



Federal Ministry  
of Food  
and Agriculture



# Webinar on the European Green Deal - The role of agriculture in achieving climate neutrality by 2050

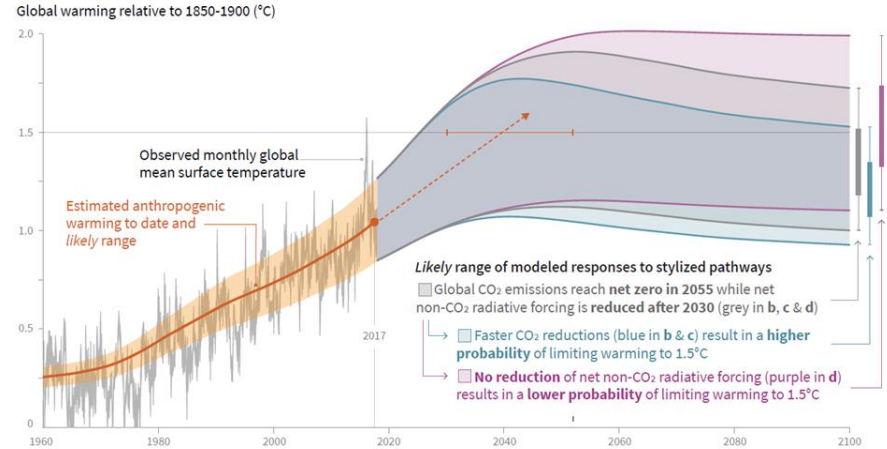
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# Opening Remarks

The rate of build-up of CO<sub>2</sub> in the atmosphere can be reduced by taking advantage of the fact that atmospheric CO<sub>2</sub> can accumulate as carbon in vegetation and soils and processed wood in terrestrial ecosystems.

a) Observed global temperature change and modeled responses to stylized anthropogenic emission and forcing pathways



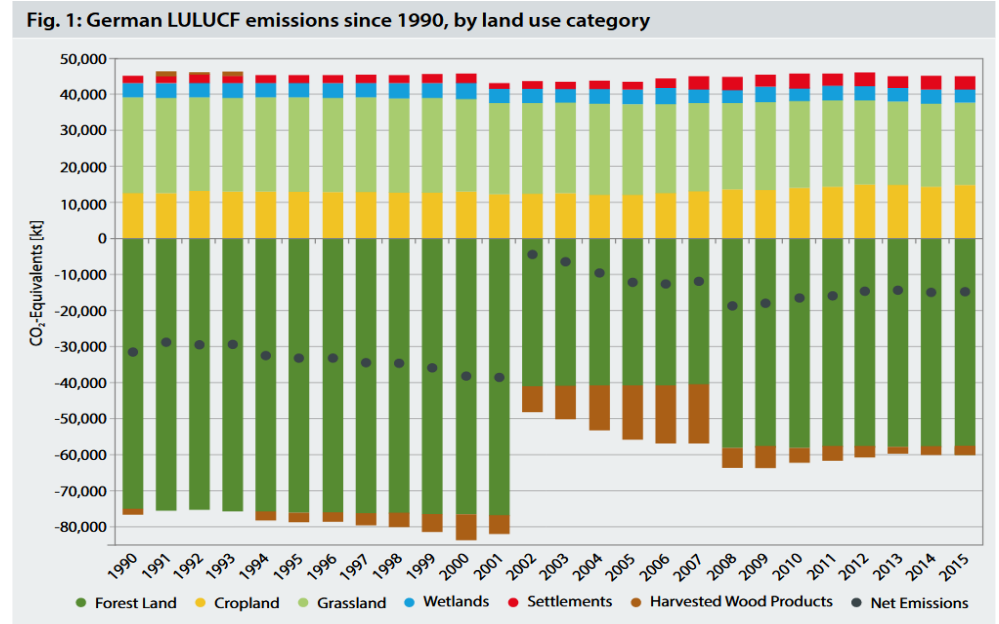
Source: IPCC, 2018

The Climate Target Plan and Impact Assessment communicated by the EU KOM „Stepping up Europe’s 2030 climate ambition“ shows:

→ **To reach the goal of climate neutrality we need to strengthen carbon sinks.**

# German Climate Protection Program 2030

## LULUCF Measures:



Source: Thünen Institut, 2017

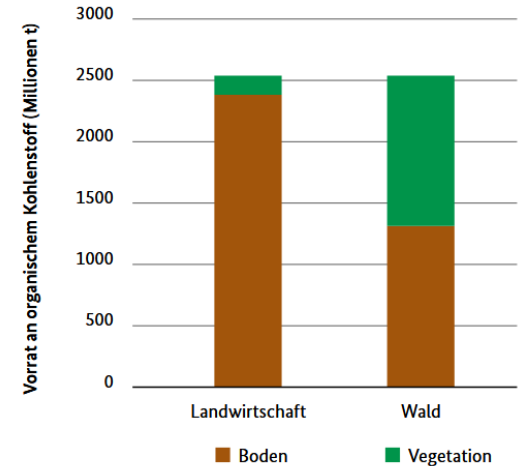
1. Maintaining and/or building up humus levels on arable land
2. Maintaining permanent grassland
3. Protecting peatlands/organic soils and reducing the use of peat in growing substrates
4. Conservation and sustainable management of forests and timber use

# From Forests to Agroforestry

- Forests present a significant global carbon stock accumulated through growth of trees and an in soil carbon.
- Carbon storage in long-lived wood products and reductions of emissions from use of wood products to substitute for emissions-intensive materials also contribute to mitigation objectives.
- Trees do not only belong in the forests: The conversion from grassland or cropland to an agroforestry system produces an increase in soil organic carbon. So agroforestry systems can play an effective role in global carbon sequestration.

# Scaling up carbon levels on agricultural land

- In 2018, Germany carried out a nation-wide agricultural soil condition survey.
- For this purpose, more than 120,000 soil samples were taken and analyzed in close cooperation with over 3,100 farmers between 2012 and 2018. With an impressive result:
- a total of over two billion tons of carbon are stored in Germany's agricultural soils. The soil condition survey thus underlines the great importance of agricultural soils for climate protection and climate adaptation - a potential that is often underestimated
- So the goal is clear: to protect the soil as a carbon sink and further expand its storage potential.
- In Germany 75 million euros will be made available over the next three years through the Climate Protection Program 2030 to support farmers on this path.



Source: Thünen Institut, 2019

# Protecting peatlands/organic soils and reducing the use of peat in growing media

- Peatlands in Europe have formed a significant sink for atmospheric CO<sub>2</sub> since the last glacial maximum.
- Currently they are estimated to hold ca. 42 Gt carbon in the form of peat and are therefore a considerable component in the European carbon budget.
- Most peatlands in Germany have been transformed to arable land by draining in the last century
- In Germany 168 million euros will be made available over the next three years through the Climate Protection Program 2030 to support farmers in turning back the use of former peatland by extensification, especially rewetening organic soils. A part of this financing will go into reducing the use of peat as gardening substrates

# The vision is to reward farmers for ecosystem services: Climate change mitigation can be an agricultural good that a farmer produces.

## Thoughts for the way ahead:

- The farm-to-fork Strategy announces robust certification rules for carbon removals in agriculture and forestry. It will be exciting how this process implements in agricultural policies.
- The carbon sequestration potential of agroforestry is an underestimated potential. How can we better support this potential at European level? Trees and other woody structures are usually not considered agricultural land and thus are no longer eligible for CAP support - is that a problem?
- When farmers rewet their peat soils, they need a perspective to continue using these soils. Paludiculture is a sustainable option. How can farmers be better supported on this path?



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Thank you for your attention.

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