



How CAP Strategic Plans contribute to climate mitigation?

An assessment of interventions proposed by Member States

CDG Animal production – Beef and veal , 8 March 2024

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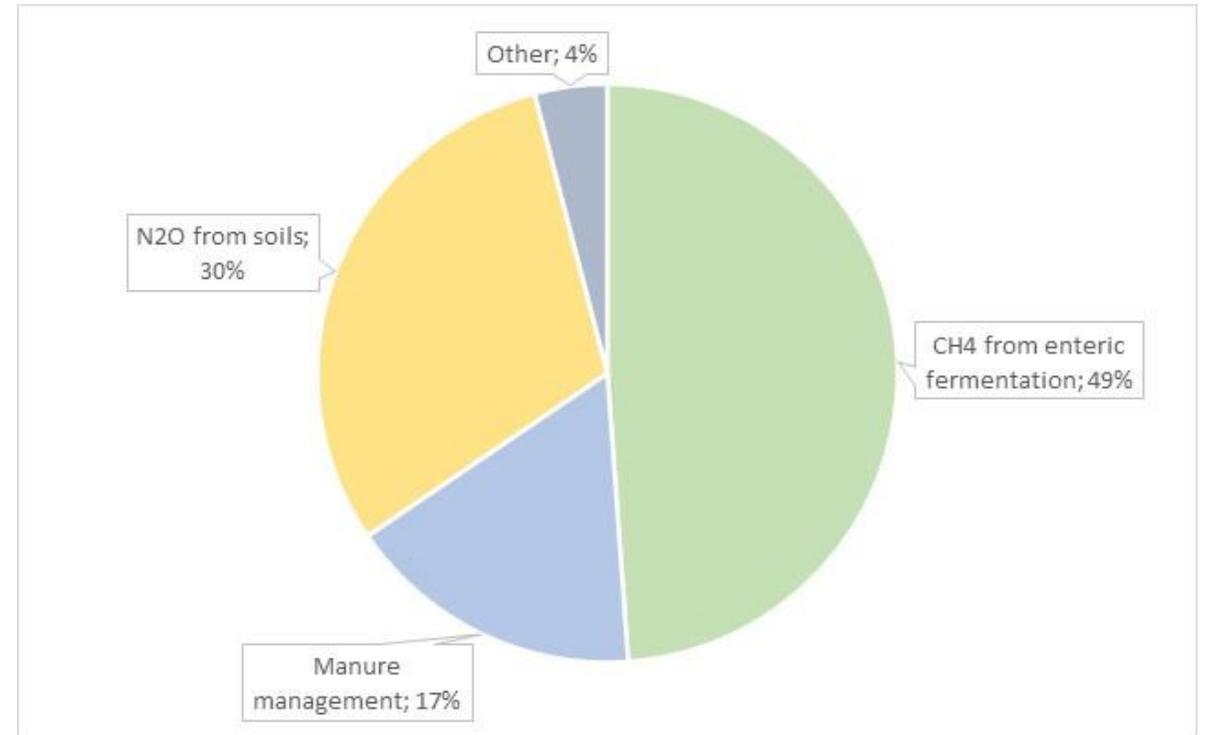
Scope



Screening of CSP on:

- Actions for reducing **non-CO₂ GHG emissions** : methane (CH₄) and nitrous oxide (N₂O)
- **CO₂ removals**
- **Area-based measures and investments**, though relevant actions planned also in sectorial programs

