



The Agriculture Sector within the European Commission Proposals on Climate

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Climate impacts on agricultural production

Climatic changes will have both negative and positive consequences in different regions, e.g. on

- **Yields**
- **Quality and stability of food production**
- **Natural environment, esp. water resources, pests, diseases, soil**
- **Frequency and intensity of extreme weather events**

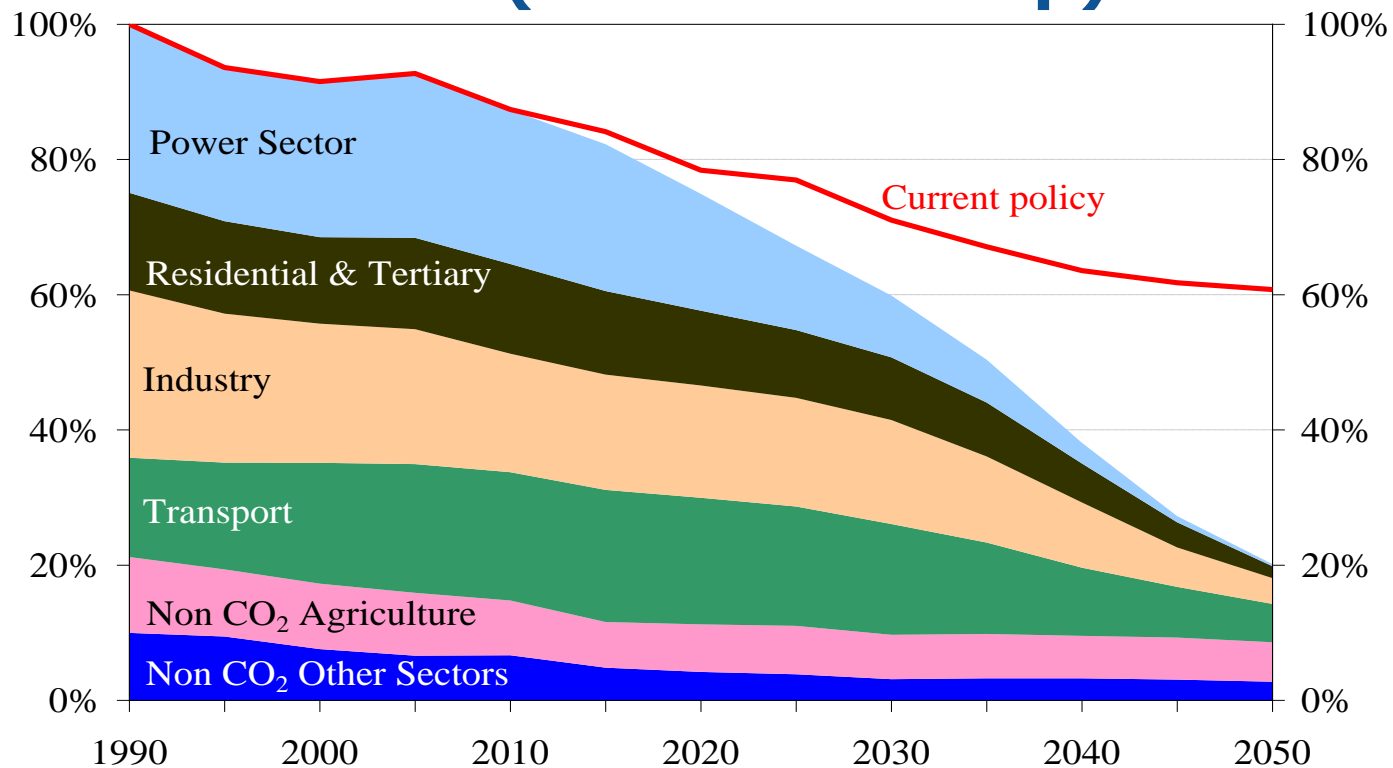


Significant changes in the conditions for agriculture and livestock production

EU land use emissions and removals: Looking backwards

- *EU agriculture is approx. 10% of EU GHG emissions (as per GHG inventory)*
- *EU agricultural emissions have reduced by approximately 24% since 1990*
- *EU forests are a net sink, with slightly increasing forest areas – although not fully in accounts*

