

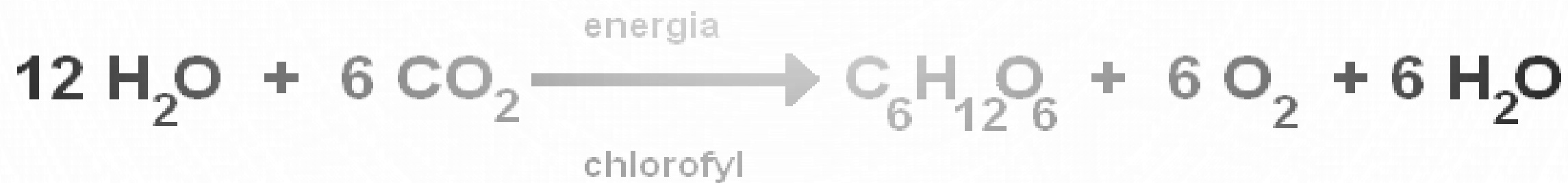


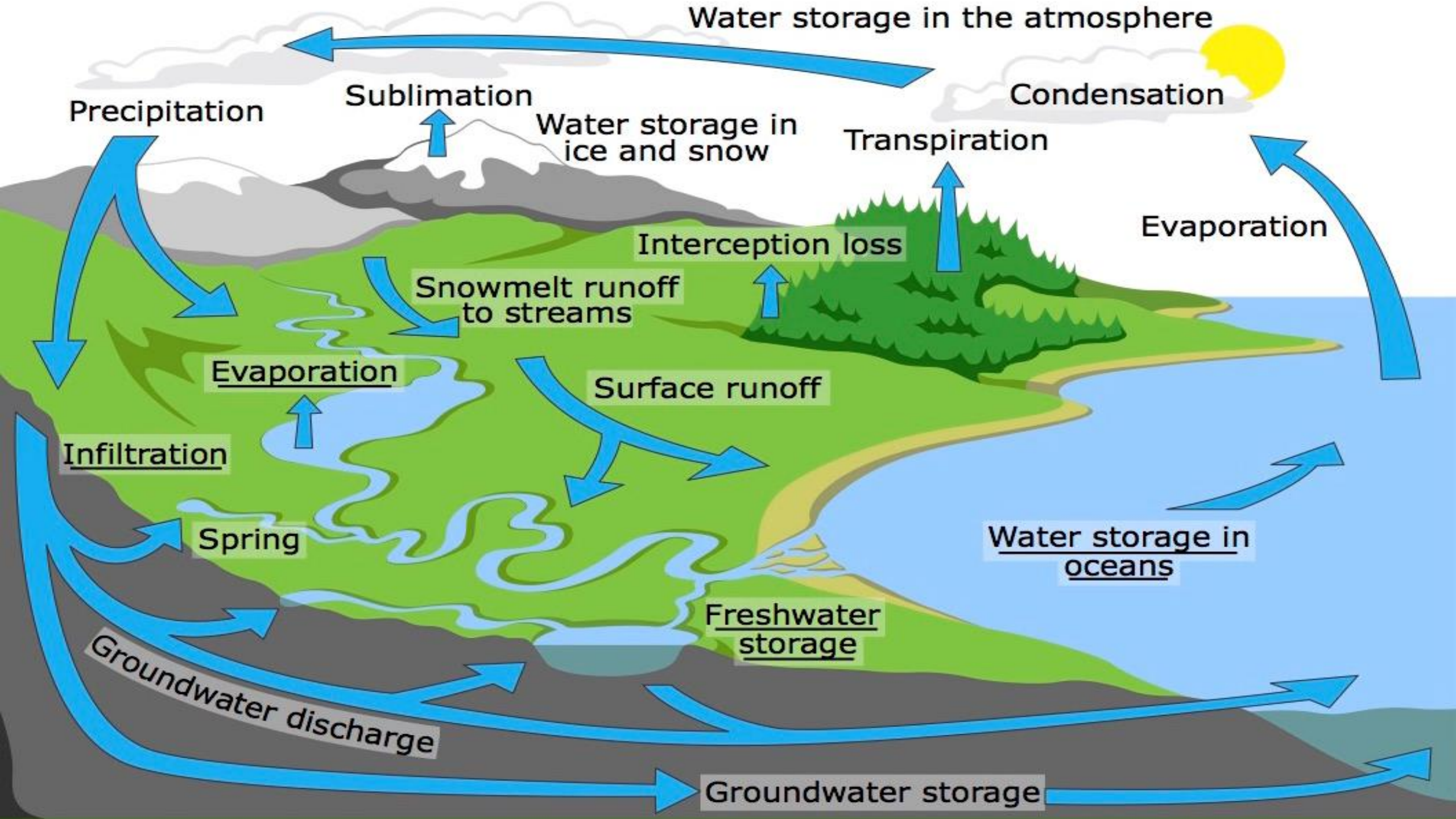
CLIMATE CHANGE IMPACTS ON FORESTRY. HOW WG FOREST CAN ADDRESS THIS ISSUE?

