

Peatlands: not easy way to Nationally Determined Contributions

Raising the bar on nature-based solutions in NDCs

UNFCCC COP24, Katowice, Poland,

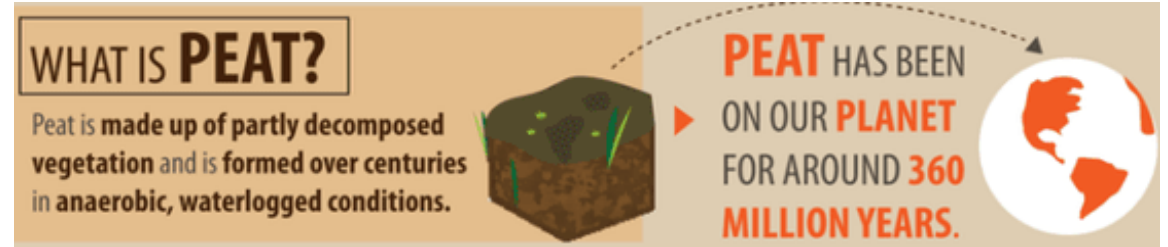
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What are Peatlands?


- Terrestrial wetlands
- Accumulating biomass faster, than it decomposes, as long as they are wet – eg. thousands years



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- Accumulate carbon
 - Shelter biodiversity
 - Increase resilience of ecosystems and communities

adaptation

Why Peatlands in NDC?

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- At 3 % of terrestrial surface contain 30 % of soil carbon nad 2 times more than all forests
 - Being drained they loose carbon as GHG

mitigation



Peatlands in Nationally Determined Contributions

Why it is not so easy?

NR

- No LULUCF
- Forestry and Agriculture
- Wetlands
- Peatlands

MRV

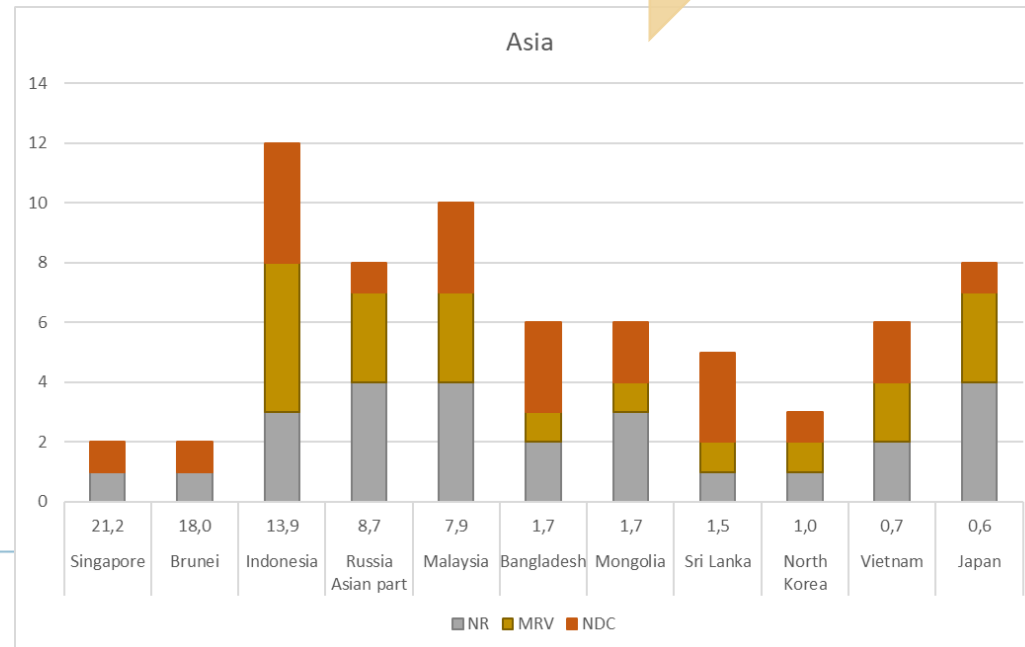
- 0 = No
- 1 = no explanationa
- 2 = TIER1
- 3 = Research and piloting
- 4 = TIER2
- 5 = VCS or other

