

Overview of Policy Instruments in the Agriculture Sector

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Overview

- Effort Sharing Legislation & sectoral GHG emissions
- Agriculture: Sources of Emissions
- Emissions profiles
- Policies and measures
- Mitigation potential
- Measurement, Verification and Reporting

•Effort Sharing Legislation set EU Member State commitments to meet GHG reduction commitments

- Effort Sharing Legislation applied to sectors not in the EU ETS.
 - Transport, buildings, agriculture, non-ETS industry and waste
 - Non-CO₂ agriculture emissions included
 - CO₂ Emissions from LULUCF covered by LULUCF decision
 - ~60% of EU domestic emissions

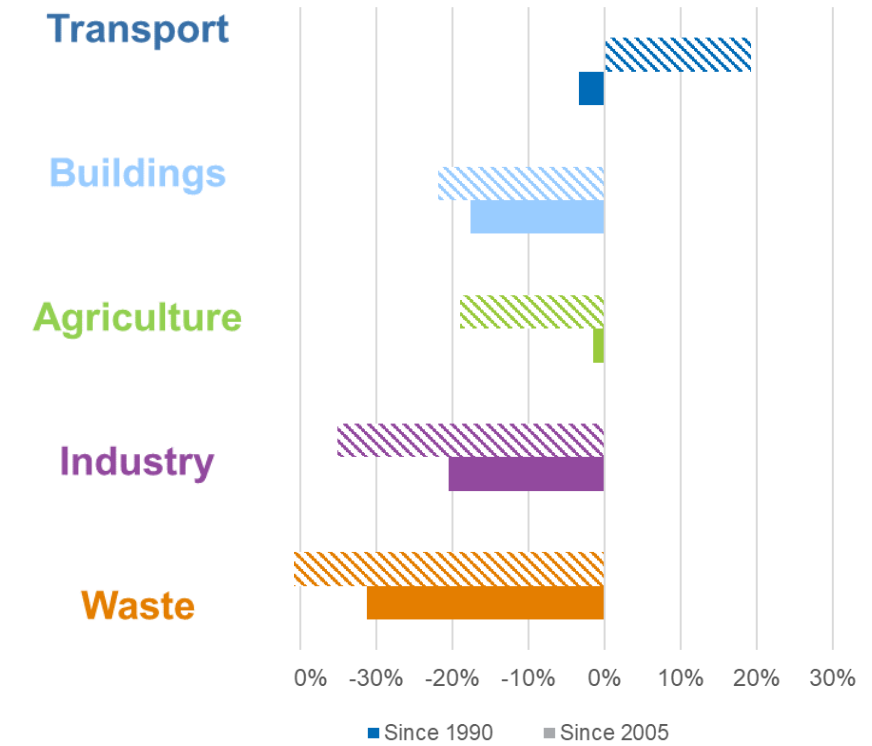
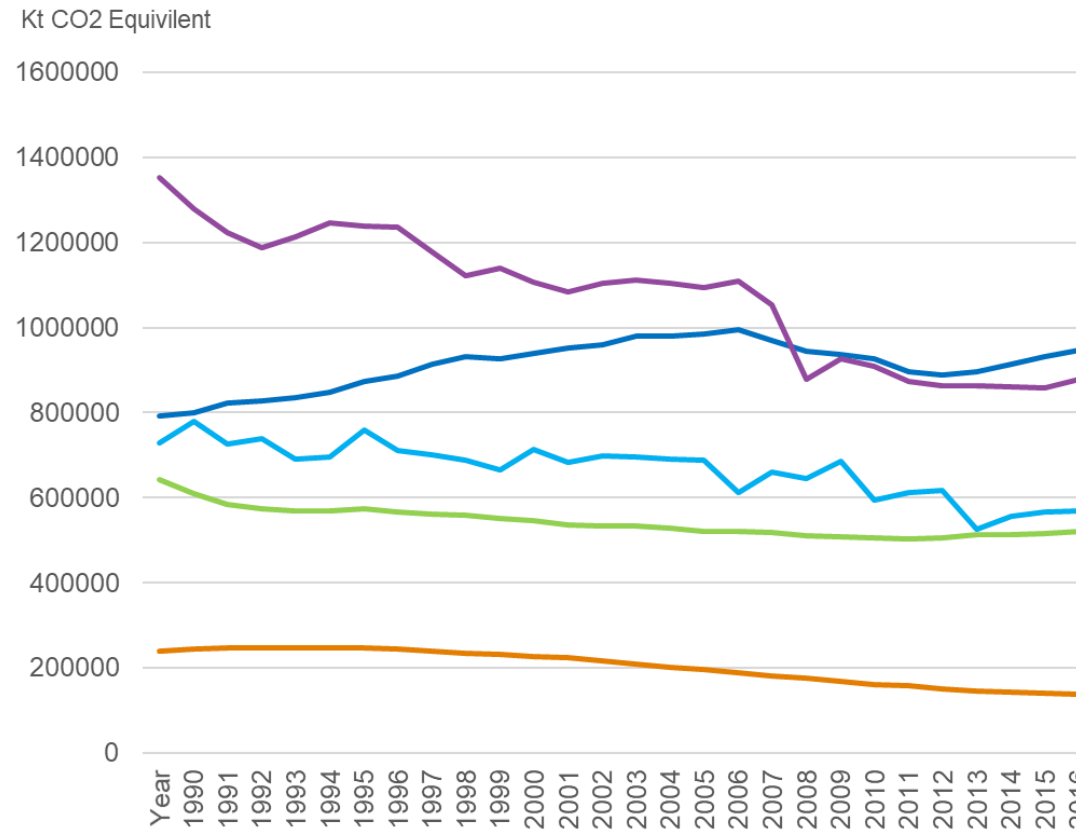
- EU Targets (compared to 2005)
 - Reduce emission by 10% by 2020
 - Reduce Emissions by 30% by 2030

