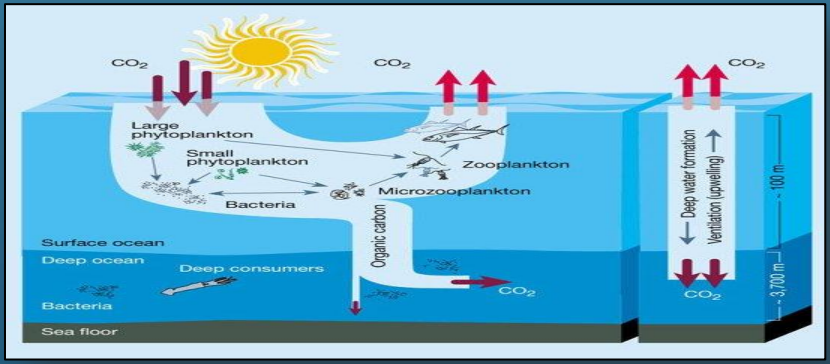
Science Day Symposium 2015
MARINE GEOENGINEERING

Scientific Groups of the London Convention and London Protocol

April 23, 2015



Objective of the London Protocol

The objective is to:

> "protect and preserve the marine environment from all sources of pollution and take effective measures, according to their scientific, technical and economic capabilities, to prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea of wastes or other matter."

So LP governs dumping activities *world-wide*, but always from the perspective of protection from all sources of pollution.

Why Marine Geoengeering?

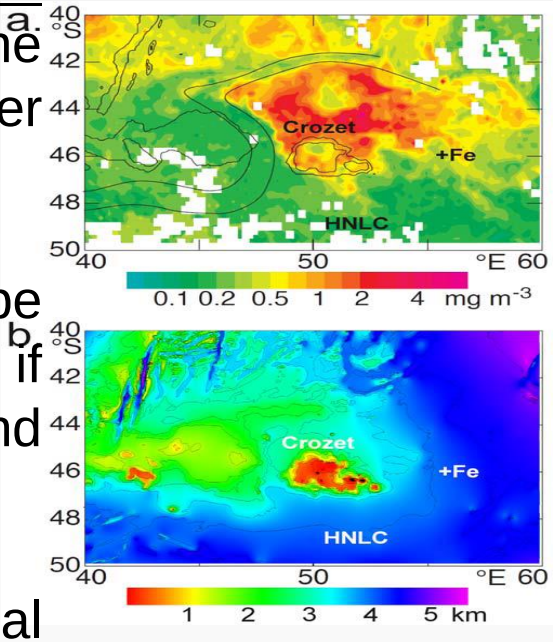
- Since 2007 Parties to the Protocol and Convention have had concerns about ocean fertilization activities and other activities that have the potential to cause harm to the marine environment
- Work continued towards a global, transparent and effective regulatory and control mechanism
- In 2013 an amendment to the London Protocol was adopted to further regulate ocean fertilization and to create a mechanism to control other marine geoengineering activities in the future.

Regulation of Ocean Fertilization under the LC/LP

Resolution LP.4(8) (2013) prohibits the placement of matter for ocean fertilization and other listed marine geoengineering activities, except if authorized under a permit

Allows other marine geoengineering activities to be considered and listed in a new annex in the future if they fall within the scope of the London Protocol and have the potential to harm the marine environment

Requires assessment according to an international framework.



Marine Geoengineering and LP

'Marine geoengineering' defined as:

"a deliberate intervention in the marine environment to manipulate natural processes, **<u>including</u>** to counteract anthropogenic climate change and/or its impacts, and that has the potential to result in deleterious effects, especially where those effects may be widespread, long-lasting or severe".

Marine Geoengineering and LP

Does not include:

- direct harvesting of marine organisms,
- conventional aquaculture or mariculture,
- the creation of artificial reefs,
- use of dispersants in oil spill response,
- or the production of energy from the wind, currents, waves, tides, or ocean thermal energy conversion,
- deep sea mining,
- or conventional marine observation and sampling methods