NDC

- 0 = No INDC/NDC or no LULUCF in it
- 1 = LULUCF but no Methodology/Plan
- 2 = L+ Meth + Plan
- 3 =Wetland/Peatland
- 4 = W/P and Implementation plan
- 5 = W/P and Reporting

Countries with peatlands more than 0.5 % sources:

- National inventories
- CRF, CEF
- National Communications
- NDCs



Wetlands International activities on peatlands around the World

Case Studies on Ecosystem Based Solutions for Climate Change Mitigation and Adaptation

- **Tropical forested peatlands in Indonesia:**

Hazards: drainage, forest logging, palm oil monoculture, peat fires

Solutions: peatland restoration, Acacia plantations as paludiculture, developing of incentives for restoration, introducing voluntary market for carbon units

- **Mongolian highland peatlands:**

Hazards: overgrazing, mining, peat degradation, permafrost thaw

Solutions: peatlands restoration, land use policy, national climate related policy

- **Temperate zone peatlands in the European part of Russia:**

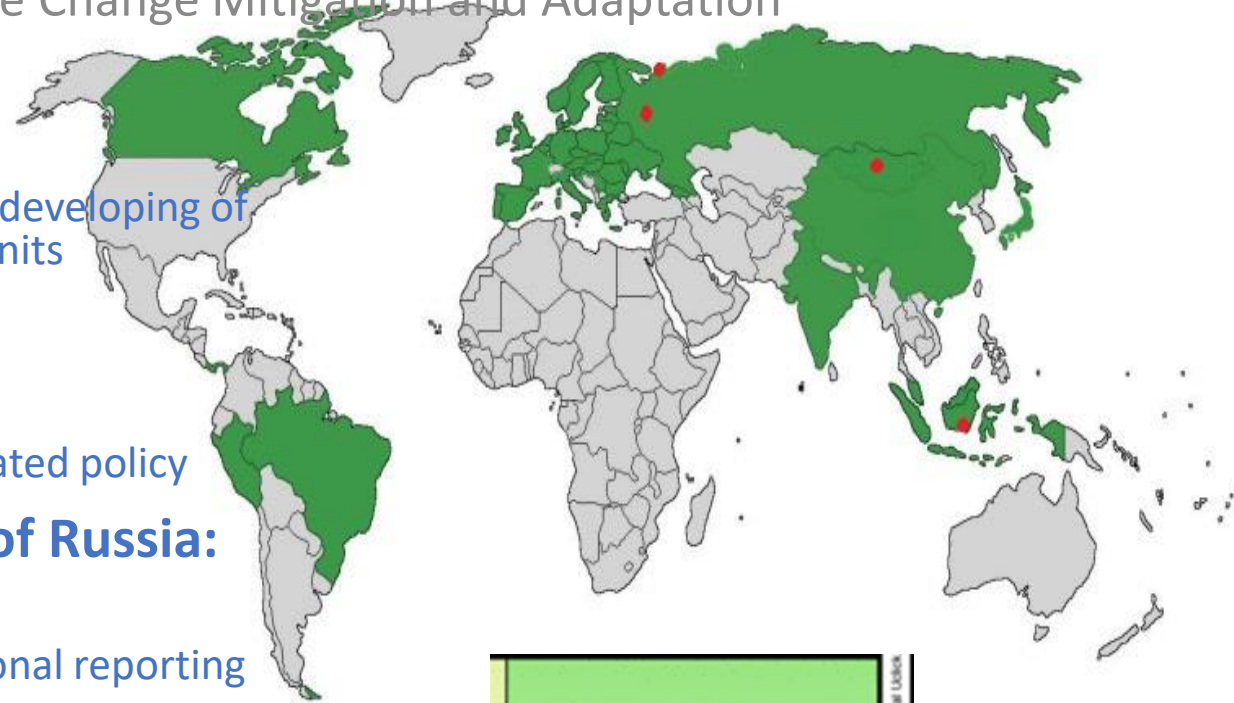
Hazards: drainage, drained peatlands abundance, peat fires

Solutions: peatlands rewetting and restoration, land use policy, national reporting to the UNFCCC

- **High Arctic permafrost peatlands, Russia:**

Hazards: oil and gas infrastructure, overgrazing, permafrost thaw and related methane emissions