- 2030 emission reduction commitments range from 0 to -40%
 - Based on GDP per capita
 - Combined = EU-wide reduction targets

- Member States are responsible for policies and measures to limit emissions from the sectors.

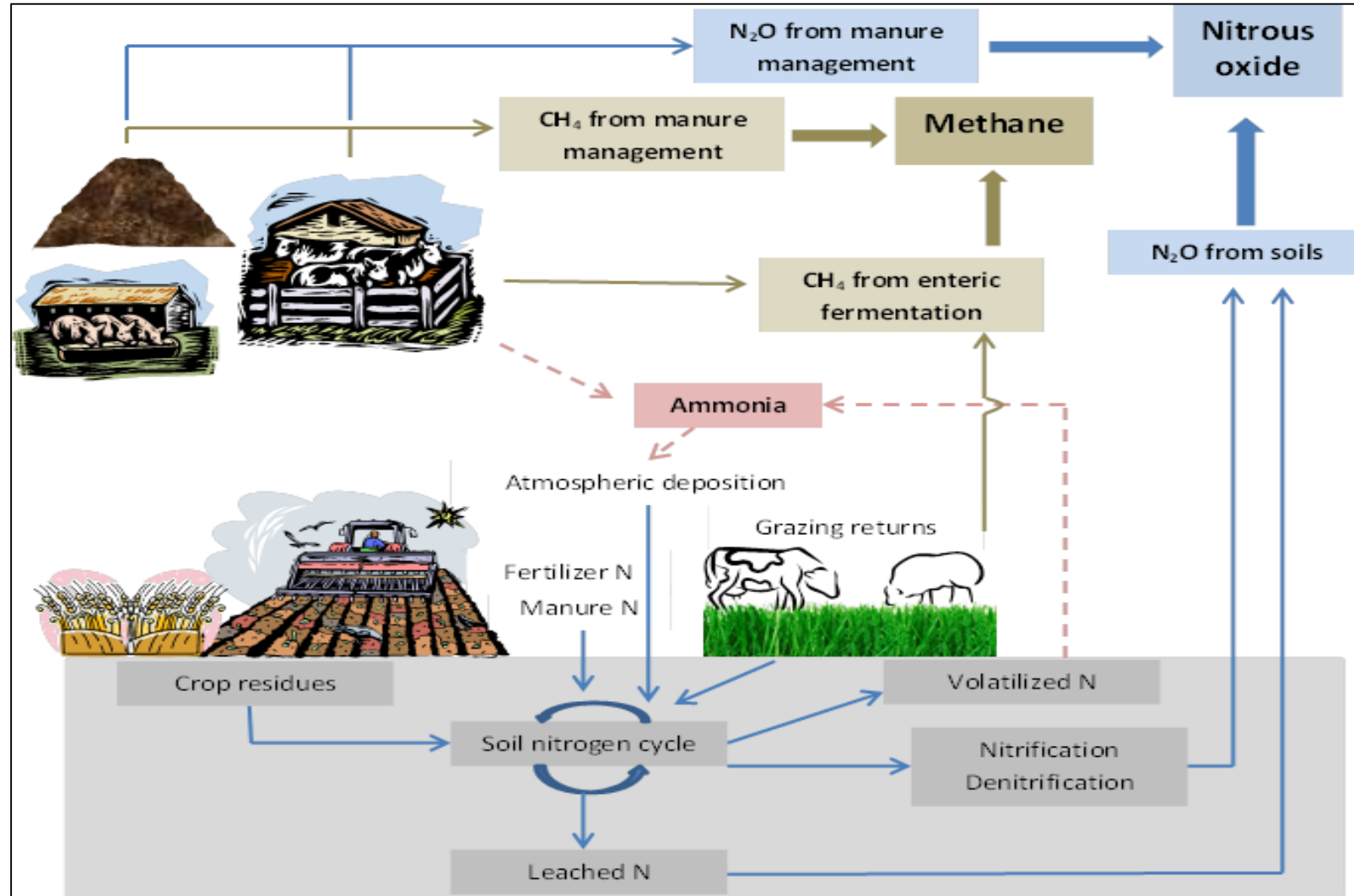


Effort Sharing Sector Emissions 1990 – 2017 (EU27 + UK)



Source: <https://www.eea.europa.eu/data-and-maps/daviz/ghg-emissions-by-aggregated-sector-5#tab-dashboard-02>

