

# Open letter to Italian designers and entrepreneurs

## Open letter to Italian designers and entrepreneurs

Dear friends, especially, installers and freelancers, who are competing with each other and with the whole world, unfortunately, you are participating in a jumping competition, where the auction is set higher and higher. The survival of your business, which I have experienced before you, is increasingly at risk. When, in the world, we have scraped the bottom of the barrel, and we are getting there, we will realize that the work can only be created by remaking all the things we have done wrong in the past, remote and recent. Only then will it be understood that the current energy and purification systems are only palliatives against the degradation of the environment, which man himself has caused, in large part, with the wrong systems, which we ourselves have helped to create. Before, between one flood and another or a summer drought, decades passed. Today, there is no time to repair the damage. Especially now that the world population is about to become nine billion, it is time to change the purification solutions. Not only are these insufficient, but when they exist, they do nothing but transform local pollution into global with incomplete treatment cycles. Even the new energies, stimulated because they are neutral, steal the place from energies that could protect the environment without the need for incentives. From retiree I became the inventor of "Global Plants" to fill the gaps that I noticed in my working life, between one plant and another: civil, industrial, energy, agricultural, water lifting, heating, air conditioning, which in many cases, they nullify the efficiency of the same for the purposes of pollution and even damage the environment. But I could not help but propose new plants that do not exist today, both to complete incomplete cycles and to

anticipate intervention times, which are now completely neglected, and to protect water bodies and coastal areas, affected by eutrophication. Above all, by creating connections between the plants that do not allow the premature discharge of water and untreated air, which today occurs everywhere. This immensity of plant engineering, not only necessary, but even urgent, not surprisingly, does not exist anywhere in the world, because the manufacturers of machines for the environment and for energy cannot design everything as standard. While public and private design, too fragmented and specialized in single applications, is not prepared to design global systems. In these huge gaps, which can only be filled by convincing public bodies of the mistakes made, the activity of freelancers and plant installers must be included if they want to overcome the irreversible crisis in which they now find themselves. You designers and installers simply have to do differently what is already within your competence (masonry, hydraulic and electrical connections, heating, conditioning, digestion, composting, purification, local energy production), but by truly designing the systems, do not size them and assemble them according to schemes already pre-established, which were wrong with respect to global pollution (water, air, heat). You have to convince public bodies that they need to update the regulations and tender specifications. Who, if not you, will be able to replace the current civil and industrial chimneys to recover the heat of the fumes and the CO<sub>2</sub>? Who will be able to recover the hot waters that discharge the thermal power plants, not to create distant and dispersive district heating, but to heat very close digesters, specially designed by myself, with many autonomous loading and unloading stations, to take advantage of the immense quantities of heat. Who will be able to put together the cooled waters and the CO<sub>2</sub> captured in warehouses of crushed limestone material to properly close the carbon cycle, sending the carbonates to the seas. Who, if not you, can clean the cities of pollution, eliminate the heat produced by the air / air exchangers of the conditioners by means of air filtration towers with

incorporated heat exchangers, connected to heat pumps (hot cold) and geothermal wells (not probes) with low enthalpy, which act as heat exchangers and inertial volumes. Who, if not you, can make the sewers purify water and air, separating the sludge at the origin, conserving its energy power and transferring it to the nearest digesters anaerobically, replacing the immense purifiers that are used far from pollution only to partially remedy the damage caused by hydrogen sulphide and ammonia nitrogen in the sewers, but with high energy consumption and producing acid waters that also contribute to damage the environment. Who, if not you, can produce hydroelectric energy in the same city with vertical plants (incorporated or not in the same buildings) that use pumps for the circulation of water and turbines for the production of energy, which will consume on average 40% of the energy produced by the turbine to circulate the water. This will be possible through special hydraulic connections that will allow the exploitation of the entire hydrostatic head of the water on the recycling pump while only renewing a percentage (the one that allows the hydrostatic pressure to be inserted in the recycling circuit). Therefore the general efficiency which depends on the efficiency of the machines, on the water head we use and on the quantity of water we raise, and of about 60%, of the kinetic energy and theoretical pressure, while a classic hydroelectric plant that fully exploits the hydraulic head has an average efficiency of 87%, depending only on the efficiency of the turbine and on the head losses in the pipes that feed it and on the hydraulic head. But the construction of a hydroelectric plant involves huge investments in reservoirs, dams, etc. Furthermore, a hydroelectric plant with a hydraulic jump cannot be built where it is desired. On balance, vertical and submerged hydroelectric plants with and without water recycling (latest inventions of the undersigned), will be cheaper, not only than large hydroelectric plants, but also fossil, biological, solar and wind energy, as they do not require of the extraction of fuels from the subsoil to refine them and transport them, nor

