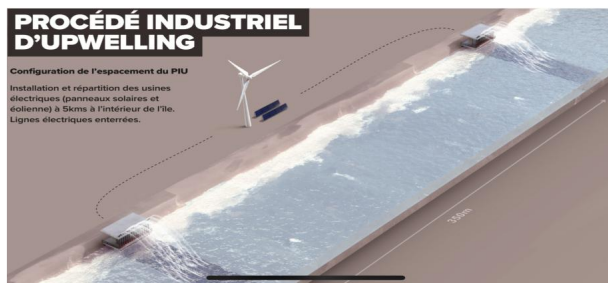


LEPINE COMPETITION APRIL 30-MAY 11, 2025



COASTAL METEOROLOGICAL PHENOMENON MANAGEMENT FACILITY

SOLUTION TO STOP RUNAWAY CLIMATE CHANGE

The coastal installation in tropical areas allows the pumping of cold ocean waters located below the mixed layer to reduce the surface temperature. In English, this mechanism is called UPWELLING, a term that has been adopted. This limits the production of water vapor, the most abundant greenhouse gas in the atmosphere.

Since carbon dioxide is the driving force behind initial global warming, water vapor accelerates it, amplifying violent and destructive weather events.

This innovative process, patented by the European Patent Office in Munich, helps reduce global warming and the intensity of hurricanes.

WHAT PROBLEMS DOES THIS INVENTION ADDRESS?

The South Atlantic does not experience hurricane-type weather phenomena. Indeed, thanks to natural upwelling on the African coasts, its average surface temperature is maintained at a temperature below 26°C.

Conversely, the North Atlantic sees its average surface temperature exceed 28°C and every year around ten hurricanes cause very significant damage in the Caribbean and the southeastern states of the United States. It is the Cape Verde archipelago that blocks the natural upwelling that occurs on the Moroccan and Mauritanian coasts. The Cape Verde islands are veritable thermal machines that accelerate the warming of the ocean and thus the production of water vapor.

FUNCTIONALITY,

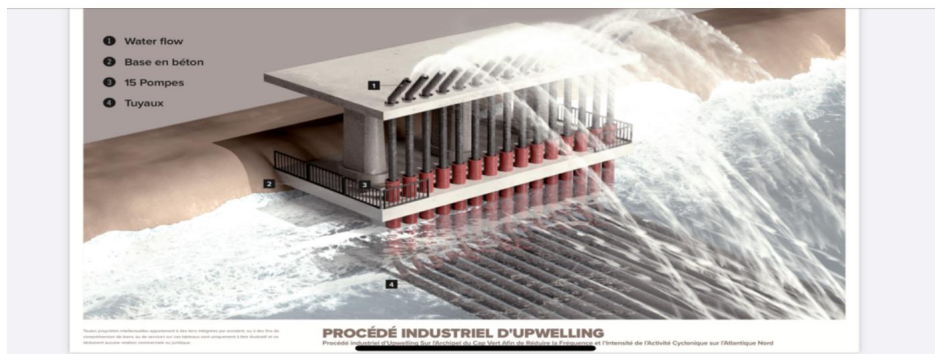
The industrial process of UPWELLING for cooling the surface waters of the North Atlantic is demonstrated on my mentioned website. The cooling of those is also demonstrated.

of the central Pacific during periods of strong EL NINO on the coasts of Peru, Ecuador and Colombia, which are contributing to global warming. For the Indian Ocean, action must be taken on the Chagos Archipelago.

We can cool the surface waters of the Mediterranean on the French Riviera and air-condition cities from Cannes to Menton to prevent a repeat of Storm Alex.

It is imperative to cool the waters of the Persian Gulf because by 2050 the countries in this area will become uninhabitable according to NASA.

We need to intervene on atmospheric rivers in the sky; these are narrow corridors of water vapor that transport heat from subtropical zones to Europe and the American West. This water vapor is deposited at this altitude by the combustion of kerosene from air transport. If we limit the cruising altitude of jet aircraft to less than 8,000 meters, we eliminate the formation of these rivers. I propose on my site a method for calculating the PARCEL (Pouvoir d'Accélération du Réchauffement Climatique et ou Almanement Localisé) of water vapor.



USE OF THE INVENTION

Is a necessity to reconcile the fight against global warming and the maintenance of economic growth, which is essential for the well-being of populations. The innovative nature of my invention, a PIU station or coastal installation for managing meteorological phenomena, is the inversion of priorities to stop runaway climate change.

Decarbonizing human activities a little is not enough and zero carbon is out of reach by 2050. We need to **dehydrate a LOT** and first combat the water vapor contained in the atmosphere.

In my PARCEL calculation, the figures speak for themselves: the centennial variation of CO2 between 1922 and 2022 is 759 billion tonnes, while the centennial variation of water vapor is 939.4 billion tonnes, or 180 billion tonnes more. Since 2015, the centennial increase in the mass of water vapor in the atmosphere is greater than that of CO2. Given that the respective contributions to the greenhouse effect are 60% for water vapor and only 26% for carbon dioxide, it is no surprise that water vapor accelerates global warming. And to stop the current runaway climate of the planet, we must stop the deposition of water vapor in the stratosphere.

IMPORTANT INFORMATION AND REASONS TO PARTICIPATE IN THE LEPINE COMPETITION

It was the explosion of the underwater volcano HUNGA TONGA, which propelled 140 million tons of water vapor into the stratosphere of the southern hemisphere on January 15, 2022, which revealed a climate event of extreme violence. In 2023, the southern hemisphere warmed by 0.23°C, **TWENTY** times more than its historical average, and the melting of the ice pack on the Antarctic continent was phenomenal. Human activities generating **CO2** through the use of fossil fuels, coal, oil, or gas, are identical in both hemispheres. The only human activity that deposits water vapor, 300 million tons between 9 and 13 km altitude in the lower stratosphere, is air transport.

The very significant proportions are 93% of flights in the Northern Hemisphere and only 7% of flights in the Southern Hemisphere. **Every year in the Northern Hemisphere the deposition of water vapor from high-altitude jet aircraft is more than TWICE that injected by the Hong Kong explosion. This is unsustainable.**

The only solution to make this water vapor climate-neutral is to IMPERATIVELY limit the cruising level of global air transport to less than 8,000 meters. This will reduce global warming in the Northern Hemisphere.

at a lower cost at the level of that of the Southern Hemisphere + 0.8°C from the end of 2027. This respects the Paris agreement on climate of 2015 (maximum + 1.5°C in 2050 and +2°C in 2100) by gently decarbonizing human activities without breaking economic growth.

And subsequently, after 2030, it will be necessary to install PIU stations to combat the intensity of hurricanes and/or reduce their frequency by limiting the warming of the surface waters of the oceans, North Atlantic on the Cape Verde archipelago, East Pacific on the coasts of Peru, Ecuador and Colombia, Central Pacific in the Marianas and Indian Ocean on the Chagos archipelago.