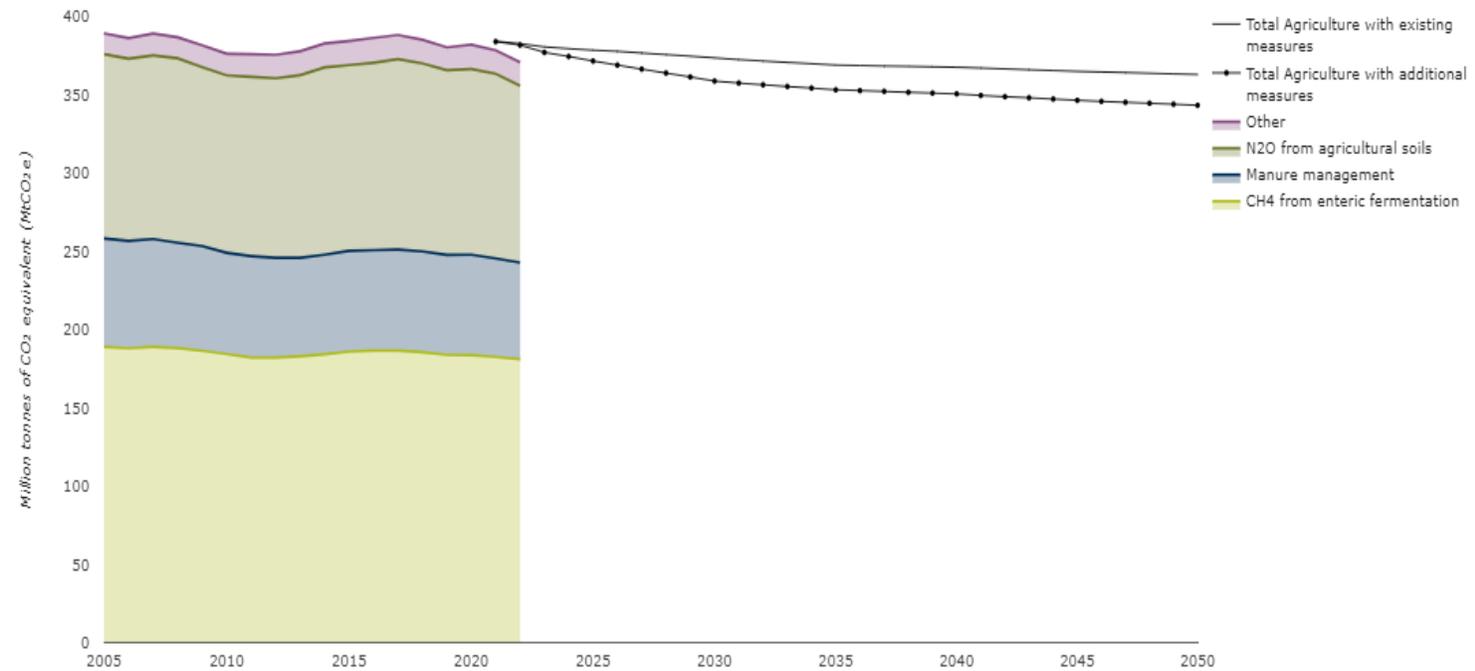
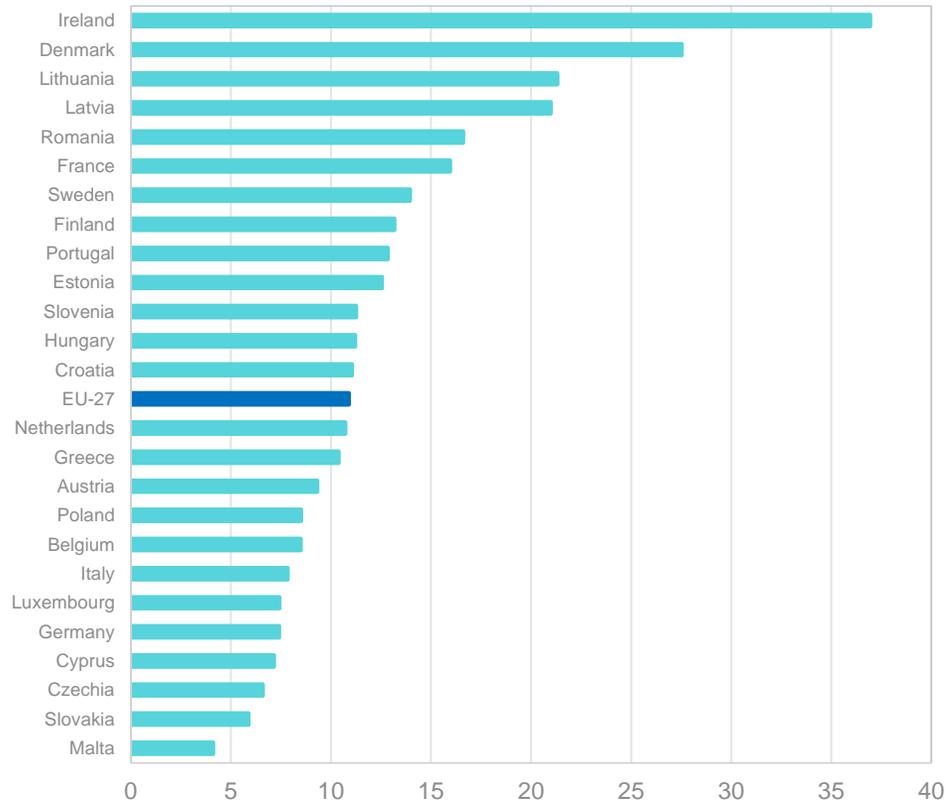
Main sources of agricultural greenhouse gases in 2021



Source: EEA data on GHG emissions from agriculture in Europe, published on 25 Oct 2023

Agricultural GHG per MS and projected trends

% of agricultural emissions over the total per MS (2021)



