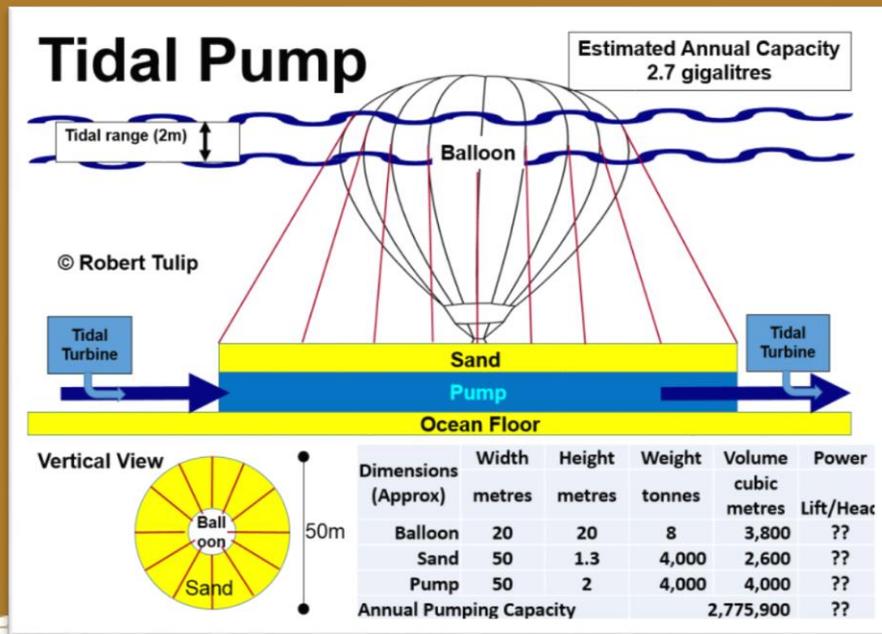


SMI SEMINAR SERIES



Tidal Pumping for Large Scale Ocean Based Algae Production

Presenter: Mr Robert Tulip

Assistant Director, Energy and Resources, Department of Foreign Affairs & Trade

Innovative technology suited for rapid deployment could help prevent dangerous warming and acidification, using methods that if scaled up globally could remove more carbon from the air and sea than total emissions. Large scale ocean based algae production can use carbon dioxide as a useful commodity input. Carbon can be mined to make fuel, food, feed, fabric, fertilizer, bitumen, construction material and other goods. Algae farming can protect and enhance biodiversity while providing sustainability at scale, utilising the space, energy and resources of the world oceans, to make carbon capture and storage a profitable industry instead of a cost.

The Tidal Pump and other components of the proposed algae system are at schematic proof of concept stage. MIT recognition provided an important initial validation for the concept, with the Tidal Pump winning its 2015 Climate Colab Energy-Water Nexus competition. Partners are now sought to assess feasibility. If proven, ocean based algae production could become a major new industry for Northern Australia, contributing to global security priorities in climate, energy, ecology and food

Robert is an international development professional who has worked for AusAID and then DFAT since 1989, managing Australian aid programs and policy in sectors including mining, water, forestry, climate, research, governance, health, finance and infrastructure. Building on this multi-disciplinary experience, he developed ideas for ocean based algae production which recently won a global competition on the Energy-Water Nexus at the Massachusetts Institute of Technology, for a proposed method for tidal pumping. He has a Master of Arts Honours degree from Macquarie University for a thesis in philosophy and a Graduate Diploma in Foreign Affairs and Trade from Monash/ANU.

PUBLIC SEMINAR

Date: Thursday
17 December 2015

Time: 10:00am-11:00am

Location:

Level 4 Seminar Room
Sir James Foots Building
(47A)
Sustainable Minerals
Institute

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