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Earth Climate Optimisation Productivity Island Array (ECOPIA™)

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A new nature based solution for capturing the entire man-made emission of carbon dioxide per year and locking it away in the deep ocean, called ECOPIA™, has been devised by a marine think tank, MyOcean Resources Ltd. This is a global solution to the anthropogenic climate change problem, without environmental downsides - it provides the fix. By using the characteristics of the Ocean, ECOPIA™ removes the excess atmospheric CO₂, de-acidifies the ocean's waters, creates new sustainable fisheries, and most importantly allows the economies of the world to continue to grow and prosper.

ECOPIA™ is able to address the anthropogenic climate change problem whilst having a positive global impact on economic growth. It enables continued economic growth for all nations by balancing the problem of excess atmospheric CO₂ rather than following strategies that require a reduction in economic activities. Trying to reduce the amount of excess CO₂ emitted by economies can be considered the biggest waste management issue the world has to solve; however current strategies have had trouble getting traction due to their negative impact on economic growth.

By transillumination of the giant deserts of the Ocean, we can reduce the amount of atmospheric CO₂ at the same time as de-acidifying the oceans, by empowering natural oceanic primary productivity simply through the provision of light. This allows ECOPIA™ to be an effective CO₂ waste management solution for the atmosphere. Rather than having to harm economic growth through difficult to achieve emissions reductions, companies can work with ECOPIA™ to genuinely offset their atmospheric CO₂ emissions, through photosynthetic CO₂ uptake.

These enormous deserts of the sub-tropical open oceans, one seventh (~ 50 million km²) of the whole of the Earth's ocean area, are reportedly getting bigger; with productive surface waters being replaced by an increase in the minimally productive surface waters of the oligotrophic gyres, at a rate of 0.8 million km² per year. ECOPIA™ in total only requires 0.2 million km² of those gyres, just one quarter of the current increase in area per year.

Many of the nature based solutions have significant uncertainties that largely come about from the farming-like practise of changing the composition of the 'soil' or in this case the ocean waters. ECOPIA™ takes a different approach, that of channelling light down to the depths where there are plenty of naturally determined nutrients and seed population, thus we are no longer 'farming' we are simply providing light. Furthermore, as there is no strict geo-engineering involved, ECOPIA™

provides no mechanism for a preferential pressure on the naturally determined diversity of the light cultured ecosystem.

It has been noted by the UK's, HRH the Prince of Wales, amongst others, that the global anthropogenic climate change issue can only be solved by Industry. ECOPIA™ stands out in that it is self-fundable, both in infrastructure and operational costs, via the use of Carbon Credits at today's prices, allowing Industry to solve the issue in an affordable way.