizing gas that are solubilized in the water, that can be integrated with a small compressor on board the machine, or with a mini super compressed tank equipped with pressure regulators. If as we said the future of hydropower in the fixed version will be hundreds of times cheaper than fossil, We can say the same for the mobile energy, for the simple reason that the mechanics of engines will be much simpler, but above all, because we will not have to pay the fuel and we will have self service almost endless. This is important especially if we think of all the fuel that must transport planes and ships that become hazardous in case of accidents, regardless of pollution. No matter if in mobile system only 50% of recycled water will produce energy. Although the engines hydroelectric compressed require more space than an internal combustion engine, eliminating the fuel tanks and the cooling radiators, much of

the space that serves as we recovered. If we think that the current heat engines have employed 120 years to reach the current technology, with trillions of investment and millions of technicians divided into about five generations, the engine hydropower is still a year zero. It 'just a hydraulic schematic greeted with silence, like all inventions sustainable myself. Meanwhile, those who should respond, continue to finance treatment plants that do not function, dams, reservoirs, drilling of underground and seabed in search of black gold. All things that do not serve in the society of the future. Even the solar and wind energy will have to be scaled down because bulky and low performance. If they can not compete with the fossil, they cannot expect to compete with the future hydropower that will be similar to perpetual motion.

Best regards

Luigi Antonio Pezone.