



EU climate policies and synergies with the CAP

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Outline

1. *The policy context*
2. *Use of IACS/LPIS data in climate policies*
3. *Climate-smart agriculture in the next CAP*

Land and forests in the Paris Agreement



*Mitigation
objective*
*"Achieve a balance
between anthropogenic
emissions by sources and
removals by sinks of
greenhouse gases in the
second half of this
century"*

The EU commitment:

- Include **land use and forestry** into the GHG mitigation framework
- At least **40% emission reductions by 2030** compared to 1990

2030 Climate and Energy Framework

Commission

≤-40 % Greenhouse Gas Emissions

Emission Trading System (ETS)

-43%

Including:
Power/Energy Sector
and Industry,
Aviation

Max
100
MtCO₂eq

Effort Sharing Regulation

-30%

Non-ETS ≤-30%

Including: road transport, buildings, waste, agriculture, Land Use, Land Use Change and Forestry

Full flexibility

Land Use, Land Use Change and Forestry

≤ 0%

"No-Debit"

Max 280
MtCO₂eq

Agriculture and climate policies

The **agriculture sector** has a role to play in all three pillars of EU climate policy:

1. Emission Trading System:

agriculture can produce biomass to **replace the use of fossil-fuel energy and materials** (thus decreasing emissions) in the ETS sectors (energy, manufacturing...) – **Bio-Economy**

2. Effort Sharing:

agriculture contributes to the emission reduction targets in the Effort Sharing sectors by **decreasing methane and nitrous oxide emissions** from use of fertilizers, livestock ...

3. Land Use, Land Use Change and Forestry:

well-managed soils and forests **remove carbon from the atmosphere**; agriculture can also reduce carbon losses caused by land use change (e.g. avoid deforestation).

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Access to LPIS data for environmental purposes

*An Opinion by the Commission Legal Service (June 2017) clarified **privacy concerns**:*

- *LPIS data do not constitute personal data (normally they are not related to an identified or identifiable natural person)*
- *MS are required through the EU legislation to provide the Commission with access to existing LPIS data for environmental purposes*
- *DG AGRI should be allowed by analogy to share the LPIS data with other EU institutions or bodies*

Spatially-explicit data in the LULUCF Regulation

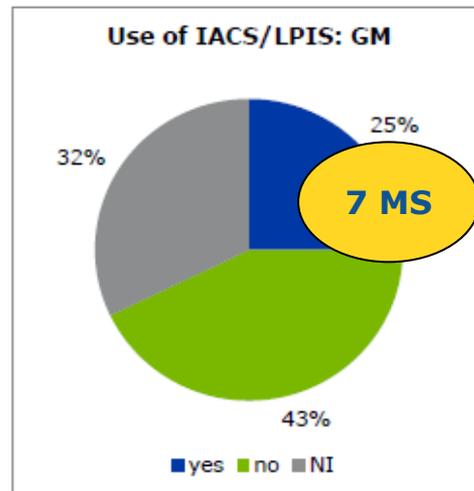
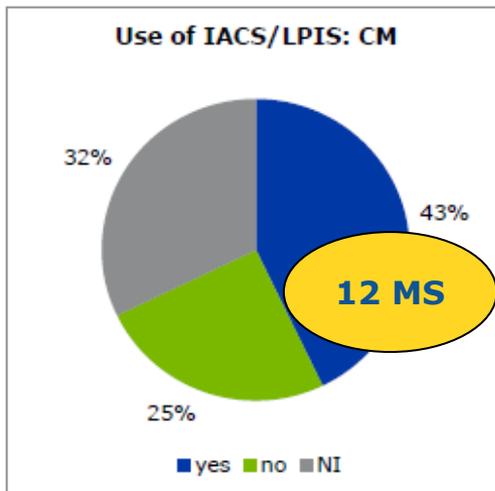
LULUCF Regulation: now in trilogue negotiations (Parliament and Council seek a compromise, assisted by Commission)

➤ ***Not adopted yet!!!***

"To facilitate data collection and methodology improvement, land use should be inventoried and reported using **geographical tracking of each land area**, corresponding to national and Union data collection systems."

