

# Carbon Cycle game!



# Carbon Cycle game

- The goal of the game is to learn about the carbon cycle:  
First the natural cycle of the atmosphere, ocean, biosphere and secondly also about fossil fuels
- And it can be used as an energizer activity during a lesson/program about climate change
- We played it we kids of 9-11 years old

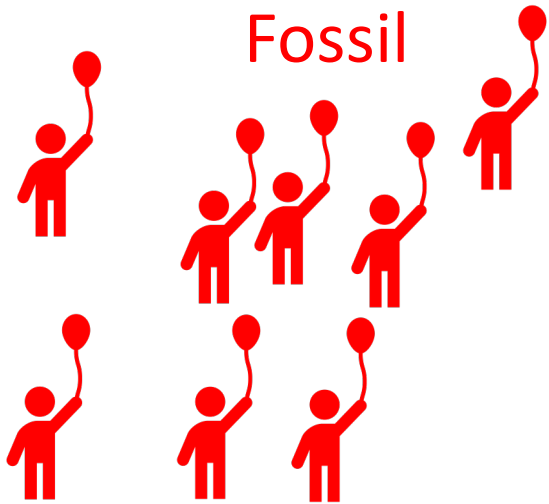
# Carbon Cycle game

- Preparation: draw or make 4 areas on the floor. Each for atmosphere, biosphere, ocean and fossil, see picture on the next slide.
- Divide the kids in 3 teams with a certain color: red for fossil, blue for ocean and green for biosphere (you can use paper of caps), and ask them to go in their area. We played it with 75 kids in total.
- The kids represent CO<sub>2</sub> molecules. They start in either biosphere, ocean or fossil, but will fly around to the atmosphere before returning to their area!