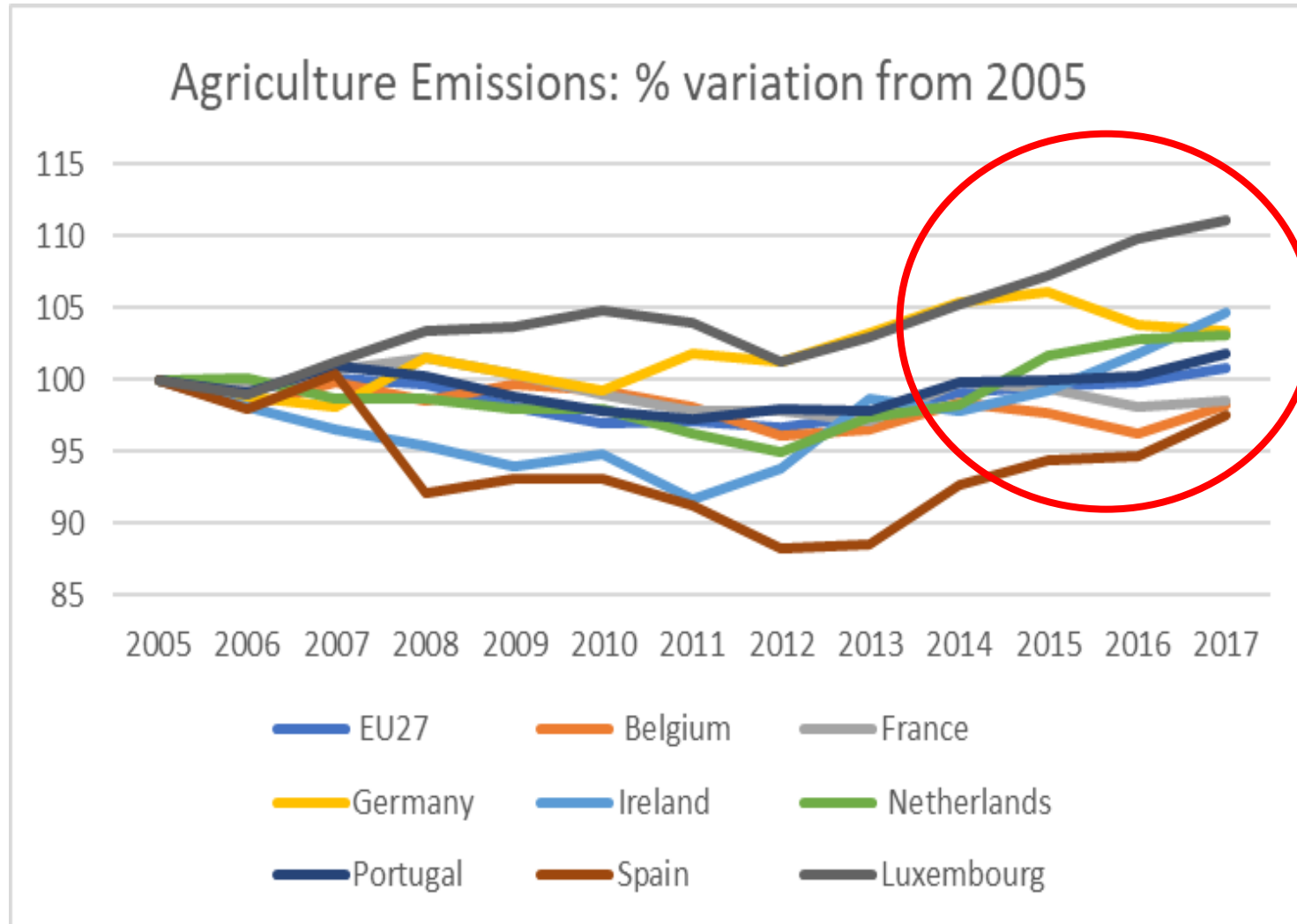
Agriculture Emissions Sources



Emissions Profile

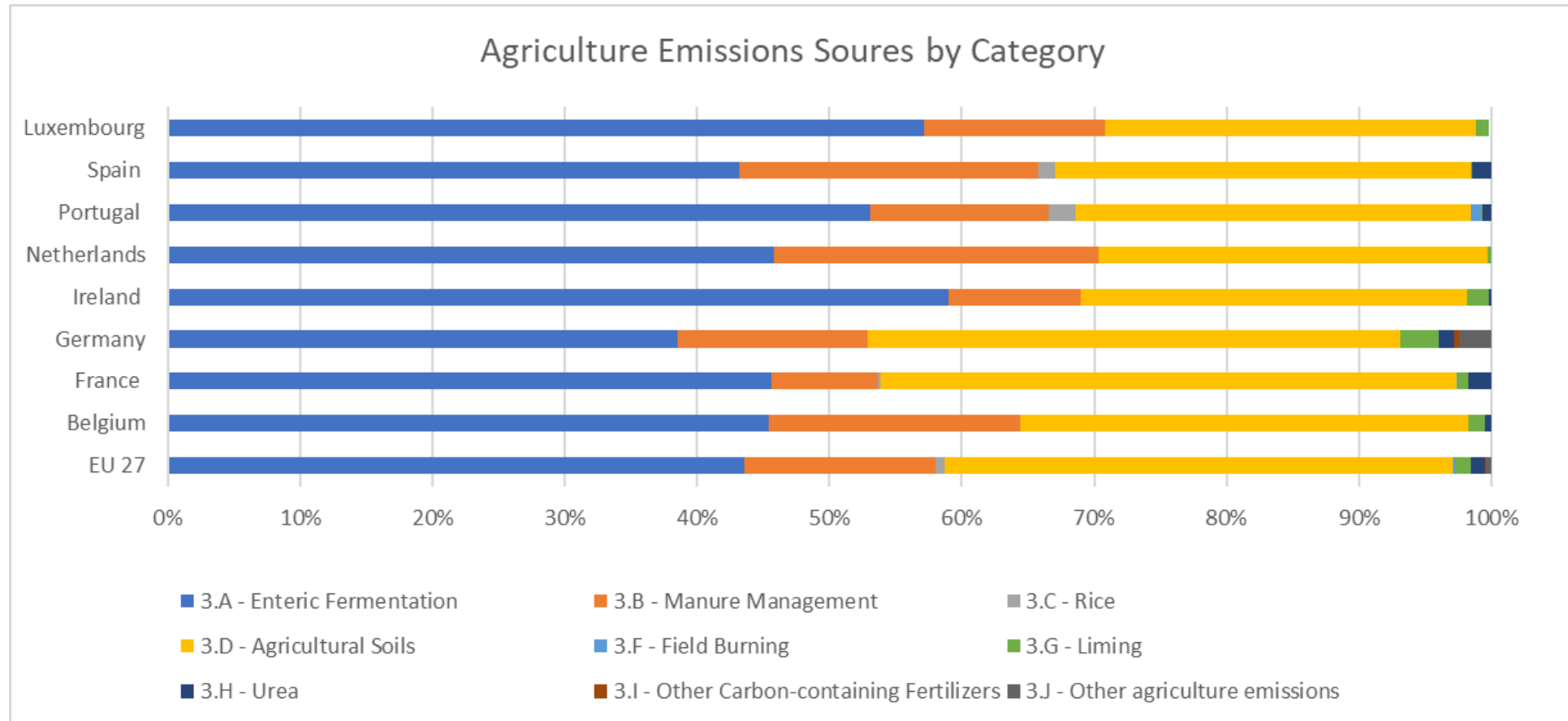
Country	ESR Sector emissions of Total	Agriculture share of total GHG emissions (2017)	Change in Ag Emissions (2005 – 2017)	ESR Target Emissions Reduction (2030)
EU 27	58%	10.3%	+1%	-30%
Belgium	62%	8.8%	-2%	-35%
France	76%	16.4%	-1%	-37%
Germany	51%	7.3%	3%	-38%
Ireland	72%	32.2%	+5%	-30%
Luxembourg	85%	7%	+11%	-40%
Netherlands	53%	9.8%	+3%	-36%
Portugal	57%	9.8%	+2%	-17%
Spain	59%	11.6%	-2%	-26%