Solutions: peatlands restoration and mitigation measures, MRVs for permafrost ecosystems, integration of permafrost into LULUCF



The Katingan Mentaya Project – a case study for REDD+ in tropical peatlands



Key Facts



+450 LOCAL PEOPLE

protect the forest from seasonal fires



AUTOMATED FIRE MONITORING

updates our fire teams every 8 hours



18 FIRE POSTS

enable fast and effective response with specialised equipment to directly target underground peat fires



AT 26,000 YEARS OLD

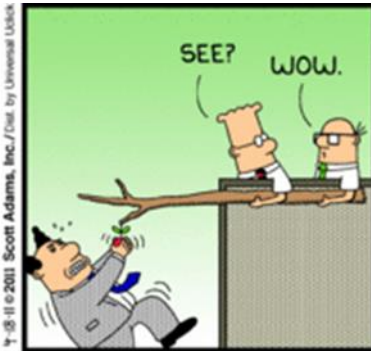
the peat soils under the forest are up to 13 meters deep



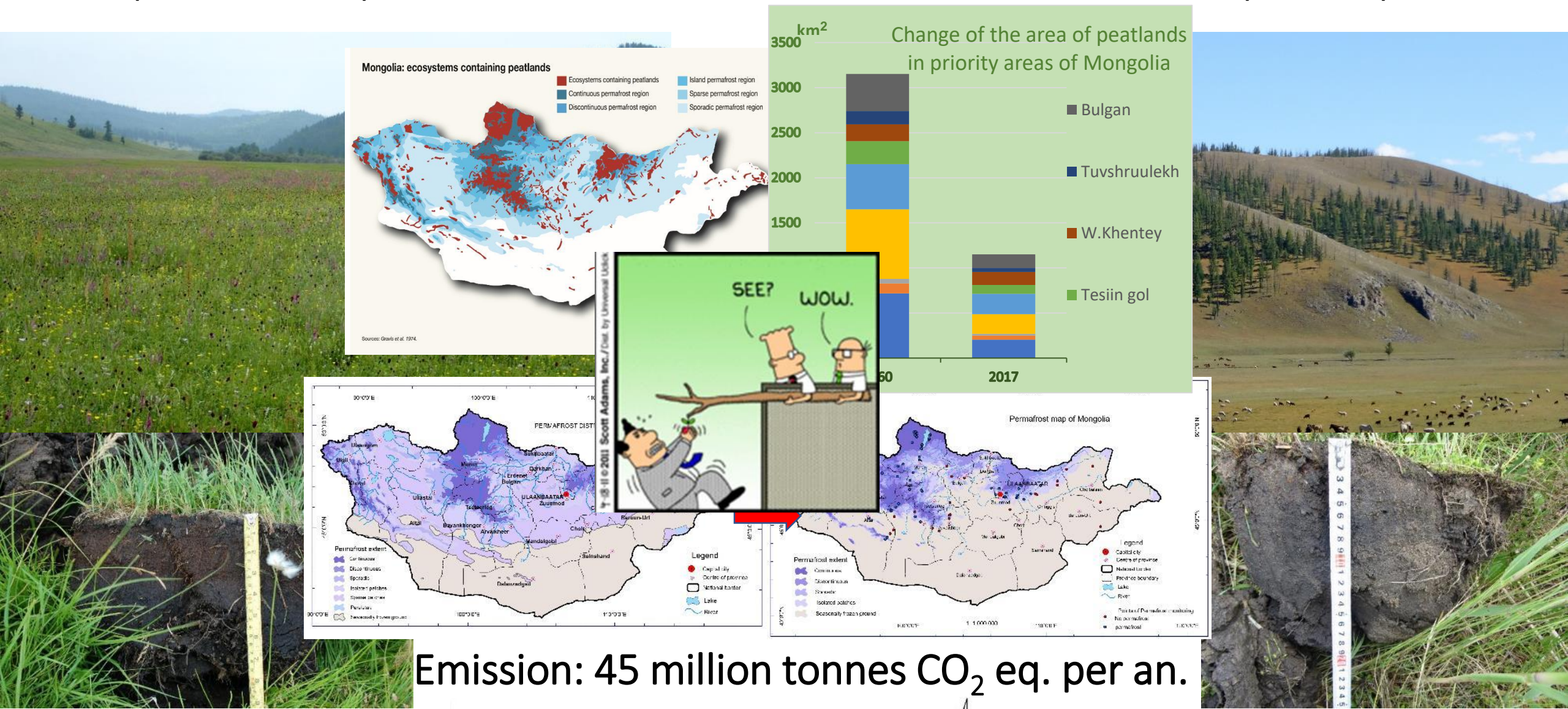
The outcome

