

Abstract Submitted
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Two heretical thoughts on fusion and climate WALLACE MANHEIMER, Retired from NRL — This presents and explores 2 heretical thoughts regarding controlled fusion and climate. First, the only way that fusion can contribute to midcentury power is by switching its goal from pure fusion, to fusion breeding. Fusion breeding makes many fewer demands on the fusion device than does pure fusion. Fusion breeding could lead to a sustainable, carbon free, environmentally and economically viable, midcentury infrastructure, with little or no proliferation risk, which could provide terawatts of power for the world. The second involves climate. We are all inundated by media warnings, not only of warming from CO_2 in the atmosphere, but all sorts of other environmental disasters. For instance there will be more intense storms, rising sea levels, wild fires, retreating glaciers, droughts, loss of agricultural productivity. These assertions are very easy to check out. Such a search shows that we are nowhere near any sort of environmental crisis. The timing could be serendipitous; the time necessary to develop fusion breeding could well match up to the time when it is needed so as to avoid harm to the earth's climate and/or depletion of finite energy resources.

Wallace Manheimer
Retired from NRL

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