Emissions Profile



- Emissions have been static or increasing
- General trend for increases from 2013

Targeting: Emissions Profile



Effective mitigation actions in agriculture

What are the key considerations when reviewing effective policy measures?

- | | |
|--|--|
| <ul style="list-style-type: none">• GHG emissions abatement and removal• Accountability and verifiability• Costs of implementation | <ul style="list-style-type: none">• Technological constraints• Co-benefits and Risks• Socio-economic factors |
|--|--|

Ref. Project: DG CLIMA Effective performance of tools for climate action policy: European Commission

https://ec.europa.eu/clima/sites/clima/files/forests/lulucf/docs/cap_mainstreaming_en.pdf

This project reviewed 23 mitigation actions according to these criteria.

Examples of agriculture mitigation actions shortlisted and reviewed

Group	Agriculture mitigation actions
Livestock Production	<ul style="list-style-type: none"> • Livestock disease management • Use of sexed semen • Breeding lower methane emissions in ruminants • Feed additives for ruminant diets • Optimised feeding strategies for livestock
Nutrient and Soil management	<ul style="list-style-type: none"> • Use of nitrification inhibitors • Improved nitrogen efficiency • Biological N fixation in rotations
Tools	<ul style="list-style-type: none"> • Nutrient management plans • Improved on-farm energy efficiency
Crop Production	<ul style="list-style-type: none"> • Reduced Tillage • Zero Tillage • Leaving crop residues on the soil surface • Ceasing to burn crop residues • Use cover/catch crops



Understanding Mitigation effect: Measurement

Understanding the likely impact mitigation actions on inventories

1. Have a detectable impact on the emissions reported in the inventory and the impact can be specifically attributed to the implementation of the mitigation action:

Measurable and Effective

2. Have an impact on the emissions reported in the inventory but the effect cannot be specifically attributed to the implementation of the mitigation action:

Difficult to measure/variable effectiveness

3. Have implied impact on the emissions shown in the inventory due to improvements in emissions intensity of production :

Effect is dependent on other factors

4. No direct impact on inventories but may have a positive effect on influencing farmer behaviour

No direct effect on the inventory

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