Starting  
position

Atmosphere

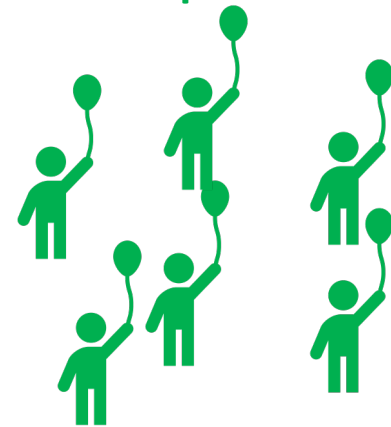
Fossil



Ocean



Biosphere



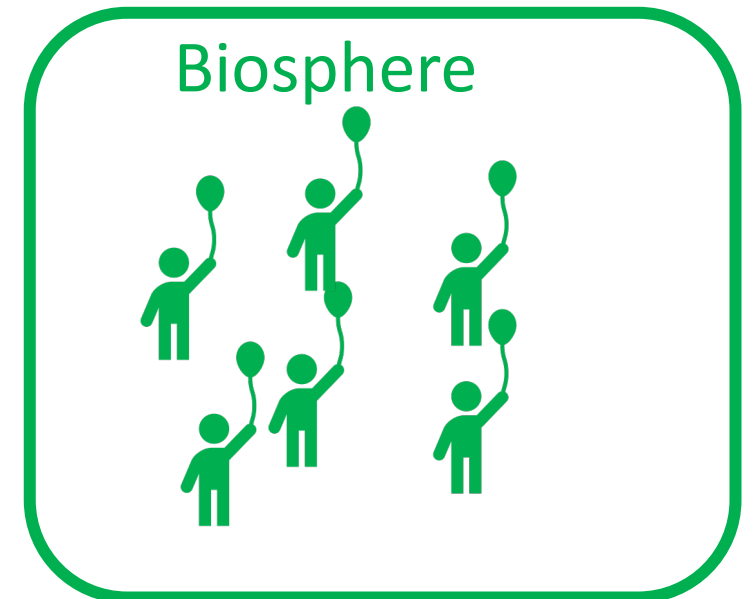
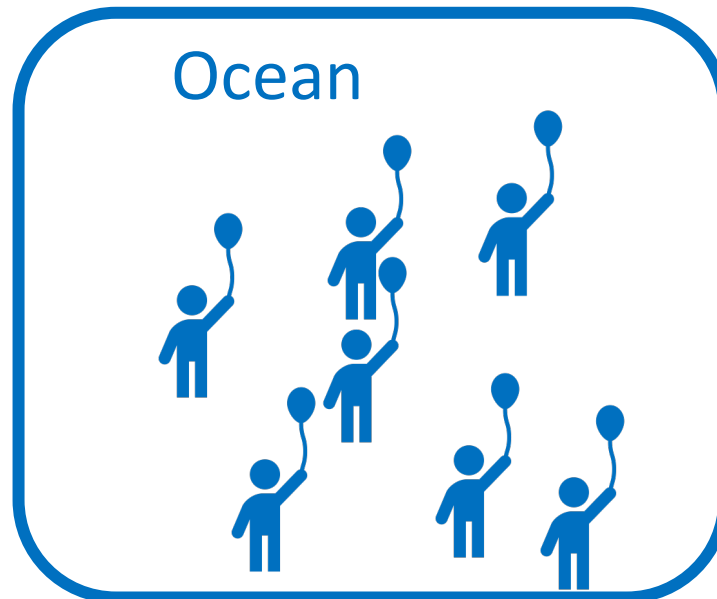
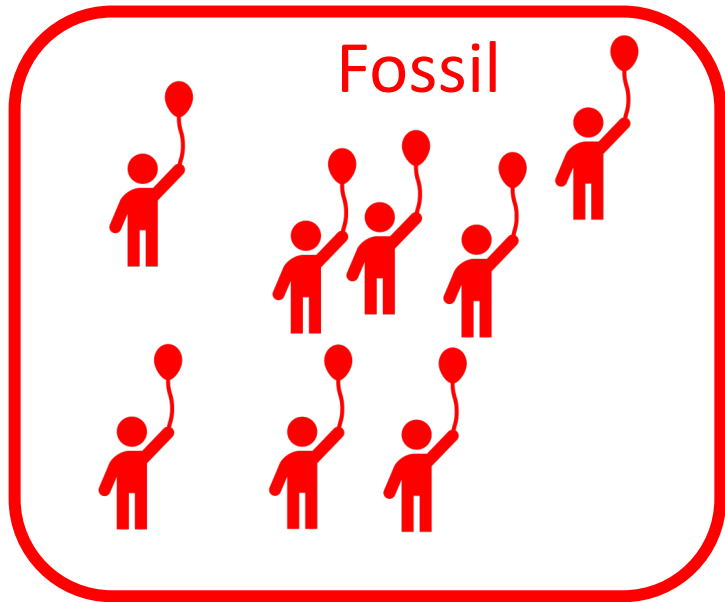
# Carbon Cycle game: the natural cycle

- Round 1:
- The biosphere CO<sub>2</sub> molecules start their natural cycle. One by one they will fly to the atmosphere and fly around for 15 seconds, before going back to the biosphere (can also be 5 by 5 if you have a lot of children)
- While waiting the fossil and ocean CO<sub>2</sub> molecules can act out their roles as ocean molecules, or as fossils!

# Carbon Cycle game: the natural cycle

- Round 2:
- The biosphere CO<sub>2</sub> molecules continue their natural cycle.
- Now the same for the ocean CO<sub>2</sub> molecules:  
One by one they will fly to the atmosphere and fly around for 15 seconds, before going back to the ocean (can also be 5 by 5 if you have a lot of children)

