Denmark's position on the post 2030 architecture for agriculture and LULUCF

Denmark's main priorities to strengthen the climate architecture for agriculture, land and forestry after 2030

The EU needs a new and more effective climate architecture for agriculture, forestry and land post-2030. Total EU agricultural greenhouse gas emissions have been stable since 2005 and agriculture will account for an increasing share of EU emissions towards 2040. In addition, the EU is not on track to meet the 2030 net removal target under LULUCF. Changes must be made in the architecture to accommodate some of these challenges and to provide a better baseline for regulation. Therefore, Denmark strongly advocates for combining agricultural emissions and net emissions from agricultural land in a new agricultural pillar. This pillar should be regulated with emission trading as the central instrument. Thereto, Denmark proposes a separate forestry pillar with a common EU regulation of emissions and removals from forests and other land use. Such a design would be simple, cost-effective, and would allow for a more coherent policy making in the respective sectors.

Promoting agricultural synergies while accommodating the distinctive properties for forest land
Denmark proposes a new climate architecture constructed as follows:

1. *Livestock, farm management and agricultural land; regulated through emissions trading*

Agricultural non-CO_2 emissions and net removals in agricultural soils should be considered together to allow for a more coherent policy-making of the agricultural sector. Such a framework, in which all farm emissions are accounted for (including e.g. livestock, manure handling, slurry, fertilizer management and soils), would encourage farmers to make more cost-efficient mitigation efforts across the various emissions in the sector.

2. *Forestry and other land use; regulated with a common EU regulation*

The vast majority of the EU's GHG removals occur on forest land and could be handled in a separate pillar. With agricultural soils separated from this pillar, the scope becomes more homogeneous than the scope of the current LULUCF Regulation. This allows for a more focused approach to overcome some of the challenges identified with regulating greenhouse gas fluxes in forests:

1) At this point, forestry seems less fit for emissions trading. In New Zealand, where forestry is integrated in the national emissions trading system, there are recognized challenges with ensuring permanence and forest integrity.
2) There are general issues with obtaining accurate and timely data for emissions and removals on forest land, which should be handled separately in order not to jeopardize the credibility of a combined forestry and agricultural sector.
3) Moreover, a common challenge with climate regulation of forests is how to ensure more long-term goals. A climate regulation specifically designed for forests may in a higher degree than today manage to incorporate incentives for long-term effects that can contribute positively to climate neutrality and net negative emissions.

Denmark supports looking into options for designing incentives for individual forest owners to increase long-term net removals of carbon from the atmosphere. Looking ahead, several initiatives such as the revision of the LULUCF-regulation as well as the Soil and Forest Monitoring Laws could increase knowledge on how to best optimize a consistent, long-term and sustainable contribution from forests. Moreover, the implementation of the EU carbon removal certification framework could turn out to be a valuable tool by paving the way for efficient results-based payment schemes and by facilitating private finance on the voluntary market for climate credits.

A suggestion for technical adjustments for a new climate architecture for agriculture, forestry and land
The *livestock, farm management and agricultural land* pillar should include all non-CO_2 emissions from agricultural activities as well as emissions and removals from "B. Cropland" and "C. Grassland." In turn, the *Forestry and other land use* pillar should include "A. Forest land" as well as the land reporting categories "4.D Wetlands", "4.E Settlements", "4.F Other land" and "4.H Other".

The majority of recently deforested land in the EU is converted to settlements or wetlands, which makes it reasonable to govern emissions from these land conversions together with emissions and removals from managed forest land. Moreover, an ETS or other price mechanism for agriculture would not be an appropriate measure to drive mitigation action on the parcels of land falling under the scope of these categories. A concrete proposal for the design can be viewed in Table 1.

Table 1. Overview of reporting categories within each pillar and their associated emissions figures

Reporting category (including subcategories)	Pillar[1]	GHG emissions, (Mt CO2e yr^{-1})
3. Agriculture		383
A. Enteric fermentation	Livestock and agricultural land	184
B. Manure management	Livestock and agricultural land	64
C. Rice cultivation	Livestock and agricultural land	3
D. Agricultural soil	Livestock and agricultural land	119
E. Prescribed burning of savannas	Livestock and agricultural land	-
F. Field burning of agricultural residues	Livestock and agricultural land	1
G. Liming	Livestock and agricultural land	5
H. Urea application	Livestock and agricultural land	4
I. Other carbon-containing fertilizers	Livestock and agricultural land	1
J. Other	Livestock and agricultural land	2
4. Land use, land-use change and forestry		**-245**
A. Forest land*	Forestry and other land use	-297
B. Cropland	Livestock and agricultural land	24
C. Grassland	Livestock and agricultural land	21
D. Wetlands*	Forestry and other land use	21
E. Settlements	Forestry and other land use	28
F. Other land	Forestry and other land use	1
G. Harvested wood products	Forestry and other land use	-44
H. Other	Forestry and other land use	0

Note: *This suggested split includes the subcategories, such as land use conversions. Emission figures are the EU average for the years 2017-2021 according to the 2023 submission.

The suggested design requires additional comprehensive analysis; including further investigation concerning incentive structures and how the design interplays with future regulations on national emissions on land-use. Moreover, it raises key questions on how to deal with areas in transition. It will be important that the architecture supports and rewards mitigation efforts for farmers. A way forward could be to include cropland and grassland

[1]Note that both pillars need policies to consider the scope for both emission reductions and removal enhancements. There would be gross removals embedded in cropland and grassland, just like there will be gross emissions embedded in forest land; in some Member States, grassland is a sizable net sink while in others, forest land is a net source.

converted to forest land in the *Livestock, farm management and agricultural land* pillar as to better reflect the entirety of mitigation actions taking place on agricultural soils and reward farmers for afforestation measures. Emissions and removals from agroforestry activities are already reported under cropland, in line with IPCC 2006 guidelines. The same approach could apply to wetlands in order to ensure that wetland conversions are made solely when it is cost-efficient[2].

Table 2. Forest land in transition

Reporting subcategories	Pillar	GHG emissions, (Mt CO2e yr^{-1})
A. 2.1 Cropland converted to forest land	Livestock and agricultural land	-17
A. 2.2 Grassland converted to forest land	Livestock and agricultural land	-20
B. 2.1 Forest land converted to cropland	Livestock and agricultural land	8
C. 2.1 Forest land converted to grassland	Livestock and agricultural land	7

Note: Emission figures from the year 2021 according to the 2023 submission.

[2] Wetlands have not been included in table 2 due to their nature of the reporting scheme, and their inclusion remains for further analysis.