

# CARBON CYCLE

STORES

BIOSPHERE

ATMOSPHERE

HYDROSPHERE

LITHOSPHERE

CRYOSPHERE

PHOTOSYNTHESIS

BURN  
COAL  
GAS  
OIL  
BURN

LIMESTONE/CHALK

PLATE TECTONICS

VOLCANOES

PERMAFROST

ICE SHEET

ENERGY PRODUCTION  
EXTRACTOR  
COAL OR GAS  
CEMENT  
LIME

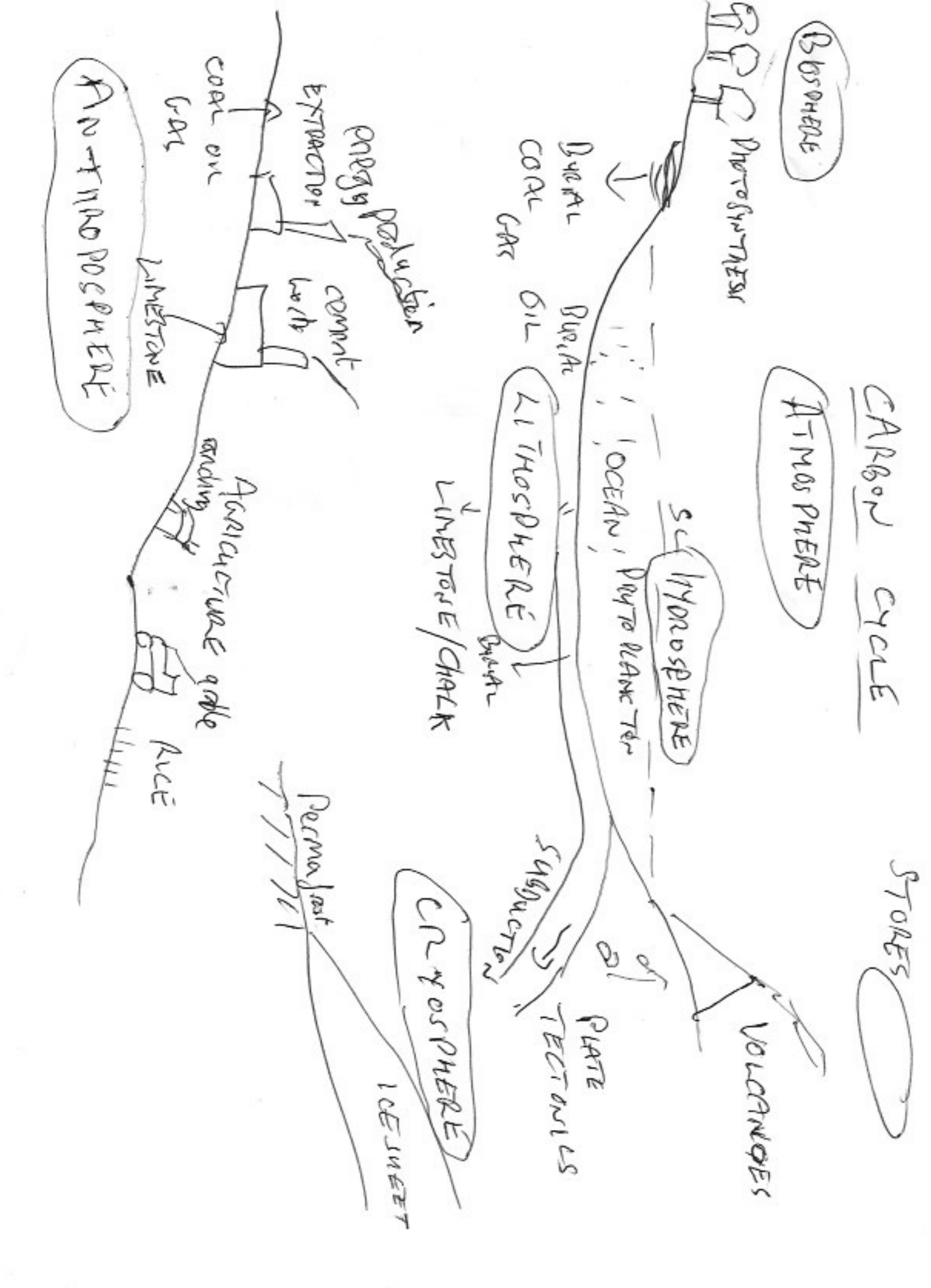
AGRICULTURE  
