

"Fullarbor Desert Greening Lanes" is a virtual project for forestation with a view to contribute to climate stabilization

"Fullarbor Desert Greening Lanes" is a **virtual project for forestation** of arid and semiarid areas **with a view to contribute significantly to climate stabilization**, and to organize and facilitate interested specialists and companies to cooperate in establishing Fullarbor Lanes traversing the deserts of Nullarbor Plain and of South and Western Australia. Forestation happens already at a limited scale at several disconnected places in Australia and throughout the world through traditional methods or through technologically innovative methods but it is not yet planned on a sufficiently large scale to contribute significantly to climate stabilization.



"Nullarbor Plain Escarpment" By Yewenyi at the English language Wikipedia, CC BY-SA 3.0



"Dunes near Andado, Northern Territory, Australia" By Christopher Watson (http://www.comebirdwatching.blogspot. com/)

I still remember that an account of the transport of an iceberg from the Arctic waters till Western Sahara appeared in a Dutch newspaper in the 1970s. This adventurous undertaking was financed by the Saudi prince Mohammad al-Faisal. I did not preserve a newspaper clipping of this feat, which was at that time mainly a curiosity but which should now be regarded as a remarkable achievement with considerable ecological significance. Especially in the light of





current climatological and meteorological disbalances and their impact on millions of people world wide, either on account of lack of water or on account of excess water (at present Tropical Storm Harvey is raging in Houston, Texas; earlier, this year has seen the devastating force of Cyclone Debbie in Australia, of Cyclone Mora in Bangladesh, Myanmar, and Manipur, now again extensive flooding in Nepal, India, Bangladesh ...). The iceberg transfer mentioned in the newspaper in the 1970s was probably one of those organized by the pioneering French engineer Georges Mougin. Iceberg transports such as this one are briefly referred to in a project simulation prepared by the French company Dassault www.3ds.com/icedream/scientific-simulation-in-3d /cutting-edge-technology/analysing-the-icebergtransfer/ (a preview: last viewed in 2015...); The concept of Iceberg towing is also demonstrated at: www.youtube.com/watch?v=eOs-gSVvPWA

"The Nullarbor Plain viewed from the Indian Pacific." No machine-readable author provided.

And it forms part of a recently proposed visionary project to convert the deserts of the United Arab Emirates (UAE) into lush green land through icebergs towed even much further than achieved so far: from the Antarctic waters to Heard Island (Australia), and next all the way to Fujairah Port (UAE).

The author of this *Science alert* article is skeptical about the feasability of the project which, however, can be expected to be valuable even if 30% of an iceberg towed to Fujairah Port will melt underway. Note at the end of the article the link to the video-simulation (Arabic-language and English summary titles) on this Iceberg project by the UAE National Advisor Bureau (with irrealistic representations such as the Arctic polar bears and Antarctic penguins on the iceberg at its arrival in Fujairah...).







"Tabular iceberg, near Brown Bluff in the Antarctic Sound off Tabarin Peninsula" By Andrew Shiva / Wikipedia, CC BY-SA 4.0 "An iceberg being pushed by three U.S. Navy ships in McMurdo Sound, Antarctica, 1965" By U.S. Navy – http://www.history.navy.mil/danfs/g5/gla cier-iv.htm, Public Domain

Icebergs captured and tugged in from the Antarctic region to a relatively "nearby" Southern Australian coastal port can therefore contribute to a generous supply of fresh water for the Fullarbor project, for the planned forested lanes through the extensive Australian deserts - as long as the production of fresh water from sea water or through for instance electro-chemical reactions remains insufficiently cost- and effort-efficient. A relatively recent historical example of an extensive program to address an environmental problem was the Great Plains Shelterbelt project, initiated by president F.D. Roosevelt in the 1930s, that aimed at planting lines of trees as windbreaks in the Great Plains states of north America in order to reduce the soil erosion and severe dust storms of the Dust Bowl. The primary aim was not global climate stabilization but to regain usable agricultural ground. It became a succesful, though now largely forgotten enterprise.



"Iceberg in the Arctic with its underside visible." By AWeith – Own work, CC BY-SA 4.0

To be further explored for creating Fullarbor Desert Greening Lanes: the transportation over land of fresh water from the processed icebergs through pipelines: from iceberg docks in Ceduna (Ceduna-Thevenard) north to Alice Springs. from Eucla north to Mackay Lake (and up to the fertile area around Lake Argyle). from Port Augusta north to the Birdsville basin. from Carnarvon east to the Birdsville basin. Two steps in growing forests:

Two steps in growing forests:

- $1.\ water pipes plus 10m wide band of trees;$
- 2. areas of 10x10km2 for forestry along the pipelines, alternated with 1x10km2 for farming and forestry villages.



To summarize the aims of this virtual project that is here proposed as a meme for peaceful progress:

desert greening, improving the climate and hydrology in desert areas; contributing significantly to stabilizing the worldclimate system; creation of an avalanche of farming, forestry and other business and job opportunities.

All elements of the project are technologically feasible, but they are to be tested further through simulation and to be preliminarily evaluated according expected costs (investments) and gains, including gains in terms of opening up new forestry and agricultural areas, expected contribution to climate stabilization, etc.

After an initial starting up period of 10 to 15 years the configuration of iceberg water production and the forested lanes and new agricultural villages should largely be financially self-sufficient. Potential funders of the initial 10-15 years of the project include: longterm green investors and countries and companies sincerely trying to meet their CO<sub>2</sub> target but nevertheless still surpassing it...

Technologies developped and tested in this project can be applied in other arid areas in the world.



"Rainforest in Tasmania's Hellyer Gorge, considered a Gondwanan relic" By anyaka – Flickr, CC BY-SA 2.0



"Biogradska forest in Montenegro" By Snežana Trifunović – Own work, CC BY-SA 3.0

(featured image in slider: "Biogradska forest in Montenegro" By Snežana Trifunović – Own work, CC BY-SA 3.0)



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