Libor Ulrych

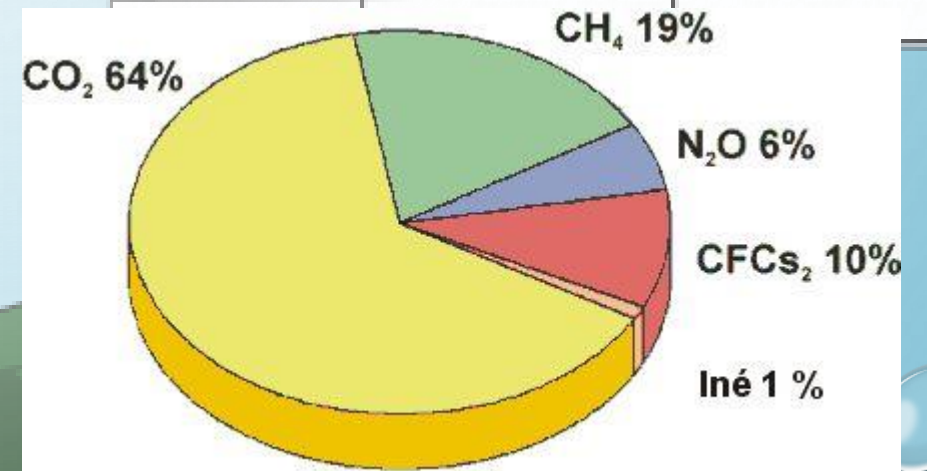
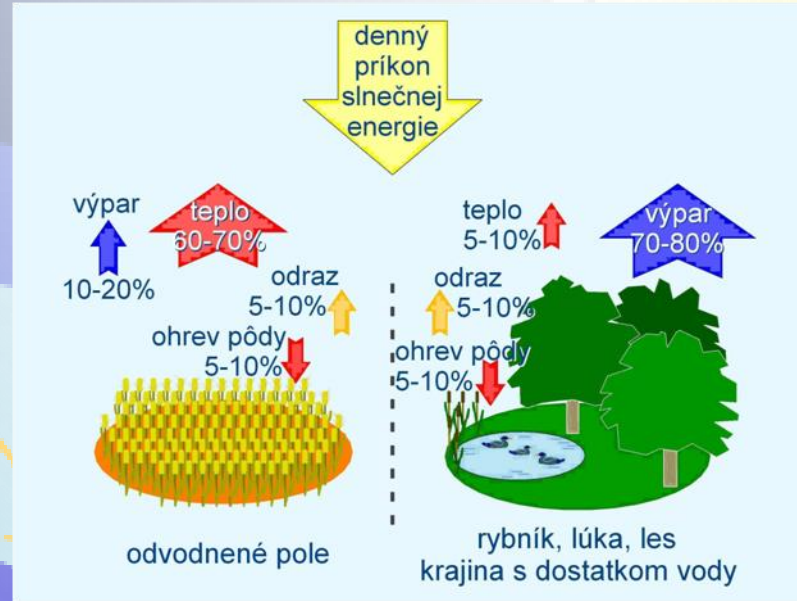
State Nature Conservancy of the Slovak Republic