Natural  
cycle



# Carbon Cycle game: human influence

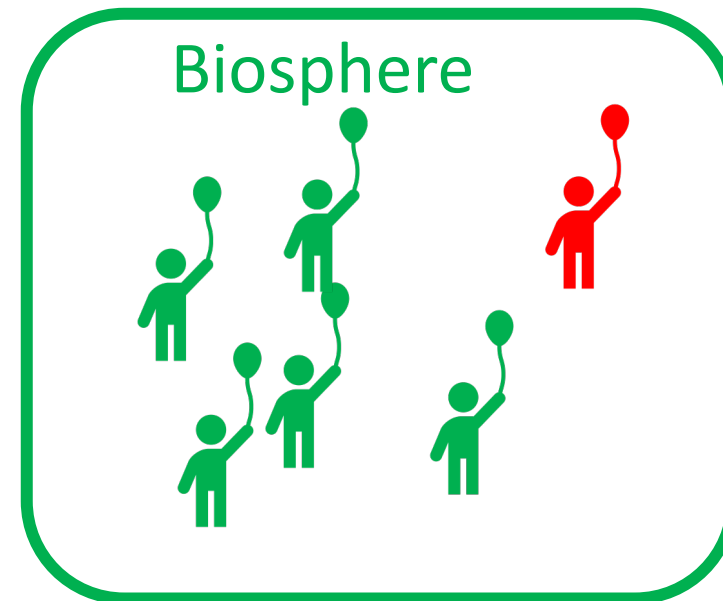
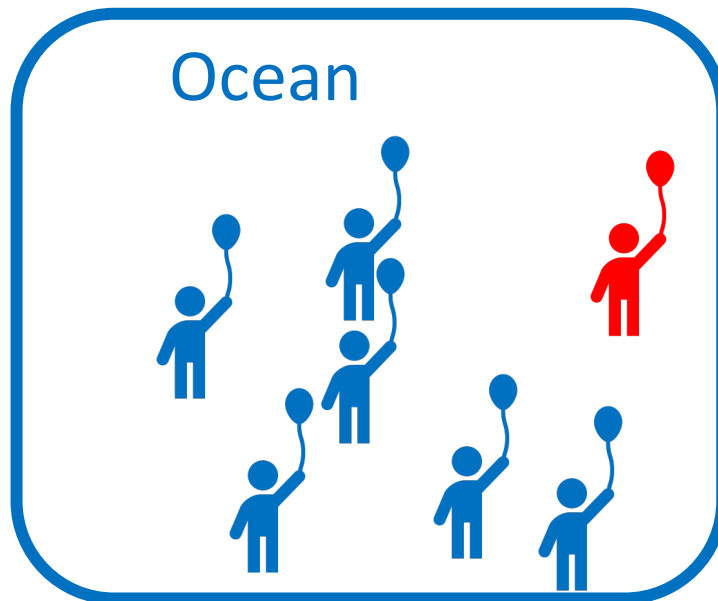
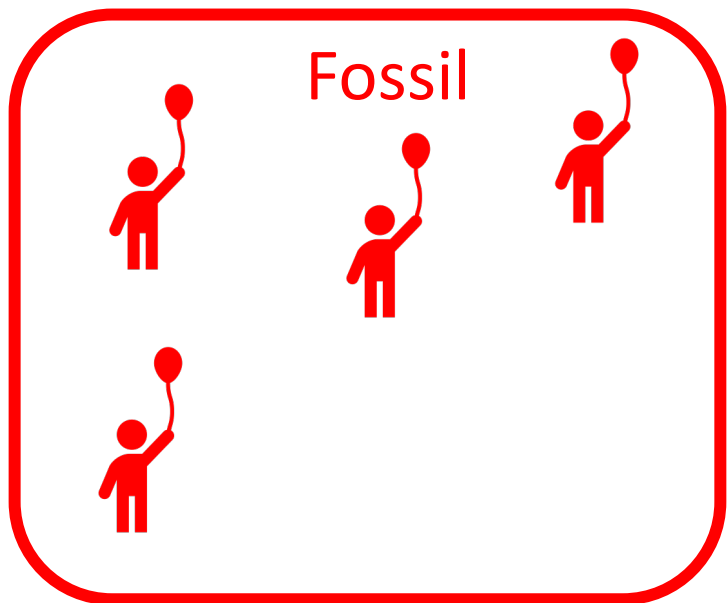
- Round 3:
- The biosphere and ocean CO<sub>2</sub> molecules continue their natural cycle.
- Now the CO<sub>2</sub> molecules enter. The kids go one by one into the atmosphere. Half of them stay in the atmosphere, one quarter goes to the biosphere, and one quarter to the ocean. They can first fly around 15 seconds in the atmosphere, before going to the ocean/biosphere. Tell each kid their role, e.g. stay in atmosphere, go to biosphere, go to ocean, stay in atmosphere...



# Carbon Cycle game, rules for the kids:

- Listen carefully to the instructions
- Molecules cannot touch each other!
- Fly 15 seconds in the atmosphere, before going where you are told

Human  
influence



We ran out of fossil fuels quickly...

