Blue Carbon

1. Background

IMPACT https://climateanalytics.org/briefings/the-dangers-of-blue-carbon-offsets-from-hot-air-to-hot-water/

Blue carbon, this term is not widely used. They focus more on land sector

In term climate change, ghg 温室气体,carbon neutral so popular but never heard blue carbon

Definition of blue carbon, why it is so important?

Danger or side effect of carbon release in the sea

Uncertainties (不确定性)

The uncertainties in the measurement of carbon flows in coastal systems are much higher than the uncertainties in emissions in other sectors. There are also uncertainties over the permanence of ocean-based mitigation, and the risk of leakage of emissions through coastal (沿海) change elsewhere.

The impacts of climate change and other stressors (both human and natural) can damage coastal ecosystems (沿海生态系统) and may reduce their resilience in the long-term, leading to a reversal of carbon sequestration.

2. Government policies and incentives

Climate Change in the People's Republic of China
The second biennial update report
Part 3, Chapter 2.6 – Carbon Sequestration
http://www.mee.gov.cn/ywgz/ydqhbh/wsqtkz/201907/P020190701765971866571.pdf

14th 5 year plan:

Chapter 33 Actively Expand the Space for Marine Economic Development, part 1&2 Chapter 11 Building a Modern Infrastructure System, section 3 - develop offshore wind, accelerate construction of hydropower http://www.gov.cn/xinwen/2021-03/13/content 5592681.htm

http://www.xinhuanet.com/english/2019-05/13/c 138053142.htm

3. Solution to reach blue carbon

Conservation on blue carbon sediments (carbon sequestration)

- Increase the soil carbon (土壤碳)

- Increase the salt marshes, mangrove (红树林) and seagrass (help biodiversity)

Blue carbon trading

Sometimes blue carbon only would not be enough since natural. Despite its uncertainties, to reach future target 2030 and 2060, China could mitigate the GHG and climate change by implement more renewable energy by utilizing coastal environment.

Reduce greenhouse emission

- use more renewable energy and emit no greenhouse gases like wind turbines, tidal power and wave energy. 风能,潮汐能,波浪能
- 4. Future of blue carbon in China
- 5. Suggestion