Source: EEA data on GHG emissions (2021), Total GHG emissions without LUCUCF

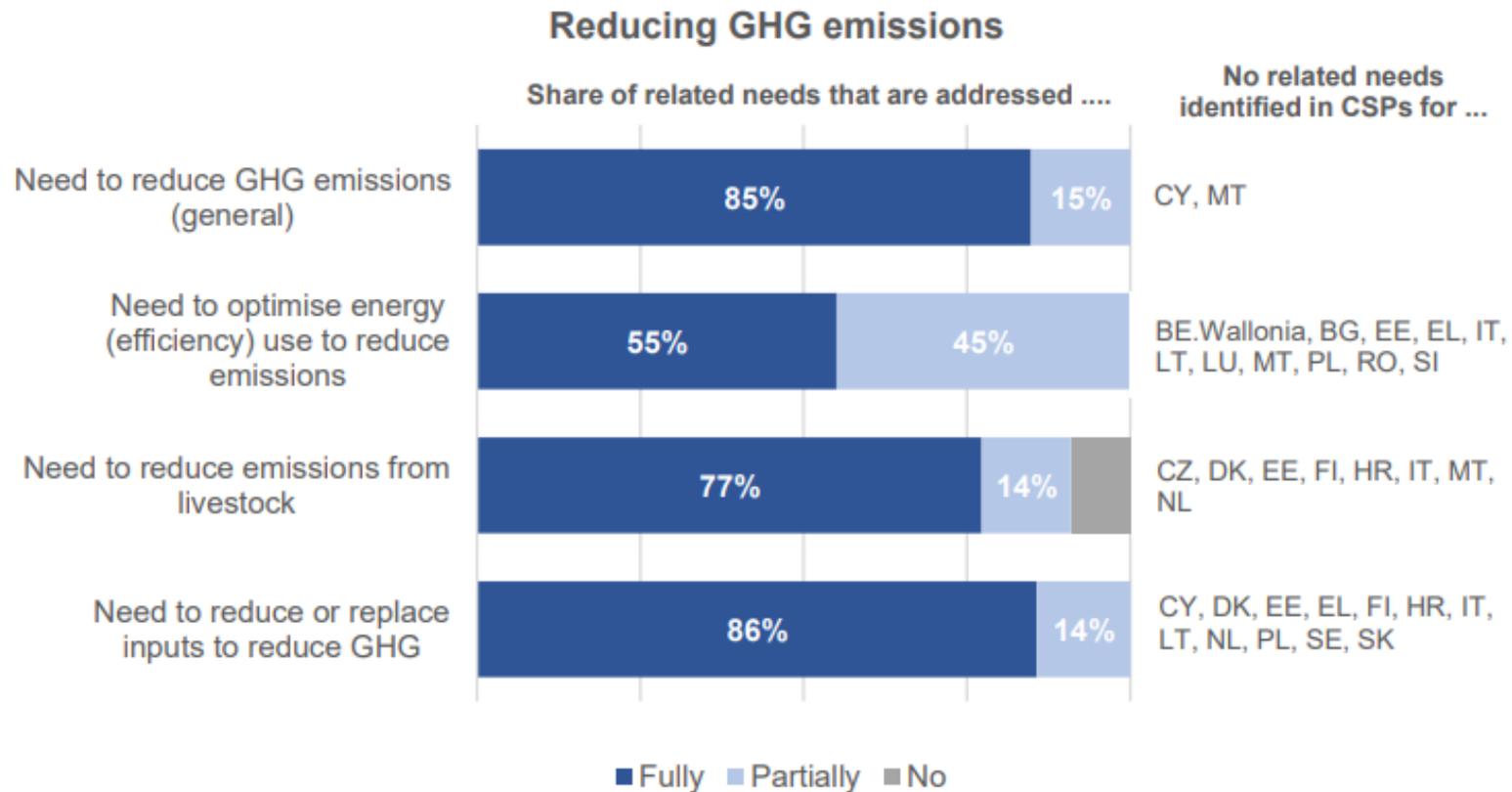
Non-CO2 emissions in CSP: result indicators and targets, relevant interventions

Main findings:

- **Need** to reduce non-CO2 GHG is addressed in all CSP, though to a different extent
- **Challenging** to identify interventions and area concerned by relevant actions; no specific and relevant RI
- Most of support comes from area-based actions on **soil health, nitrogen management** and investments

SO 4 needs – reducing GHG

Figure 252 Percentage share of the identified needs that are fully, partially or not addressed within the CAP, by cluster of needs



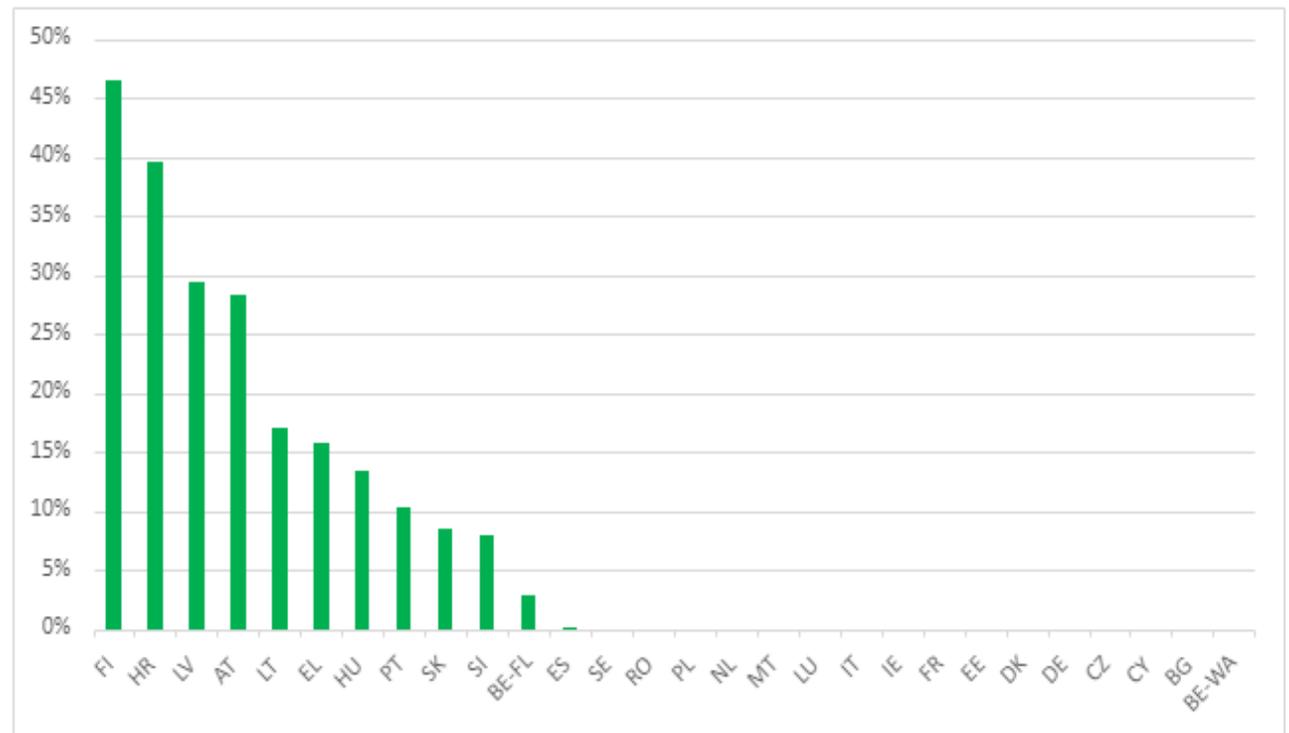
Source: Mapping and analysis of CAP Strategic Plans, assessment of joint efforts for 2023-2027