are energy crops, industrial plants necessary to produce solar panels and wind turbines. Electric pumps and turbines with current generators cost much less, the systems perform more and the circulation of water is already a self-purifying oxidation, which improves the quality compared to stagnant water, but even in lakes and seas it fights eutrophication, improves fishiness, increases alkalinity and in the long run, when pollution is defeated there may also be an increase in alkalinity, the raising of carbonates prevailing over organic substances. Those who do not believe in these simple and effective solutions must first enter into the merits of hydraulic circuits and biological cycles, then make observations. In the systems I propose, in most cases, the pumps are mounted upside down. They are not used to lift, but only to overcome hydrostatic inertia and allow the positive head to do its job. Anyone can try their hand at researching design errors by myself, making a contribution to progress, since, as usual, I could not spend a single euro for a prototype. Above all, in Italy, the private inventor is not taken into consideration. It does not matter if the inventions are based on over forty years of practical experience and researched and found scientific findings. All the plants that I propose, none excluded, will serve to cool the planet and reduce natural disasters, without spending money on unnecessary works such as the Mose of Venice and embankments that will never be high enough, if nothing is done globally on the environment. I have mentioned only plant applications that do not exist, largely patented by the undersigned, filling the gaps in global environmental and energy plant engineering. What has pushed the public and private designers, the multinationals to keep quiet about the patents that I have already published, cannot be said. They should be the ones to clarify the dilemma, but nothing can be done if they believe they have the right not to answer, continuing to propose incomplete plants, which aggravate environmental problems instead of solving them. I would never allow myself to

to make these statements, without having the alternative solutions ready. I know well that between saying and doing there is the sea. But before doing you need to conceive and develop projects. This was and is my job. Global plants cannot be improvised with single scientific knowledge and technologies, which is why they are not yet born and are struggling to be accepted. I think everyone understands the logic but ignores it, hoping that there are design errors, because first they have to dispose of old new energy and old purification plants that do not protect the environment and do not create enough work. The global plants have energy and purification potential hundreds of times higher than the current ones, therefore also the work will be multiplied in the same quantity in the sectors concerned. In the sustainable society of the future, the role of engineering companies, small and large, must become increasingly important. There is no need for competition regulations that have been copied and copied for decades (as happens in Italy), where the castes that produce them do not notice endemic errors, such as sewers, chimneys and purifiers. No large cathedrals are needed in the desert: thousands of MWh thermoelectric plants, large purifiers, incinerators. Design cannot be separated from the ability to produce patents, as in all respected sectors. To improve, permanent business associations are needed, with a single group of creative designers who know how to produce projects and patents, who are ahead of the times, for the entire sector. Only those who manage to be at the forefront can make member companies work. In an association of companies that includes building contractors, electrical, plumbing systems etc. Each company would pay the costs of the design office and maintenance of patents in proportion to the turnover resulting from the joint project. I think that freelancers and plant engineering companies have nothing to lose and everything to gain by believing in these plant engineering patents, which are almost certainly the most complete in the world, precisely because the whole world is a country and there is none. who thought of filling the gaps.

Everyone is taken by the need to bill and move on. But, if nothing else, with the recognition received, not easy to obtain, by international offices, of four patents at the same time on these subjects, I have shown that global protection systems can be built and patented, like anything else, even if after my patents for those to come, it will be a little more difficult. Indeed, globality should be a special requirement necessary to patent any application intended for the environment. Those who are better than others in this area can produce work for long periods. Even when patents expire, they will continue to bear fruit for a long time because the technology developed is always a capital. But companies, if they acquire the right mentality, will not have to live on income. They will have to produce more patents. Today, most plant engineering companies do not have real design offices but full-time technicians who have to deal with many problems at the same time. Studying solutions takes much longer than you might think, especially when dealing with problems from a global point of view. Freelancers cannot afford to waste all this time, they make do as they can with small planning and construction supervision. True strength can only be created by joining forces. To start, you can try starting with my eight patents, which are not few already, but also contain the experiences of about twenty preliminary patents, never realized, which have been equally useful. If someone thought that I woke up one morning and said to myself: "from today I am an environmental inventor", they are very wrong: "Nothing comes out of nothing". With the filling of the gaps I mentioned, "The Italian system", in the energy and environmental sector, could excel in the world even without large capital and large companies. We are not talking about candy but about plants, mostly public, which as long as they are covered by patents, cannot be easily copied without the authorization of the holders of the patent. These systems, being very different from the current ones, can be easily identified with satellite control. But the violators of the rules should be public bodies, from the 150 countries that

have signed up to international treaties on intellectual property (including China). But time passes and my four international patents will expire by April 2015, if you do not choose the countries in which to extend the protection. Within the same month, the first of the other four patents and then the others must be extended abroad, until October of the same year. The peasant mentality of our small and medium-sized enterprises certainly does not help their survival and economic recovery. But in the absence of companies understanding, not even the government supports Italian patents. Mine, by now, are also on sale on the foreign market. If you can, visit my website <http://www.spawhe.eu>, unfortunately, to hope to make myself understood even by the Italians I had to write it in English.

Merry Christmas,

Luigi Antonio Pezone