Projection of EU agriculture non-CO₂ emissions (2050 Roadmap)



- *By 2050: projected to make up 1/3rd of total EU emissions*

The Paris Agreement

- Global commitment to transition to a low-emission economy, holding the increase in the global temperature to well below 2
- Highlights need to harness the potential of **land use** to contribute to global GHG mitigation efforts
- Acknowledgement of the importance of food security
- ***Entered into force 4 November 2016***





2030 Climate and Energy Framework

-40 % Greenhouse Gas Emissions (domestic EU)

ETS

-43 %

*Including: Power/Energy Sector
and Industry, Aviation*

**Max 100
MtCO₂eq**

Non-ETS

-30%

*Including: road transport, buildings, waste, agriculture,
LULUCF*

ESR

-30 %

**Full
flexibility**

LULUCF

"No-Debit"

**Max 280
MtCO₂eq**

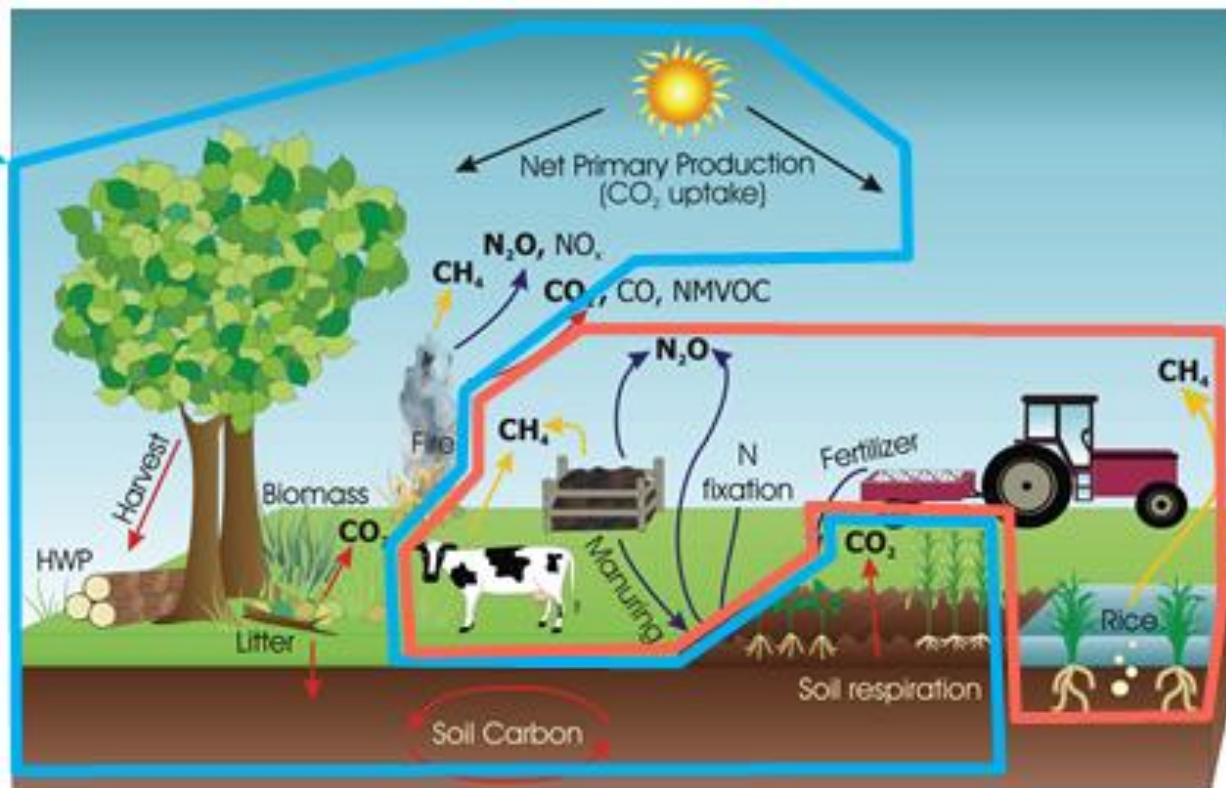
Land use: in both LULUCF and the ESR

Land Use, Land Use Change and Forestry (LULUCF): CO_2

AGRICULTURE *non- CO_2*
(CH_4 , N_2O) – in the ESR

Partly human induced
(strongly linked to global natural carbon cycle)

↓
Uncertainties?
Additionality?
Permanence?
Leakage?