Result indicators and targets (1)

- **R.13 : share of LU under support to reduce GHG emissions from livestock**

- 2,7 million LU (2,4%)
- 8 eco-schemes in 7 CSP
- 4 ES (BE-FL, EL, PT, SI) support changes in **feeding strategies**
- 1 AECC (SI) on feed additives
- 6 CSP (AT, ES, FI, HR, HU, LV) have linked AECC on **animal welfare** (feeding plans)

National target values for result indicator R.13



Result indicators and targets (2)

- **R.19 Improving and protecting soils**
- Target is to cover **47% UAA** (76,7 million ha)
- 205 interventions planned (eco-schemes and AECC)
- **Reduced inputs** of N fertilisers /reduced nitrogen losses (e.g., SE, SI)
- **No-till or reduced tillage** (e.g., IT, SI, LU, FR, ES, HR, LT, LV)
- **Green cover** of arable land and permanent crops (e.g., AT, EL, ES, FR)
- **Catch crops** and green manure (e.g., CZ, FI, LU, SI, LT)
- **Leguminous** crops (e.g., BE-FL, DE, HR, ES, FR, IT)

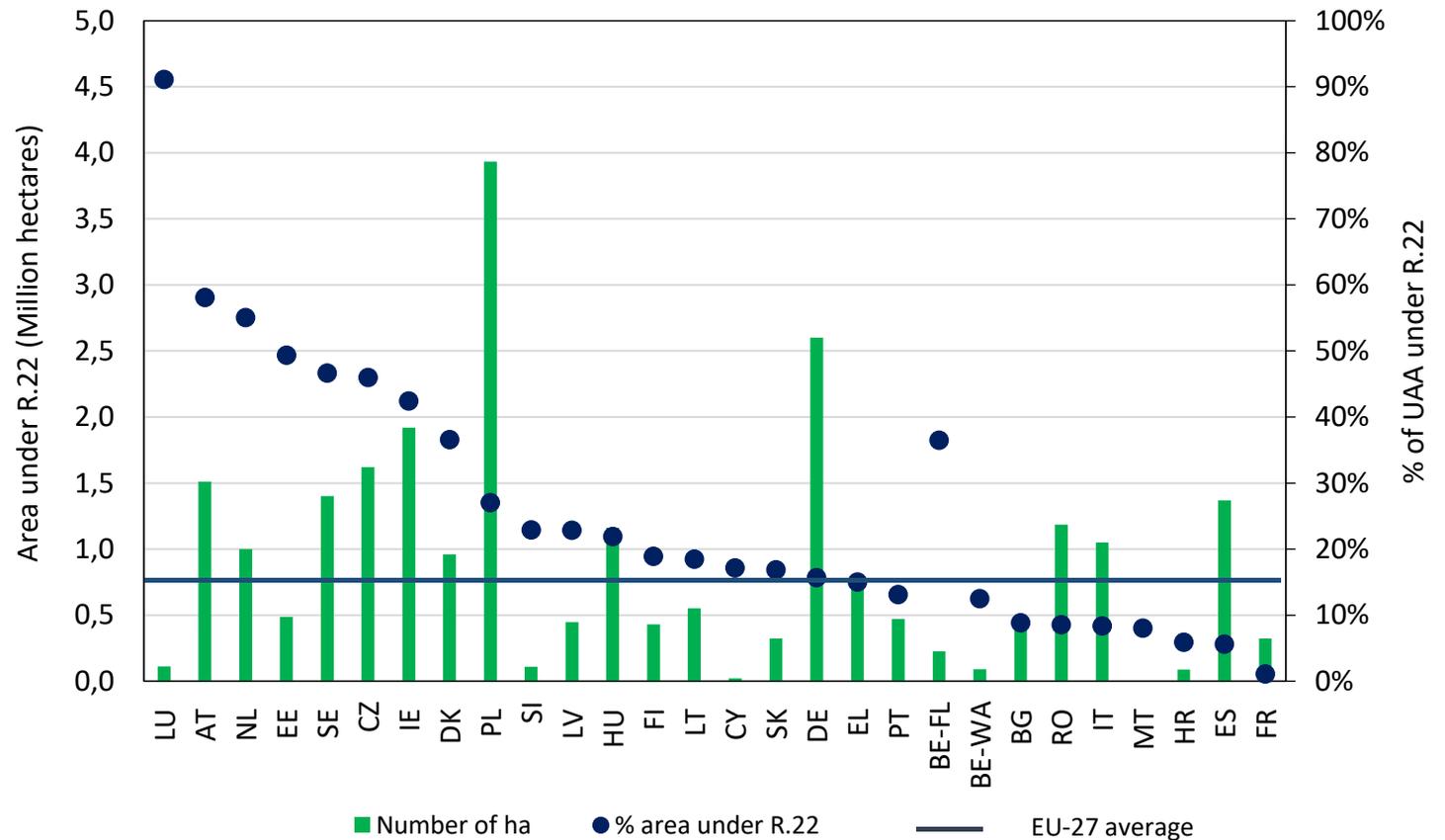


Result indicators and targets (1)

▪ R.22 – Sustainable nutrient management

- **15,2%** of the EU's agricultural area (24,6 million ha)
- National targets ranging from 1% to 90% ; 7 MS set a target over 40% of UAA
- 122 area-based interventions : 58 eco-schemes (sub-schemes) and 64 AECC (national/regional)
- **Wide range** of interventions, with a different degree of targeting to nutrient management