WG Forest CC, Zvolen 27.6.2019





GREENHOUSE GASES - ENERGY



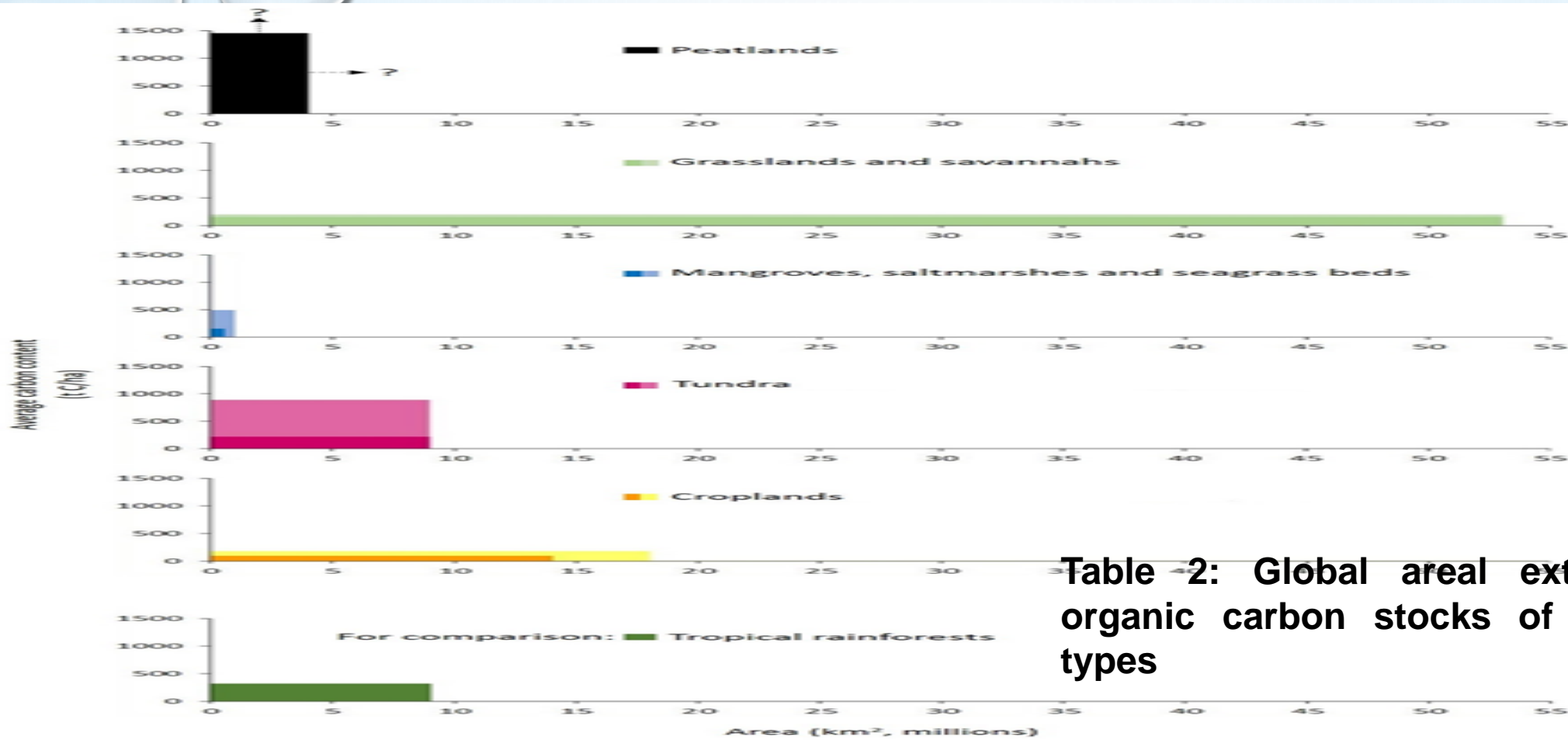


Table 2: Global areal extent and average organic carbon stocks of major ecosystem types

| Ecosystem type | Peatland ^o | Grassland / savannah | Mangrove, salt marsh, seagrass bed | Tundra | Cropland | Tropical rainforest | Total for global land area |
|---------------------------------------|-----------------------|----------------------|---|-----------|---|---------------------|---|
| Areal extent (km ²) | 4,009,238 | 52,500,000 | 489,000-1,152,000 | 8,800,000 | 13,500,000 - 18,766,440 | 9,400,000 | 149,000,000 |
| Average organic carbon stock (t C/ha) | 1,450 | 150-200 | 140-480* *soil carbon included up to 1m only | 218-890 | 95-177** **soil carbon only, biomass carbon not included | 320 | 191-205*** ***soil carbon included up to 2m only |



PROBLEMS

- Spruce forests
 - extremes of weather
 - disasters
 - bark beetle
 - management or natural regeneration?



PROBLEMS

- Oak forests
 - seed years
 - germination
 - impact of invasive plants



PROBLEMS

- Scotch pine forests on sandy sites
 - drying during long summer periods without precipitation
 - premature dying
 - invasive plants attack



QUESTIONS

- Management or natural processes
- Invasive plants – introduction of suitable species
- Timber or surviving
- Carpathian mountains with Pannonian basin?

CHALLENGES

- National adaptation strategies – ecosystem based approach
- Water catchment
 - geomorphological,
 - plant interception,
 - soil interception.

CHALLENGES

- Ecosystem services
 - valuation
 - prioritisation
 - state accounting

CHALLENGES

- New possibilities of services:
 - wilderness, natural development
 - agroforestry
 - zones

The background is a light blue gradient with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance.

THANK YOU
FOR YOUR ATTENTION

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