"Methodologies for monitoring and reporting [...] -
Approach 3:
Geographically-explicit land-use conversion data
in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories"

Use of LPIS for LULUCF reporting



Analysis of reports submitted in 2016-17 by MS on systems and methodologies to report emissions from cropland management and grazing land management - (art. 3.2 of LULUCF Decision)

- 12 for Cropland Management, 7 for Grazing Land Management
- **16 use it for at least one activity (used to be 8 in 2014!);** several MS plan to include IACS/LPIS data in the future.
- Relevant info used:
 - Determination of cropland and grassland areas and areas of crop types
 - Land Use Change areas between annual / perennial cropland and grassland
 - Share of organic agriculture (areas)
 - Determination of geographical location of areas
 - Distribution of crops/grassland on organic soils

Examples of use for GHG estimates

- **Austria:** use of IACS/LPIS system & historic land information on subsidies to stratify cropland and grassland into different management types; combination with country specific management factors based on long-time agricultural experimental plots or default management factors.
- **Czech Republic:** The current share (2014, 2.2%) of organic agriculture on cropland was derived from the detailed spatially explicit database of LPIS.
- **Luxembourg:** use of the IACS/LPIS system and census data for subsidy payments for cropland management assessment.
- **Belgium, Denmark, Finland and Sweden:** use of country specific models to estimate the soil C stock changes due to changes in CM and/or GM. The cropland and/or grassland are stratified based on various data sources, among them Agricultural Statistics and the IACS/LPIS.

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A result-oriented CAP in support of climate-smart agriculture

- *A result-oriented CAP will require improved knowledge of:*
 - **Mitigation / adaptation potential of agri measures**
 - **Their cost / benefit ratio**
 - **Geo-referenced data on uptake to monitor the performance of the policy**

Climate-smart farming

Mitigation areas	Actions to be monitored (examples)
Reduce emissions from fertilizer use	Precision farming / optimized nutrient management plans; organic farming; uptake of plant breeding programmes.
Reduce emissions from livestock	Optimal feed management; disease management; optimal manure management; anaerobic digesters for certain size of farms; uptake of breeding programmes to enhance health and productivity.
Maintain and enhance carbon sinks	Conservation agriculture (minimal soil disturbance, permanent soil cover and crop rotations); fallow organic soils; agro-forestry; arable land converted to grassland; afforestation; fire prevention measures.
Material substitution	Perennials or short rotation coppice with minimal soil disturbance.
Decrease energy use	Carbon auditing tools; reduction of energy use through improved energy efficiency.

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How to reconcile the need for more data with the need for simplification / lower admin burden?

- Use of remote sensing technologies
- Incentivize disclosure of info by farmers. Examples:
 - Create a new "Climate-Smart Agriculture" voluntary label (targeted at farmers that are front-runners in terms of competitiveness and market orientation)
 - Promote farm-level carbon management tools: example of Ireland / Smart Farming scheme (*"average cost savings of over €8,000 and reduction of climate impact by 10% on participating farms"*)

New study on monitoring Climate-Smart Agriculture

- *Title: "Monitoring tools to improve the traceability of climate action in the European farming sector"*
- *Objectives:*
 1. identify currently available and future data sets useful for monitoring climate-smart agriculture in Europe
 2. building a demonstrator using a Geographical Information System (GIS) and location-based techniques
 3. propose a design for a climate-smart agriculture label
- *To be kicked-off in the next weeks*

References

- "Evaluation of EU reporting systems for cropland and grazing land management emissions and removals", SPECIFIC CONTRACT N° 340203/2016/742121/ETU/CLIMA.C.3, Ecofys Netherlands B.V. and Environment Agency Austria



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