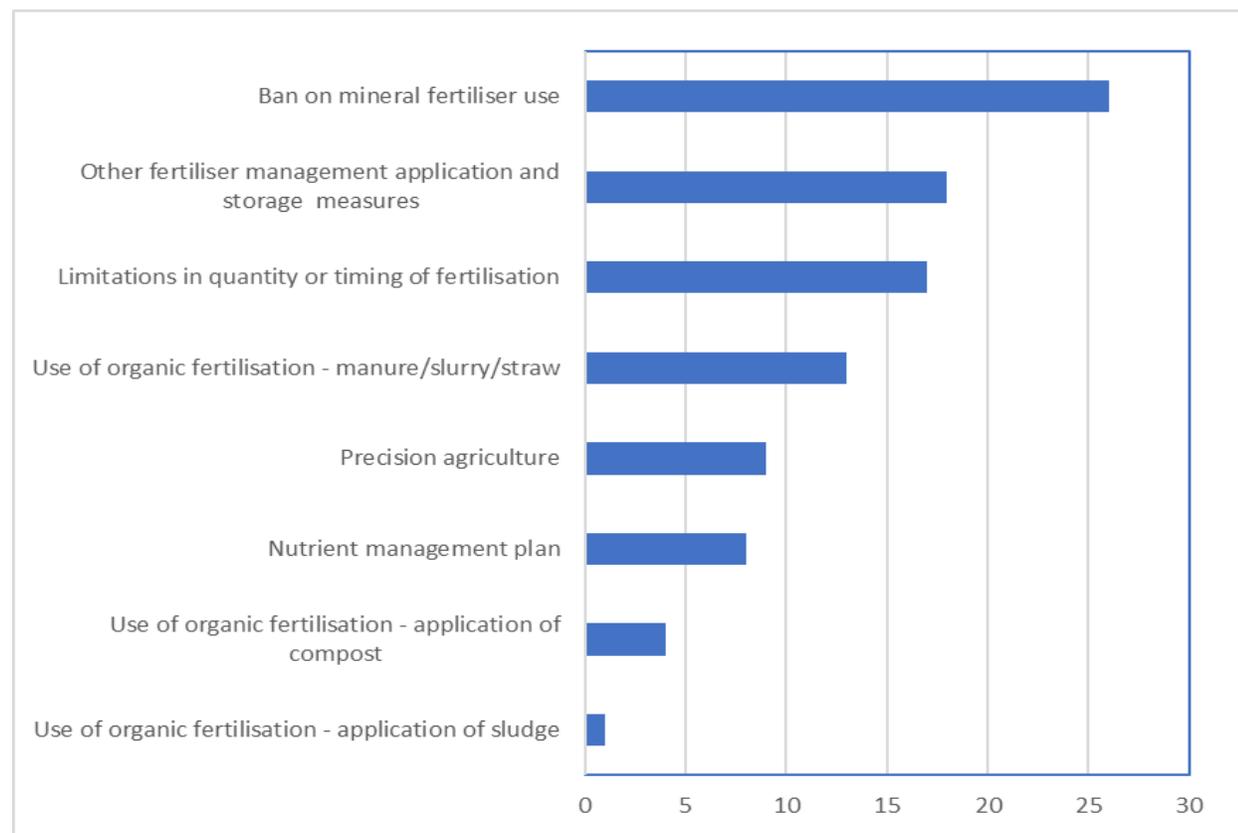
National target values for result indicator R.22



Eco-schemes examples

- **Nearly all CSP** with one/more schemes including relevant commitments
- **Ban of mineral fertilisers** (mainly **grasslands**, catch crops, crops for biodiversity) (14 CSP)
- **Manure/slurry application techniques** (11 CSP)
- **Adaptation of the timing/quantities of N applied** (arable crops) (13 CSP)
- **Organic fertilisation** (mainly manure/slurry) (14 CSP)
- **Precision agriculture** (7 CSP)
- **Nutrient management plans** (8 CSP)

Number of practices under eco-schemes with relevance to nutrient management



Support to leguminous/protein crops

- **Key action** for reducing N applications and N₂O emissions
- Contribute positively to the overall environmental footprint of agriculture and livestock
- **24 CSP with at least one intervention** targeting protein/leguminous crops
- **31 Coupled Income Support (CIS)** in 20 CSPs
- About **33 eco-schemes** (sub-schemes) in 20 CSP covering targeted support to N fixing crops / legumes or supporting crop rotation/diversification including leguminous
- **9 AECC** in 4 CSP
- **EU Report on plant proteins** for a sustainable food system (on-going)