- The peatland restoration project included in the voluntary carbon market
- 149,000 ha area, potential GHG emission reduction approx 7 million ton CO₂e/year
- Real on the ground action public and private partnership
- Has demonstration of potential for inclusion of peatland restoration activities to NDC, need to be properly compensated

NDC of Indonesia?
Yes. Included!



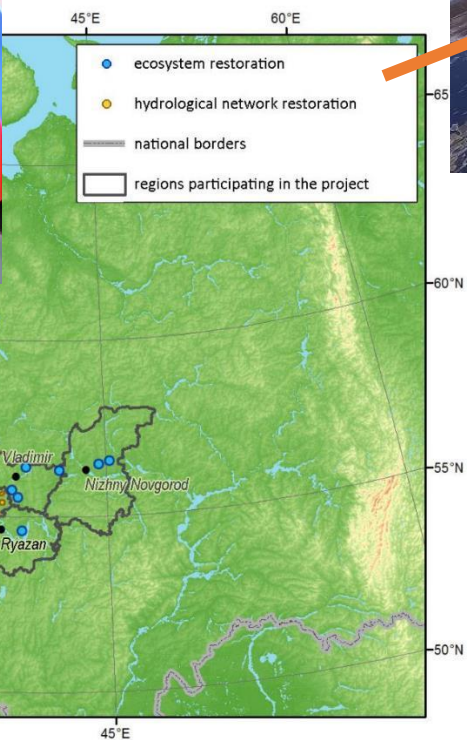
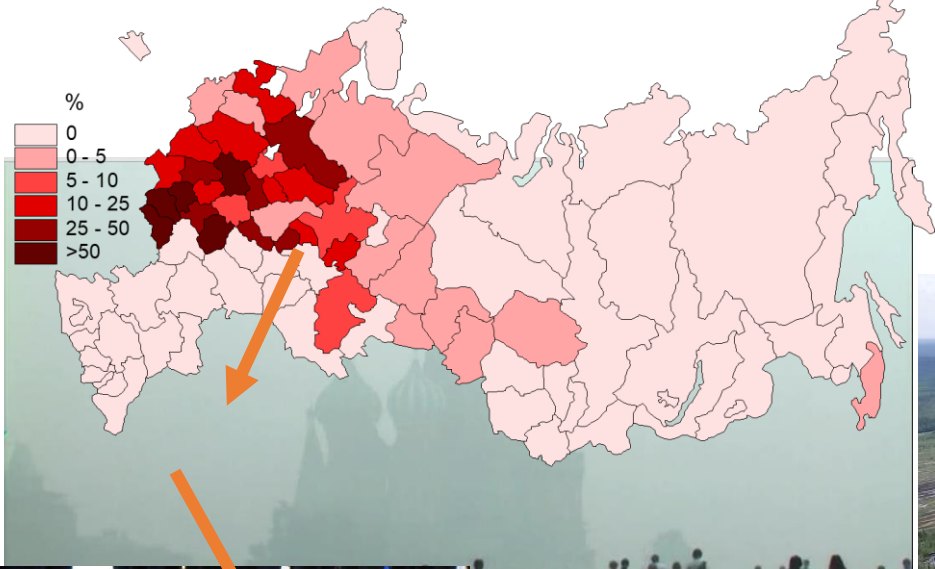
Both peatlands and permafrost had been reduced in their distribution 50 % by last 50 years



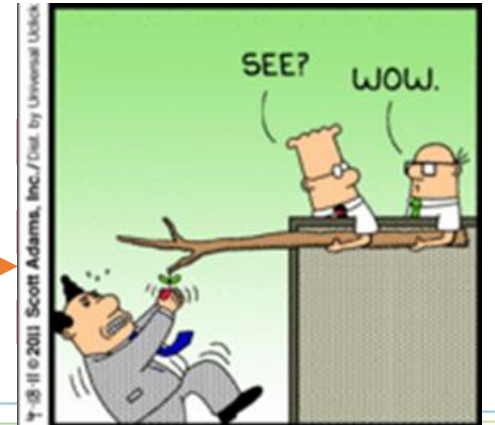
Emission: 45 million tonnes CO₂ eq. per an.

