European Social Innovation Competition

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I/we enter the competition as:*	An individual
If you're a representative, please name the organisation/company	Private
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Project Name *	FLOATING PONDS FOR CHEMICAL PRECIPITATION OF OCEANIC CALCIUM CARBONATE (FPPCC)
Tweet your idea! *	carbonates which serve to neutralize the CO2 and produce lime and cement can be extracted from the sea without realizing quarries in the mou
Choose the field to which your idea relates mainly: *	Climate and environment

Provide a summary of your idea, highlighting how it solves a social need or societal issue. *

This idea depends on another idea of the competition: Marine floating pumping stations for artificial welling (MFPSAW)â€ . Infact carbonates raised with that system are concentrated by the high pressure and when they come to the surface, are diluted in water, increasing slightly the pH and alkalinity, because the ocean has dimension almost infinite. But if We work alongside the platform MFPSAW with â€œfloating ponds for chemical precipitation of oceanic calcium carbonate (FPPCC) , we can separate, with a shutoff valve and a tube connecting part of the water, filling the pond, the salts in the pond can not be diluted by the ocean waters, therefore, the pH in the pond will increase to exceed the value 9.6 where carbonates begin to sink to the bottom of the pond. Leaving decant the water with the other salts which do not precipitate the carbonate is not being, for the time necessary to calcareous deposit and removing the decanted water abov e the deposit we will have achieved a pond float for the extraction of calcium carbonate from the sea, which subsequent layers, repeating the operation, automatically by level sensors and timers that regulate the opening of the filling valve and emptying the water decanted.

Explain why your idea is innovative in the context and in the country where it will be implemented. Alternatively, if your idea is based on an existing concept, explain how your idea differs from this. *

This system is innovative because, with subsequent processing, allows us to produce lime without emitting

CO2 into the atmosphere and without spoiling limestone mountains. Chemical precipitation of carbonates is a well-known concept that has endless environmental and industrial applications, but it can have many more like those proposed myself that have not established precisely because they are not yet born the basic inventions to exploit the riches buried in the oceans. This idea can be matched, not only to the fish production, but also to the vegetable. In fact, if we cover the ponds, in addition to exploiting the carbonates, we can take advantage of the CO2 that frees the reaction due to the increase of calcium ions in the water (Ca++ + 2 HCO3- â†'CaCO3 + H2O + CO2The CO2 that stagnates on the surface of the water, we can send in greenhouses production photosynthetic, that will be implemented to produce power in floating villages (descr ibed in another tab of the competition), who will be born, to take advantage of the wealth buried, when this will become accessible thanks to the invention initial: Marine floating pumping stations for artificial welling (MFPSAW)

Describe clearly how your idea is expected to have an impact. *

This idea is of great impact, not only for environmental protection but also for the world economy, because if we consider the demand of lime needed in the world to implement the civil construction and combat acidification of the planet, we do not think we can continue to extract the lime only limestone rocks that employ billions of years to form, and we can not even think of continuing to extract CaO by heating these to 1000 oC involving a total production of two kg of CO2 per kg CaO product. FPPCC system, with subsequent processing, also allows us to produce lime for the civil construction and environment protection with low cost, without emitting CO2 into the atmosphere and without spoiling the limestone mountains.

â€‹Indicate at what scale your idea will operate initially and how it could be implemented at a larger scale in your country or in Europe in the future *

The realization of large scale floating ponds for chemical precipitation of oceanic calcium carbonate (FPPCC) is conditioned by the realization of the â€œMarine floating pumping stations for artificial welling (MFPSAW)â€œ, but could be made simultaneously to accelerate time, being already very late in the construction of large industrial solutions that protect the environment from global warming, to increase sustainable food production, and to create jobs. Without these solutions, we continue to witness the desertification at the rate of 12 000 km2 per year and that diseases resistant to drugs phyto and zoo drugs endanger plant crops and land animals. But even in this case it will be necessary to establish rules and international regulations that will complement the existing ones for the exploitation of the territorial waters and established rules and signals for navigation surface and underwater. Today there are oil platforms that alread y involve these reports, but these plants will be hundreds of times larger quantities.

Specify how your idea could be sustained over the next three years. *

Probably, if all goes well, in three years we will be able to effect only the prototypes of the "floating ponds for chemical precipitation of oceanic calcium carbonate (FPPCC)" along with other inventions contained in the other tabs of the competition which is reminiscent only acronyms: BCSVP, MFPSAW, VMCPG, etc. All these inventions are, currently, works misunderstood by authorities and entrepreneurs, and even by science, although they connect to the basics of physics, chemistry, biology, and environmental engineering. In fact, environmental protection does not need great inventions but related inventions in the logic of global protection of the environment. These inventions, could not wait for the natural progress of the state of the art because the present purification systems and energy do not follow the logic of global security. If the inventor had not run virtually everything in his mind to allow the previous conception of new, would no t be in this competition with fifteen tabs. Only with many linked inventions is possible to close all the loops that today human activities leave open, to bring the carbonates to the seas and minerals to the ground.