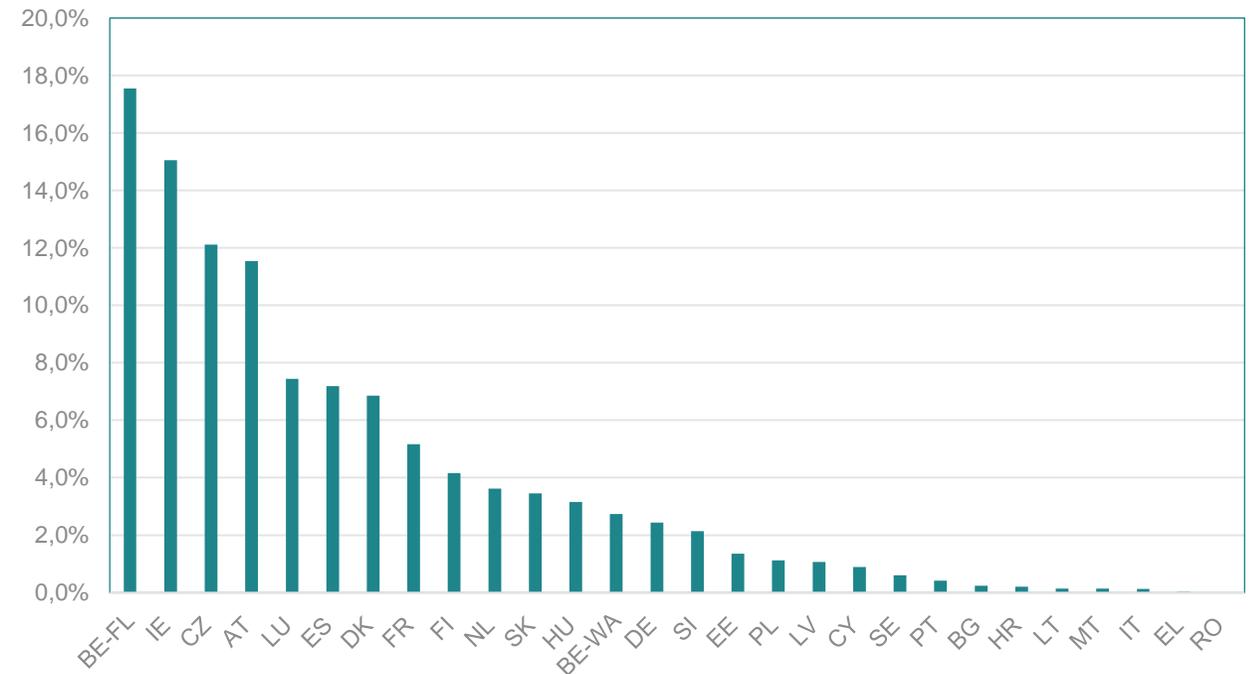


Luzerne, alfalfa

Result indicators and targets (3)

- **R.16 Investments related to climate, ammonia, renewable energy**
 - 176.000 farms (1,8%)
 - 69 RD interventions and 50 sectoral interventions
 - Manure and slurry storage (BG, CY, HU)
 - Manure treatment/processing to reduce methane and circular approaches to manure management (CZ, FI, HU, ES, FR, PT)
 - Precision and low-emission technologies (IE, NL, PL, PT)
 - Biogas facilities, including manure (EE, EL, FI, HU, LV, SI)
- **R.26 Investments natural resources**

National target values for result indicator R.16



Carbon storage and removals

- Result indicators
- Relevant interventions

Result indicators and targets

- **R.14 Carbon storage in soils and biomass**

- 35% of the EU agricultural area (56,8 million hectares)
- Wide-range of practices

- **R.17 Afforested land**

- Nearly 623 000 hectares planned to be afforested with CAP support

Figure 1: target value for result indicator R.14 Carbon storage in soils and biomass

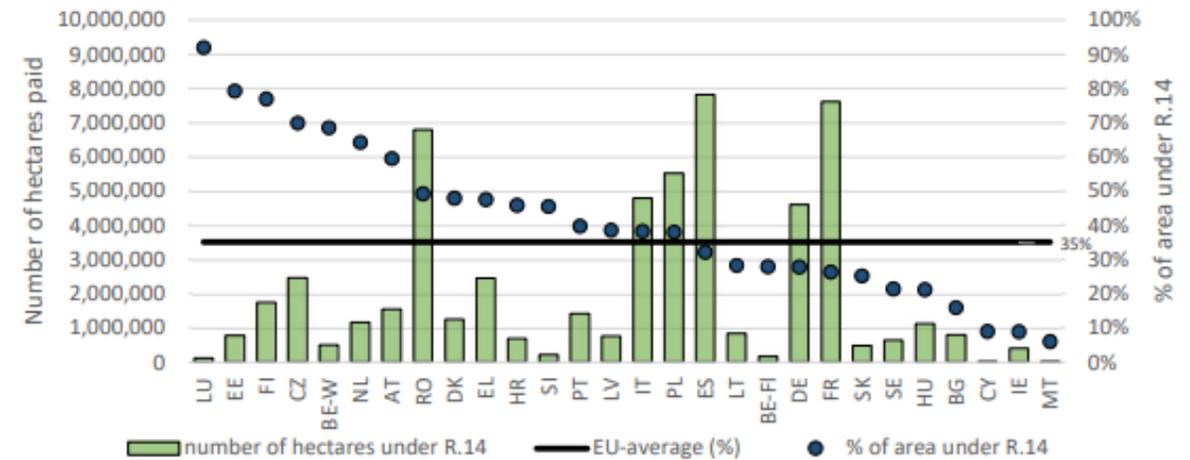
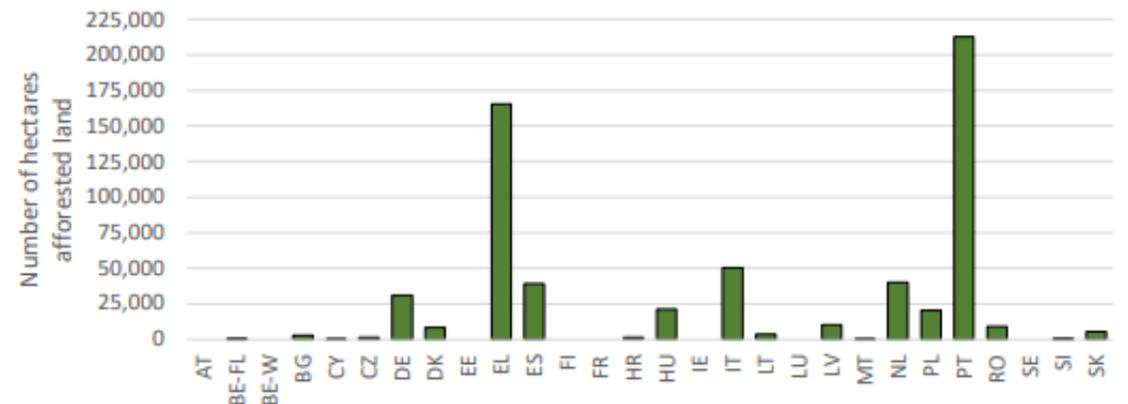