Peatland restoration in Central Russia

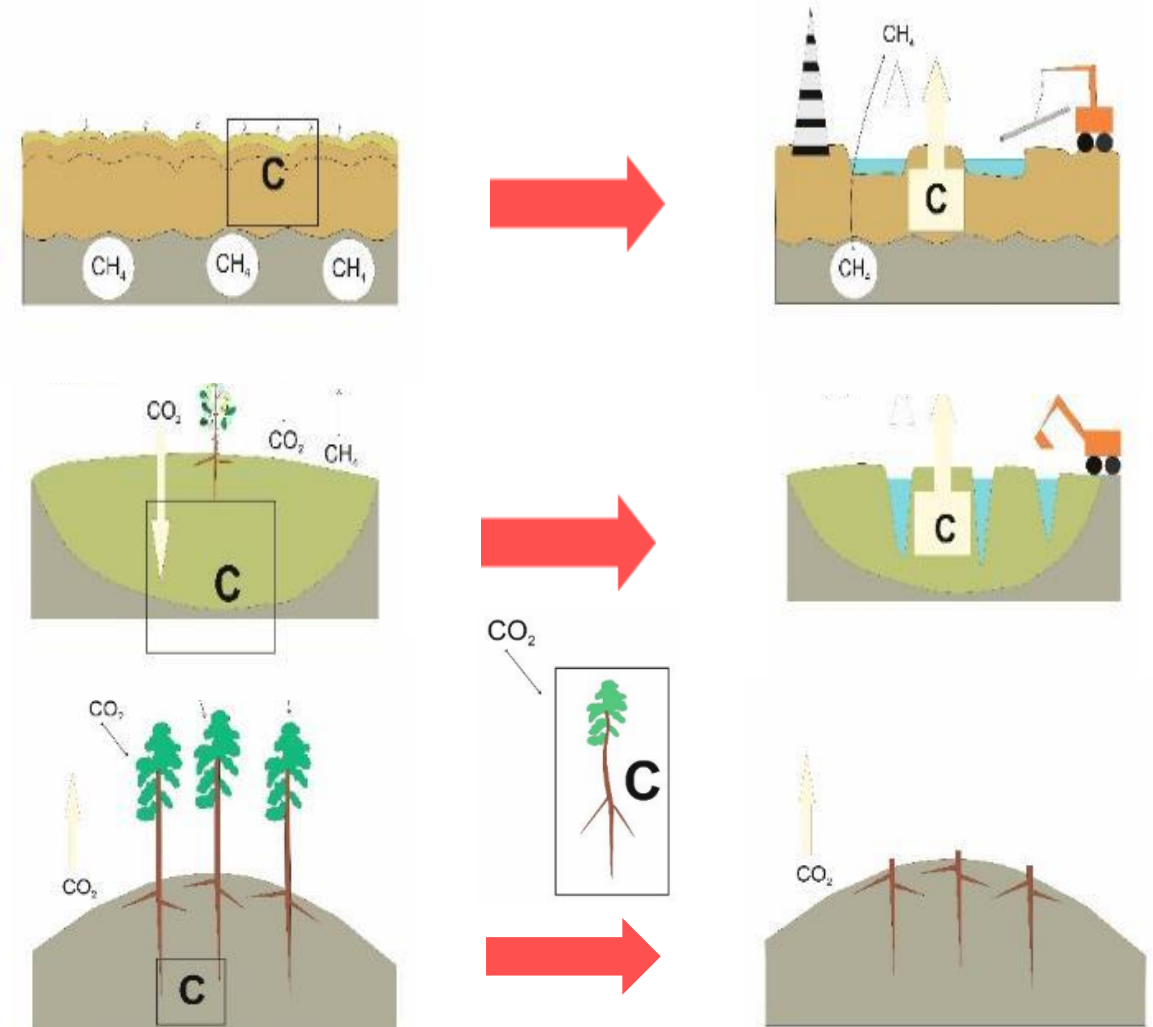
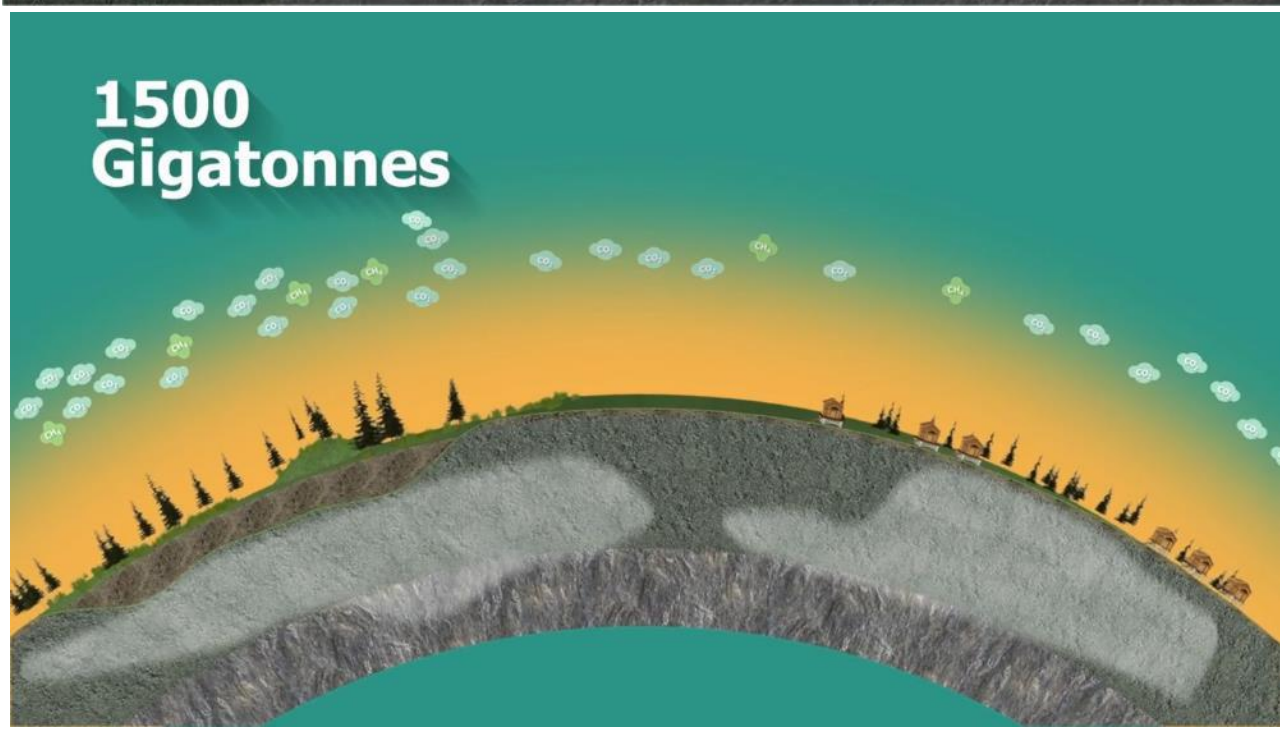
2011 – 2018 – 100 000 hectares rewetted, 30 000 ha from them – ecosystem restoration



Emission reduction up to 242,000 tCO₂eq per annum



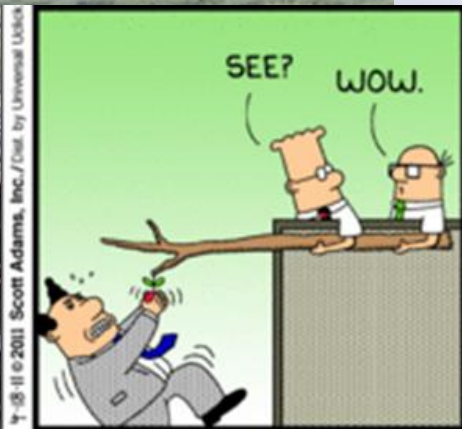
Special case for arctic peatlands



NDC of Arctic Council?



Permafrost as a source? Oil and Gas as activity?



Hazards





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FUTURE?
Thank you