A new national Net Zero Authority:

https://www.pmc.gov.au/news/new-national-net-zero-authority

#### Invitation for action

"The Australian Government has a **huge** agenda to make Australia a renewable energy **superpower**."

Emphasis mine, "huge" and "superpower" are bold statements

Australia is unique geopolitically:

- High GDP (gross domestic product)
- High HDI (human development index)
- Southern hemisphere but "Global North"
- Rule of law, strong institutions, English speaking
- Loads of land
- Loads of sun
- In need of ecosystem restoration (after devastating bush fires)

Obvious direction: Sun Cable

# Collapsed Australian Sun Cable mega project attracts multiple bids

Headline from Reuters. Wikipedia: Australia-Asia Power Link. Similar project: Morocco-UK

20000 jobs on-site. 1000 jobs cable factory. 1000 ship factory. This is a way a to go.

SDG17 - Partnerships for the goals - public and private sector working together.

### Thinking bigger

Due to unique geopolitical situation Australia should aim much higher than "net zero". As already developed country with access to land and abundant solar energy it can become leader in "net negative", leader in **climate economy**.

Please refer to this document published by YCombinator (wiki), one of the biggest startup accelerators, that is focusing on desert flooding: <a href="http://carbon.ycombinator.com/desert-flooding">http://carbon.ycombinator.com/desert-flooding</a>

#### How much CO2 it could absorb if everything worked perfectly?

Creating 4.5 million oases that are 1 km2 would allow us to sequester more than current global emissions (41+ giga tonnes of CO2 per year), while only requiring the equivalent of half the landmass of the Sahara desert.

41<sub>Gt</sub> CO2

HERE'S THE MATHS

- 1. Algal beds can fix 2.5 kg of C/m2/yr and 2.5 kg of C works out to 9.2 kg of CO2.
- 2. The total Sahara desert surface area is 9.2 million km2, with 4.5 million km2 being less than half.
- The maximum CO2 assimilation rate of algal beds
  9.2kg/m2/yr \* 4.5 trillion m2 = 41.4 giga tonnes of CO2 assimilation annually, using the equivalent of half of the Sahara for this project

2nd order effect - converting desert into the rainforest?

Climate affecting plants, plants affecting the climate.

From Amazon tipping point paper:

"The moisture of the Amazon is not confined to the basin but is a core and integral part of the continental climate system with specific benefits for critical Brazilian agriculture in the south."

"The rainforest recycles the moisture five to six times before it turns southward, feeling the proximity of the high wall of the Andes."

## Using the available resources.

Abundant solar energy = desalination = fresh water allowing for plants to grow on the desert.



Shade of solar panels helps with exposure to sun that would otherwise destroy crops.

#### **Business** model

Challenge: establishing the business model of ecosystem restoration.

Potentially: capturing CO2 and participating in the carbon credits market?

# Local awareness and sensitivity

Indigineous people.

Immigration? (it is likely to continue, maybe allow people to work on regenerative projects) Creating jobs.

## Moonshot thinking

Radical 10x change is easier than 10%.

10% we are in the business of optimisation and incremental change.

10x we are in the business of new paradigm, creating the future, imagining what is possible.

## Keywords

Ambitious, Hope, Belief, Impact, Transition, WIN-WIN-WIN

# Summary

As of 2023 the climate situation is so desperate only radical shift in thinking can prevent irreversible, runaway disaster.

Australia should aim much higher than "net zero".

Australia should become climate economy superpower.

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Published: Tuesday 30th May 2023

Link to live Google Doc: https://docs.google.com/document/d/1Ba3DakSQUp9rbaGXt1X4-2x\_o4MQSt-0UdM7CzcXB00/edit