Figure 2: target value for result indicator R.17 Afforested land

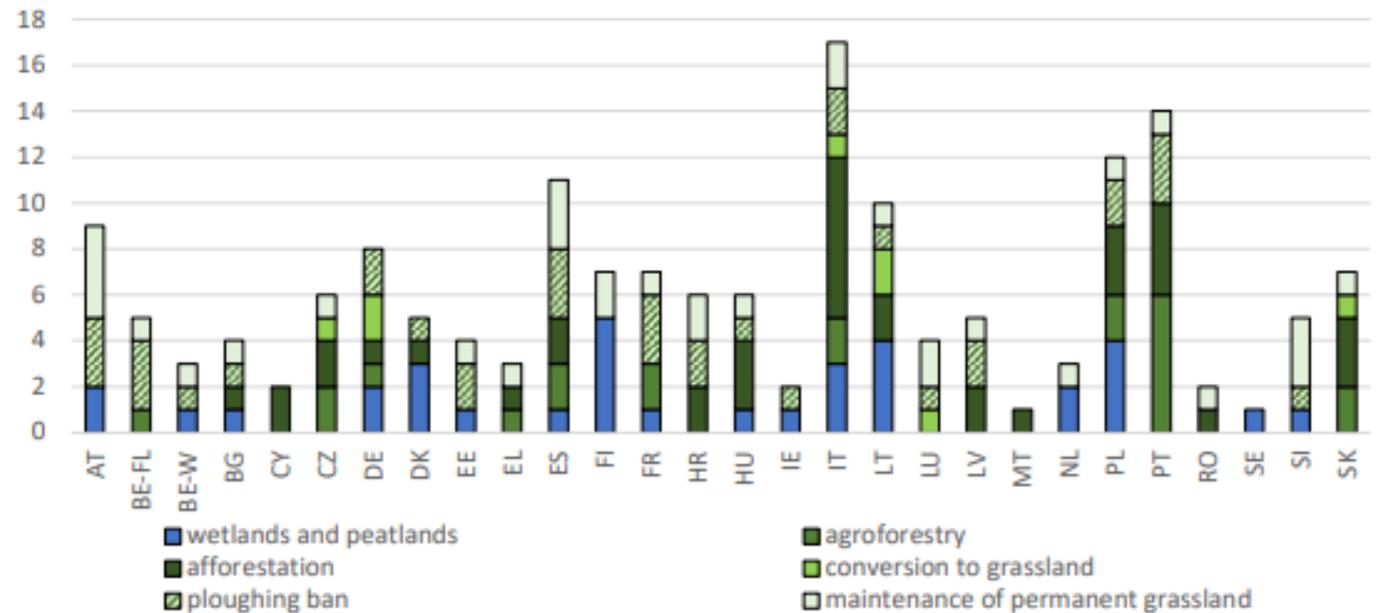


Relevant interventions

Relevant **actions** for carbon storage and removals:

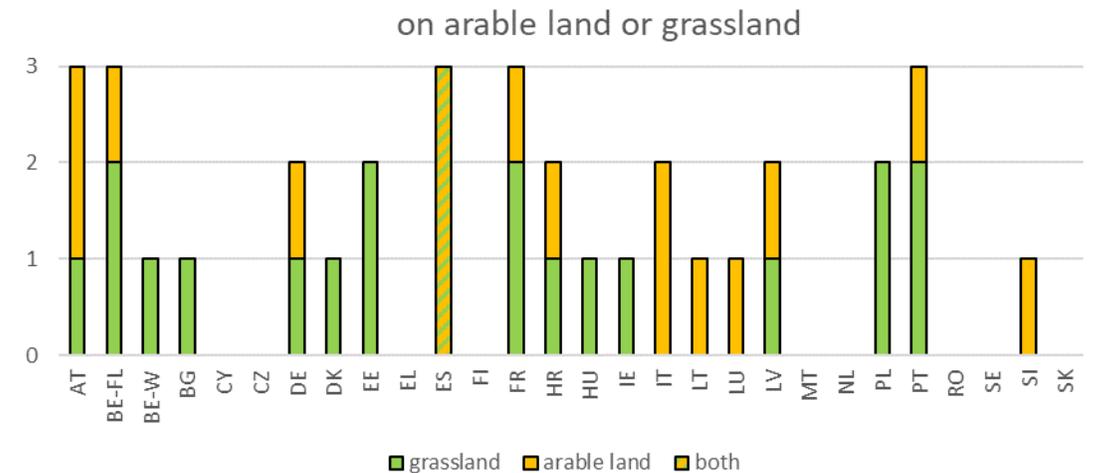
- Restoration/rewetting of **peatlands** and wetlands
- **Agroforestry**
- **Afforestation** and reforestation
- **Conversion** of arable land to grasslands
- **Ploughing ban** on grassland and arable land