Mainly human-induced

=> More readily quantifiable

Effort Sharing Regulation (ESR)

- Includes buildings, transport, **agriculture (non-CO₂)**, waste, F-gases, other smaller sectors outside ETS
- Covers almost 60% of **EU greenhouse gas emissions**
- Breaks down the EU target (-30% by 2030) by **Member State** for the non-ETS taking account of GDP per capita and cost efficiency
- Provides for **flexibility** in between MS, between years over the whole commitment period, between ESR and ETS, and between LULUCF and ESR

Land Use, Land-Use Change and Forestry (LULUCF)

- *It includes our use of soils, trees, plants, biomass and timber.*
- *The sector releases and removes CO₂ from the atmosphere.*
- *The opportunity to sequester/remove CO₂ from the atmosphere gives LULUCF a particularly important role in view of the objective from the **Paris Agreement** to reach carbon neutrality by 2050.*



Main features of LULUCF proposal

1. Provides for continuity

- **Stand-alone LULUCF pillar**
- **No-debit rule:** *Accounted emissions from land use are entirely compensated by an equivalent removal of CO₂ from the atmosphere*
- **Defines monitoring, reporting and accounting obligations of Member States (- not individual farmers or foresters)**

2. Proposes a number of innovations

- **Simplifying administration**
- **Aligning accounting rules (AF,CM/GM)**
- **Defining EU-internal process to set national forest management levels**
- **Creating flexibility between the LULUCF and ESR proposals**

Mitigation and Adaptation in Agriculture

- *Reducing agriculture's climate impacts requires a transition towards **resource efficient systems** based on **well managed soils***
- **Organic farming**, along with other types of agro-ecology like conservation agriculture, can contribute to:
 - **Improved nutrient management and nitrogen fixing,**
 - **Enhanced soil carbon management**
 - **Reducing fossil-fuel based pesticide use**
 - **Increasing the resilience of agricultural production to floods and drought**
 - **Leading to a more sustainable food production system**

Mitigation and Adaptation in Agriculture

- **Organic farming**, together with other practices, has been identified as being an important climate measure

	Organic farming	Integrated production	Soil conservation techniques	Extensification of livestock	Extensification of pastures management	Conservation agriculture	Extensive agricultural systems of dryland	Management of wetlands
Andalucia	x	x			x	x		
Aragon	x	x	x	x				
Asturias	x		x	x	x			
Baleares	x	x		x				
Canarias	x	x	x	x				
Cantabria	x		x					
Castille y L.	x		x				x	
Castille y L.	x	x					x	
Catalunya	x	x	x					x
Extremadura	x	x	x					
Galicia	x	x	x	x				
Madrid	x	x				x		
Murcia	x	x	x				x	x
Navarra	x		x					
Pais Basqu	x	x	x			x		
Rioja	x	x	x	x				
Valencia	x	x	x					x

Evolution of the enabling environment

- *EU decision to dedicate at least 20% of its budget to climate related action*
 - Mainstreaming of climate change into all sectors, including CAP and development cooperation,
 - support for **climate compatible agriculture** inside (rural development) and outside the EU (Global Climate Change Alliance)
- *Greening of the CAP*
 - Climate action is one of the three main objectives of the CAP
 - The CAP concerning the period 2014–2020, recognises **organic farmers as 'green by definition'**
- *Horizon 2020 and LIFE-Climate action support innovation and pilot actions*

Conclusions

Proposed EU policy framework

- 1. Is fully in line with Paris Agreement, especially no backsliding on transparency and accountability**
- 2. Provides for continuity, and ensures that additional mitigation actions (i.e. climate smart agriculture) are taken into account**
- 3. Obligations on accounting and compliance is on MS, not individual farmers**
- 4. Sets framework for designing smart incentives for additional mitigation, e.g. through CAP**
- 5. Represents the next step integrating the EU climate policy framework**

Many thanks for your attention

- CLIMA web page, LULUCF Impact Assessment resources

<http://europa.eu/!nM79MW>