GRAIN  
RICE

ANTIMONOPHOSPHATE

LIMESTONE

RICE

ANTIMONOPHOSPHATE



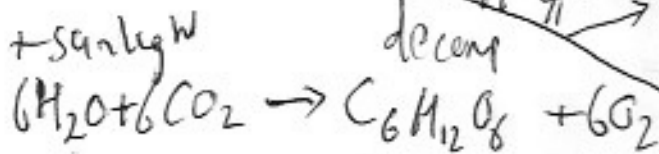
# DETAIL OF EACH SPHERE

eg. forests stores, marsh

## BIOSPHERE

ATMOSPHERE

respiration



Glucose

Carbon store in plants

+ DECOMPOSITION

by bacteria releases Carbon

## LITHOSPHERE

dead vegetation ATMOSPHERE

Carbon release ← Volcanoes

↓  
Bacial  
= coal

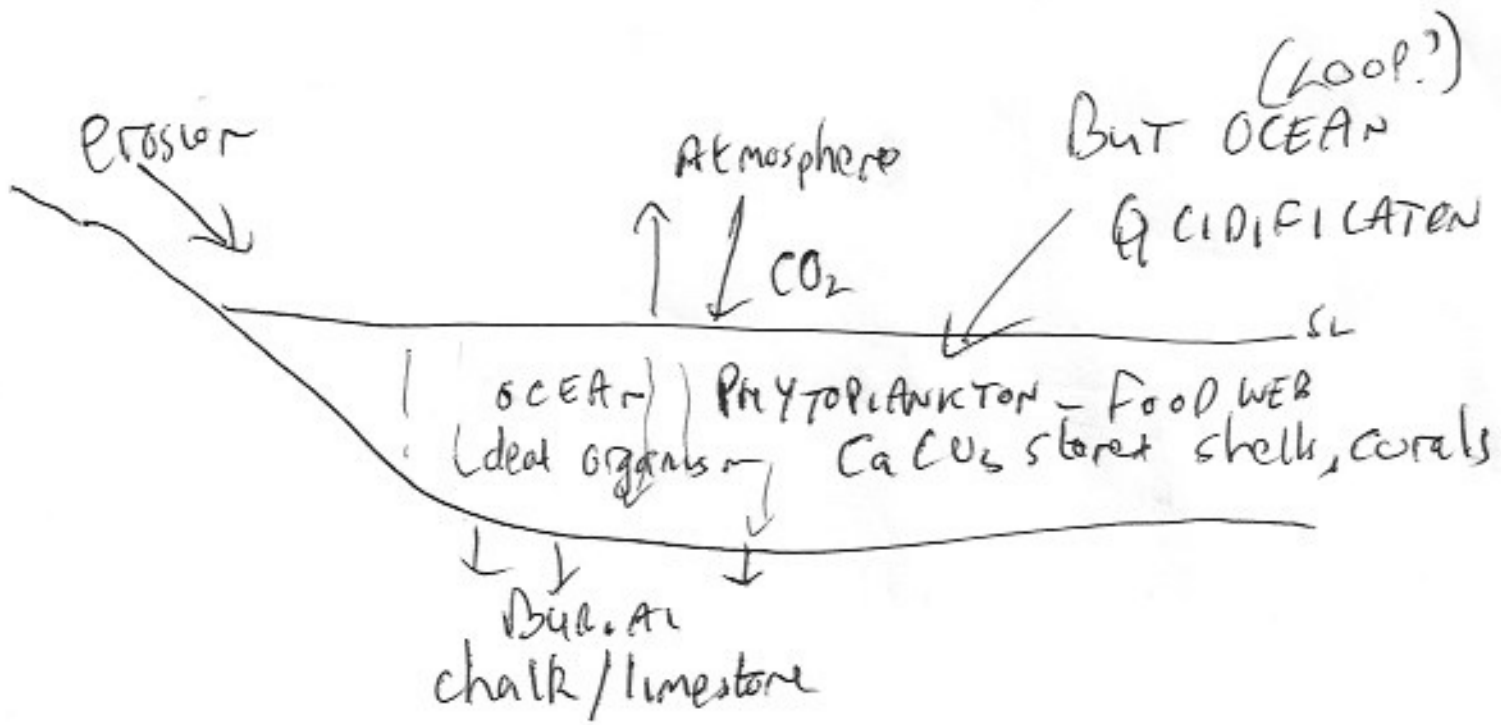
↓  
dead organisms  
↓  $CaCO_3$  OCEAN

↓  
Limestone/chalk

Store in Lith. for millions of year

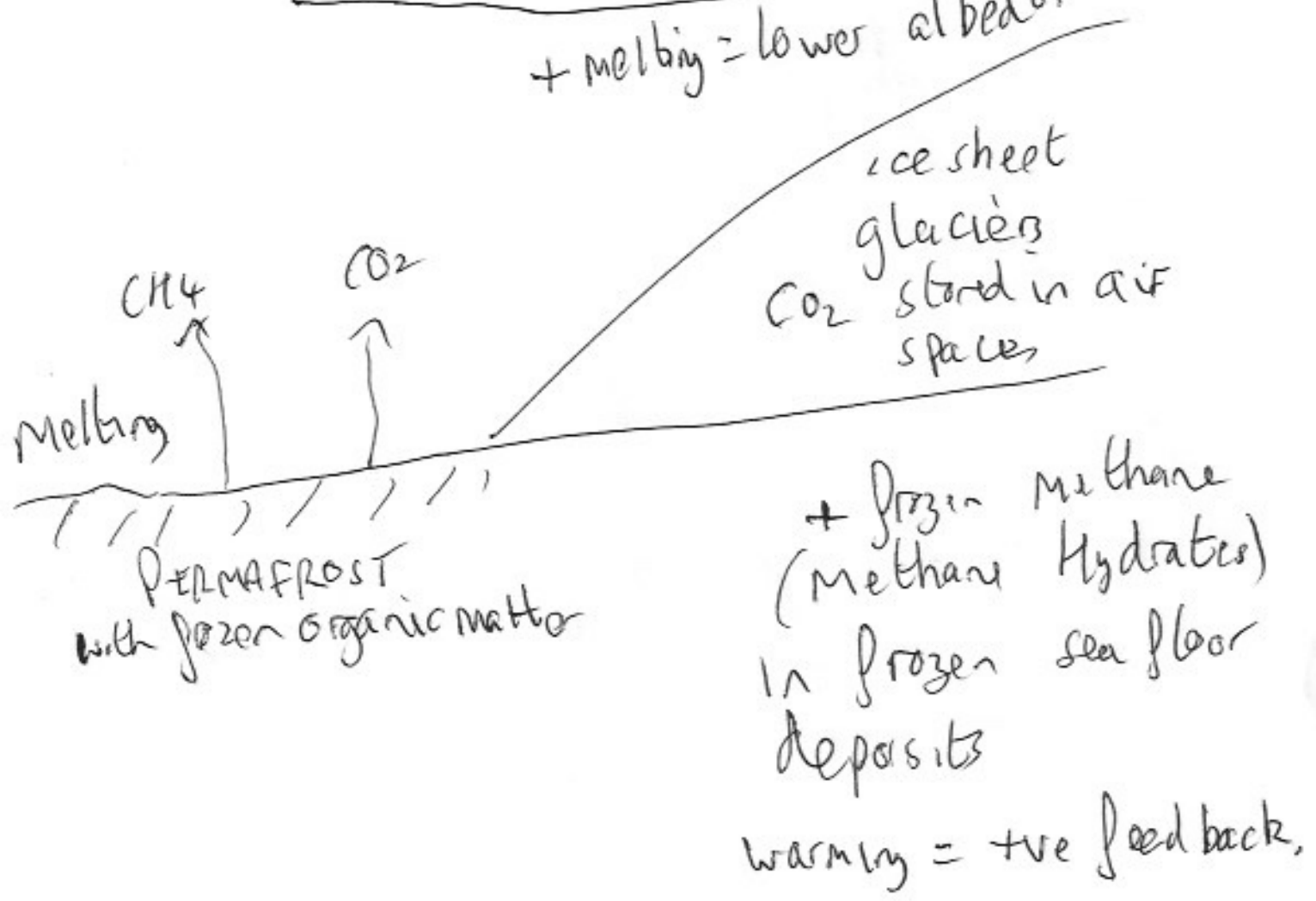
↓  
SUBDUCTION

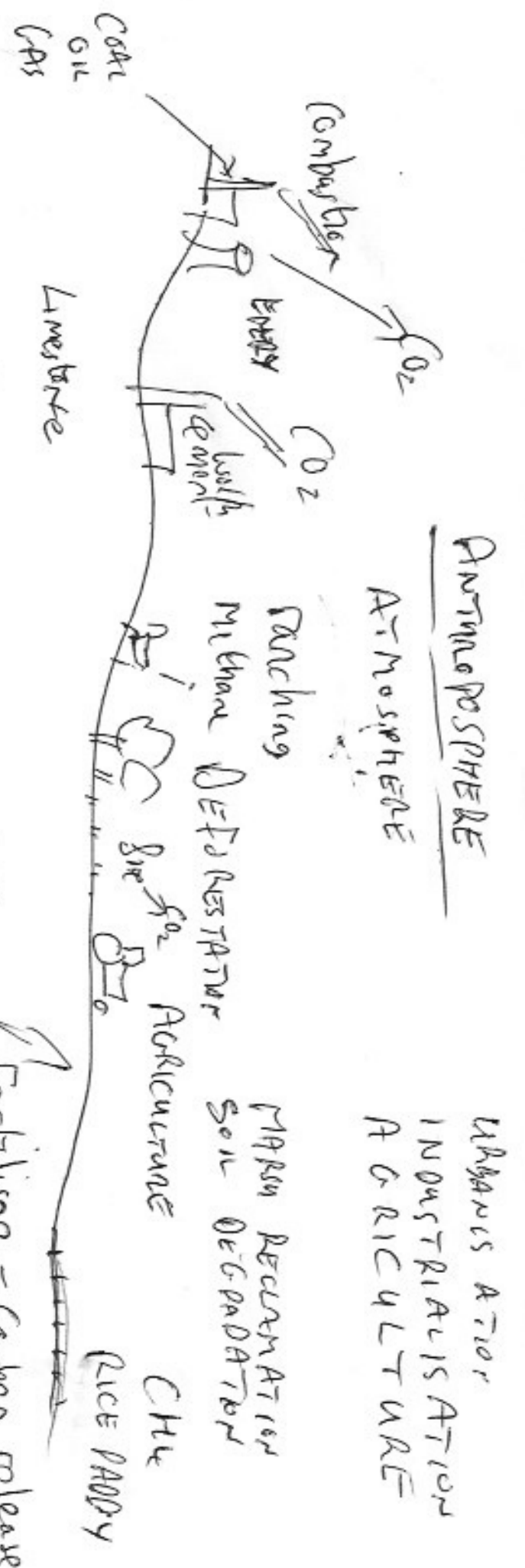
# HYDROSPHERE



# CRYOSPHERE

+ melting = lower albedo.





SUSTAINABLE FARMING??

IMBALANCE

GREEN HOUSE GASES esp CO<sub>2</sub> CH<sub>4</sub>  
 enhanced greenhouse effect  
 Global warming  
 Climate change

includes  
 + At local FLAVOUR  
 WATER/ CARBON Feedback loops  
 GEOLOGICAL  
 GLOBAL WARMING  
 Atmospheric systems