Figure 3: Number of interventions programmed per carbon practice by Member State



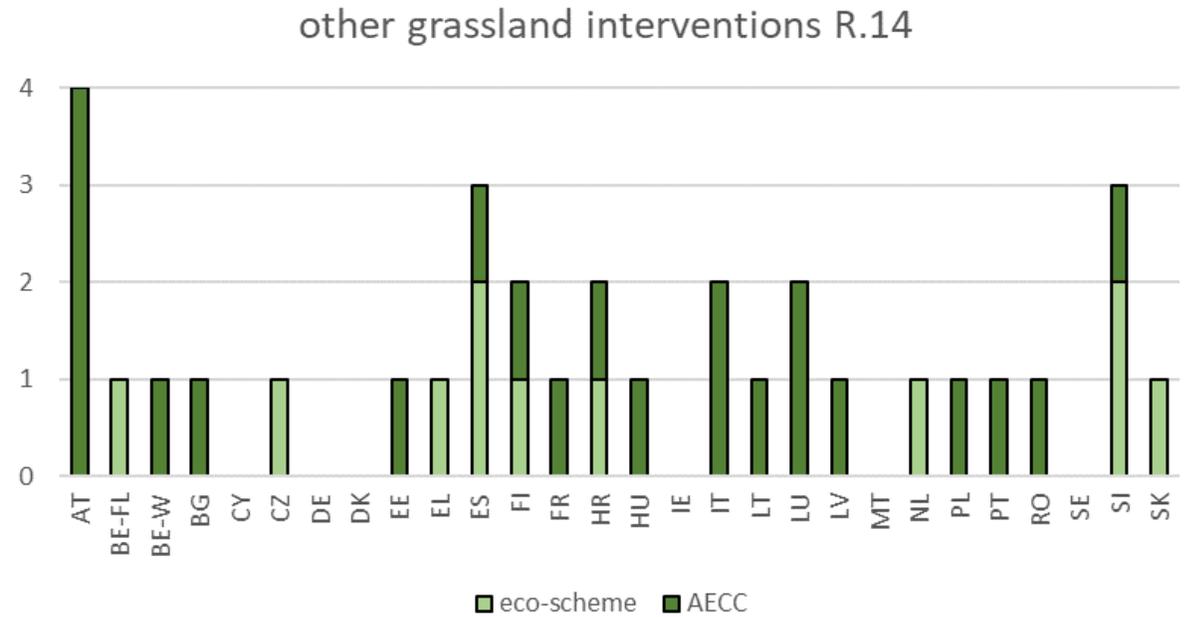
Ploughing ban on grassland and/or arable land

- **Grasslands** constitute a significant part of the EU carbon sink
- 19 CSP planned 35 interventions supporting a **ban** on ploughing:
 - 19 eco-schemes
 - 16 AECC



Maintenance of permanent grassland

- 22 CSPs planned 33 interventions
- 11 eco-schemes and 22 AECC
- Mowing and grazing commitments, reduced livestock rates
- Main goal is to contribute to nature/biodiversity



Examples of CSP climate mitigation strategies

Examples

Ireland

Comprehensive strategy, quantified mitigation

- **SWOT**: estimation CSP contribution to national mitigation goal
- **CIS** to protein crops
- **ES**: limiting synthetic N, reduction stocking rates
- **AECC** : suckler cow efficiency program, general (low-emissions spreading slurry, low-input GL)
- **INVEST** : equipment precision farming, manure storage, machinery for fertilizer application
- **COOP**: collective AECC

Denmark

Comprehensive strategy, quantified mitigation

- **SWOT**: estimation CSP contribution to national mitigation goal
- **ES** : conversion AL to GL (no synthetic N), catch crops, leguminous
- **AECC**: creation, restoration wetlands
- **NPI**: wetlands restoration (closing drains, raising water levels), calculation of N/ha/y compulsory
- **INVEST**: precision fertilization, plant-based food

Portugal

Support for feed strategies

- **CIS** to protein crops
- **ES** : cattle feed efficiency (feed plans), management pastures, organic fertilisation
- **AECC**: integrated production including balanced fertilisation, ban synthetic N
- **INVEST** : precision and low-emissions equipment

Lithuania

Comprehensive strategy & national actions

- **SWOT**: comprehensive assessment N₂O
- **CIS** to protein crops
- **ES** – conversion AL to GL in peatland areas, integrated production
- **INVEST**: manure
- **National program** on restoring wetlands & peatlands and take out from agricultural production

Examples

Luxembourg

Reducing livestock GHG

- **SWOT**: reducing livestock GHG high priority
- **CIS** to protein crops
- **ES**: N management
- **AECC** : reduce cattle density, convert AL to GL
- **INVEST** : manure storage, covers, animal buildings efficiency (and animal welfare)
- **National** measures

France

Focus on protein crops strategy

- **SWOT**: focus on protein crops to replace synthetic fertilisers
- **ES** : crop diversification scoring (high score for protein crops)
- **AECC**: fertilization management
- **INVEST**: for increasing feed autonomy of livestock farms, use of on-farm feed resources
- **National plan** on proteins for feed/food

BE-FL

Reducing livestock GHG

- **SWOT**: reducing livestock GHG high priority
- **ES**: adaptation cattle feed management (methane)
- **AECC** : conversion of temporary pastures to GL
- **Regional plan** on « Enteric fermentation cattle 2019-2030)

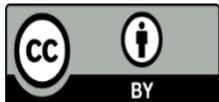
Outlook

- Need to **improve indicators** to better reflect CSP contribution to mitigation
- Evaluation network : study on **quantification** of CSP contribution to GHG mitigation (emissions and carbon removals)
- Role of **couple income support** to livestock ruminants (70% of overall CIS funding) – contributes to socio-economic objectives and do not hinder climate objectives particularly in those MS that added environmental conditions to CIS
- Future CAP: room for improvement policy design to improve **consistency** CIS with mitigation objectives



More information

- [Ares\(2023\)7234239 – Internal Brief on CSP and non-CO2 GHG \(AGRI. B2\) and internal brief on nutrient management](#)
- [Ares\(2023\)4983311 – Internal brief on carbon storage and removals](#)
- [Ares\(2023\)8839065 – Internal Brief on CSP support to protein / leguminous crops](#)
- Mapping study - [Mapping and analysis of CAP strategic plans - Publications Office of the EU \(europa.eu\)](#)



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