



### Carbon farming in Sweden

- Carbon farming activities are important for Sweden to achieve climate neutrality by 2045
- Policy instruments that aim to increase carbon sinks or decrease emissions from land use are a new development
- Many activities are at a limited or early scale
- Increasing interest for nature-based solutions that achieve synergy between climate mitigation, climate adaption and biodiversity
- Carbon farming activities needs to scale up fast due to increased ambition in the revised LULUCF-regulation
  - Significant interest in the upcoming sustainable carbon cycles proposal



### Pathway to a Climate positive future

- Supplementary measures needed to achieve neutrality, some of which are expected to come from carbon farming
  - 3.7 million tonnes per year by 2030
    - 1.2 million tonnes from carbon sinks
  - 10.7 million tonnes per year by 2045
    - At least 2.7 million tonnes from carbon sinks
- The 2030 target for Sweden in EU is expected to be 4 million tonnes
- Necessary to scale up ambition in the next few years to meet the target.



# Potential on agricultural land and land taken out of production

- Catch and cover crops
  - 400,000 ha of agricultural land
- Agroforestry
  - 50,000 ha of agricultural land
- Energy crop cultivation
  - 40,000 ha of agricultural land taken out of production
- Afforestation
  - 100,000 ha of agricultural land taken out of production
- Restoration of wetlands
  - 10,000 ha on agricultural land (100,000 ha on forest land)



## Carbon farming activities in the CAP

- Cover crops
  - Is a new addition in the CAP-plan for Sweden from 2023
- Catch crops
  - Was included in Sweden's previous plan (mainly for nitrogen retention) and remains in the 2023-2027 CAPplan.
- Education for farmers
  - "Focus on nutrients"
  - Advice for farmers on how to reduce environmental impact, which includes increasing soil carbon



#### Wetland restoration

- Sweden has large amount of organogenic soils, that was drained for agriculture in the past. Much is now covered by forest.
- Different policy instruments that supports wetland restoration for biodiversity, climate, and nutrion retention.
  - Current policy instruments only covers forest land, not agricultural land
- Legal obstacles and difficulty to engage landowners makes the process slower than expected.



#### Future

- There is a need to revise the national policies following the revised LULUCF-regulation.
- Align national policy to the upcoming Sustainable Cycles framework.
  - Potential of private sector investments into carbon farming activities
- Knowledge of farmers and land owners of carbon farming practices an obstacle that needs to be better addressed alongside policies to make it more profitable.





SWEDISH ENVIRONMENTAL PROTECTION AGENCY