

Klimatförändringar – hållbart kolkretslopp

EU-kommissionen har inbjudit organisationer och enskilda att lämna synpunkter på ett nytt initiativ för att motverka klimatförändringar. Kommissionen sammanfattar bakgrunden till initiativet på detta sätt:

Upptag av koldioxid genom skogar, jordbruksmetoder eller tekniska lösningar är nödvändigt för att EU ska bli klimatneutralt senast 2050 eftersom det balanserar utsläpp som är svåra att få bort, t.ex. från jordbruket, flyget eller vissa industrier.

Det här initiativet ska bidra till hållbara lösningar för koldioxidupptag. Vi vill föreslå en handlingsplan för att främja kolinlagrande jordbruk och ta fram ett regelverk för certifiering av koldioxidupptag.

Alla kommentarer finns att läsa på [kommissionens webbplats](#). KSLA har lämnat följande, kortfattade kommentar:

Agriculture

Soil carbon stocks in arable mineral soils in Sweden have increased with the equivalent of 2,4 Mton CO₂ per year over the last 30 years. Modern Swedish agriculture has turned from a carbon source, through drainage and cultivation of wetlands and intense soil cultivation, to a sink, by adapting soil conservation practices. This change has not occurred as the result of an intended carbon balancing strategy, but as a side effect from the production of food and feed. This shows that there is no fundamental conflict between agricultural productivity and climate change mitigation.

Reduced tillage and more varied crop rotations, including cover crops and perennial forage crops, show promising results regarding increased soil carbon content, improved soil fertility and increased productivity. The use of mineral fertilizer results in increased CO₂-assimilation and production as well as carbon inputs to soil. Closing yield gaps by increasing soil fertility and productivity is a land sparing strategy that also helps prevent climate change and biodiversity loss.

Arable land is a major reservoir for organic carbon and it is crucial that the organic matter in soils is preserved or increased. Farmers may be rewarded for carbon storage. In a short-term perspective, verification of carbon changes at field or farm scale is expensive and almost impossible. Action based measures are cheaper and easier to verify. There is also a risk that a model based on net carbon sequestration will indirectly punish farmers who have been practising good carbon management over a longer period, and thus do not have the same carbon removal potential as farms on degraded soils.

A system for promoting good carbon management needs to be based on third party certification of verified local mitigation actions, validated by long time trials and regional or national monitoring of soil carbon levels.

Forestry

The EU policy proposed aims at "restoring" forests by applying "nature-based solutions". Forests are dynamic across regions, but also through times scales of decades and centuries. For example, fires were much more common under unmanaged conditions. The terms

restoration and nature-based solutions as used here are vague and not suitable bases for EU policy.

Regarding forestry, the temporal and spatial delineation of the system considered is crucially important. For example, felling trees reduces the carbon stock in the clear-felled area in the shorter term. However, modern forest management in Norway, Sweden and Finland has demonstrated large increases in the carbon stock in forests and in removals by harvests as the growth rate in the managed forests has increased greatly.

As from the early 1990's, Swedish forest policy has aimed both at high production and increasing ambitions to enhance biodiversity. Thus, there have been documented increases in the percentage of old forests, the volume of dead wood, the volume of broadleaved trees, and in the area of forests set aside for non-wood production.

Environmental conditions, such as soil fertility and climate, vary greatly across the union. Hence, one type of management will not be optimal across the union. For example, under the nutrient-poor conditions in northern Europe, forest management needs to create larger gaps (clear-fellings) to promote tree regeneration and growth than under conditions of higher nutrient supply in south and central Europe.

Lastly, the EU needs to consider that a policy decreasing tree growth in the forests of northern Europe will have a substantial impact on the supply of wood products to EU consumers. This may result in needs to import wood products from outside the EU, greatly increase forest harvesting in other parts of the EU, or increased use of fossil raw materials. The two first options would result in no change in the overall effect on atmospheric CO₂. The last option would clearly add fossil carbon to the atmosphere. The EU policy must encompass these perspectives.