TECHNOLOGY

SEAFLUTE AS A CLEAN GENERATOR

Our process started some years back when we were surveying wind turbines for electricity generation. The idea behind the wind turbine was set with the right intentions, however its effectivity had suffered from its design. To put it in very basic terms, the wind turbine featured numerous moving parts (propeller, gearbox, generator, etc.) in order to make the power generation possible. The reality was that the presence of each moving part in the generator, translated into lesser energy being produced. Meanwhile, that lost energy would turn into heat, friction, noise and wear. This made the wind turbine relatively inefficient, expensive and maintenance-heavy.

The question we asked was, what if we could cut out all of the lossy parts? What if, we could break down each level of energy transformation from wind to electricity, such that there would be a direct conversion of wind's kinetic energy into electricity.

The technology behind the Seaflute, which in principal is a Direct Wind to Electricity Generator (D-WEG), brings together Three different fields of science: Aerodynamics, Electrostatics Electomagnetics. The science used

in this device is not based on theory, but rather real, practical science which we have used for decades. It is in the arrangement and integration of these disciplines, however, that this module can do what seems so counterintuitive. This mechanism will be briefly explained in order for the full concept to be understood in whole.

The key feature of Seaflute is its shape. To put it simply, it resembles a cap-less and bottomless hollow champagne bottle. Taking inspiration from airplane wings, its intricate curves are shaped in such a way that the oncoming wind is directed to the back of the bottle shaped Seaflute at high speeds. As the wind rushes off at the end, a vacuum is formed at the back opening. This vacuum naturally draws and empties the air from the hollow interior. This forces a continuous air suction from the narrow front opening of the module, as the air rushes in to refill the hollow space. This continuous flow of air abides by the same physics that enable airplane wings to lift off (See: Bernoulli's Effect).

Now that we have a constant and forceful flow of wind inside of the Seaflute we can engage the

rules of Electrostatics and Finally Electromagnetism .

Surrounding the narrow passageway of air at the tip of the module is where we can find the Electrostatic Ion Generator as well as the Ferromagnetic core. This unit's function is vital. As the jet of air passes by the ionizer within the narrow neck of the module, a continuous stream of charged electrons are generated (electron cloud). This long electron cloud traveling through the narrow tube can be likened to an invisible wire, carrying an electrical current. As the long electron cloud continues through the Ferromagnetic core, the core in turn replicates the passage of charge through it in a process called induction. This generates an ongoing electrical current, which is in turn captured, regulated and sent directly as a DC current to lithium batteries. This process, can create an ongoing current as long as the wind blows. There are no moving parts involved, no wearing down of equipment and no emissions/byproducts. The exhaust of this generator releases the same air that had entered it milliseconds before, in the same form as it was before.





