

# Evaluation of greening in direct payments

## Tool for policy evolution

### Commission Staff Working Document

*GREXE 27.11.2018*

*Andreas Lillig, AGRI C.4*

# Content

- Staff Working Document in the evaluation process
- Selection of findings:
  - » Drivers of implementation choices
  - » Changes in farming practices
  - » Effectiveness
  - » Efficiency
  - » Coherence
  - » Relevance
- EU Added value
- Recommendations
- Experience with greening: Towards a new CAP
- Annex for information: Main findings of the evaluation study

# Staff working Document (SWD)

- **Key deliverable** of the evaluation process, presenting the critical judgements and answers to the evaluation questions. It summarises the evaluation and presents in a transparent manner the research, analysis, findings and conclusions/recommendations of the evaluation, **providing input to decision making**.
- **Key document for stakeholders** (they may possibly comment upon).
- **Indirect feedback mechanism** to acknowledge the contributions that stakeholders and experts have made throughout the process.
- SWD on evaluation of greening measures **published** and sent to Council and the EP on **23.11.2018**

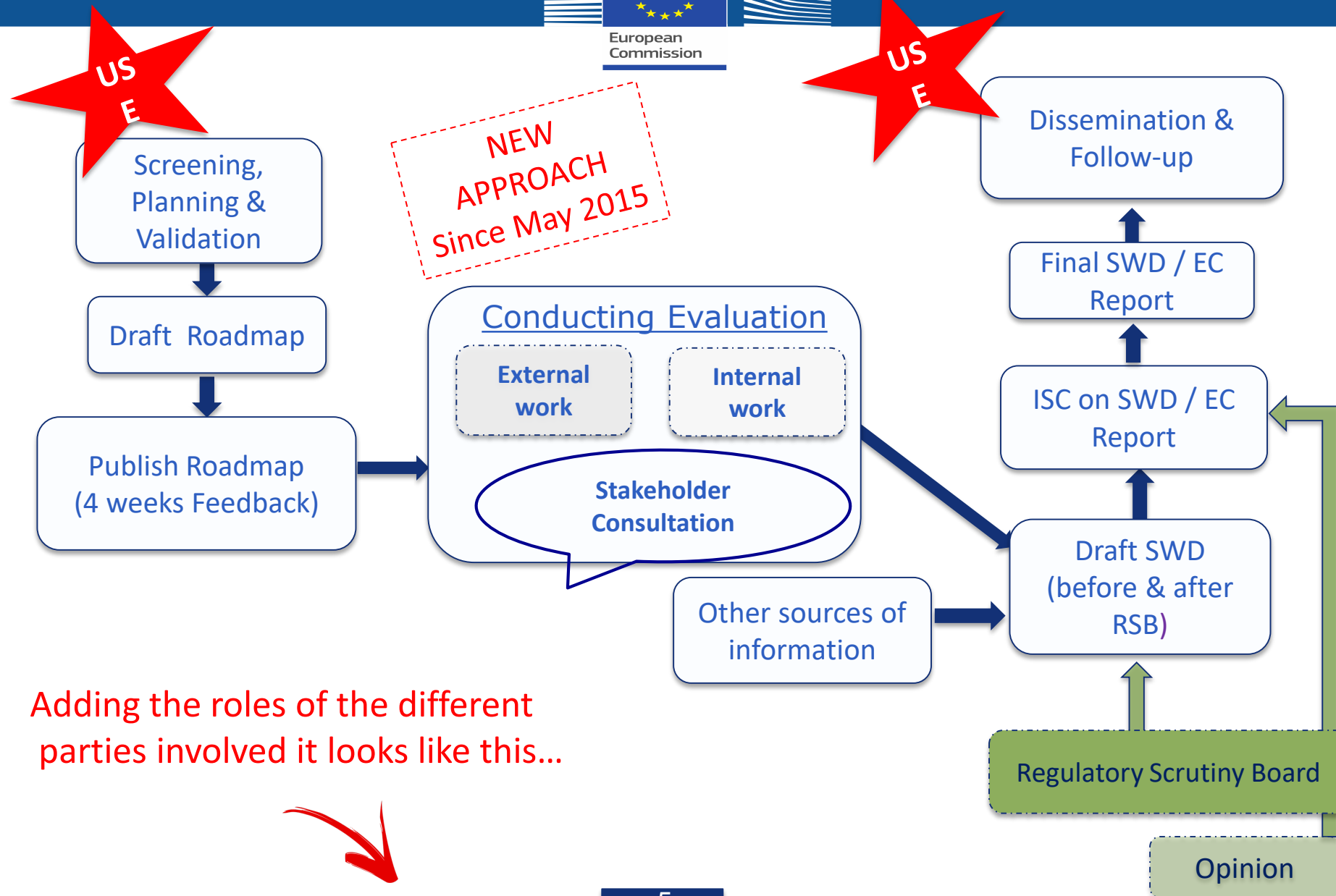
# Staff working Document (SWD)

- **Structure of the evaluation SWD**

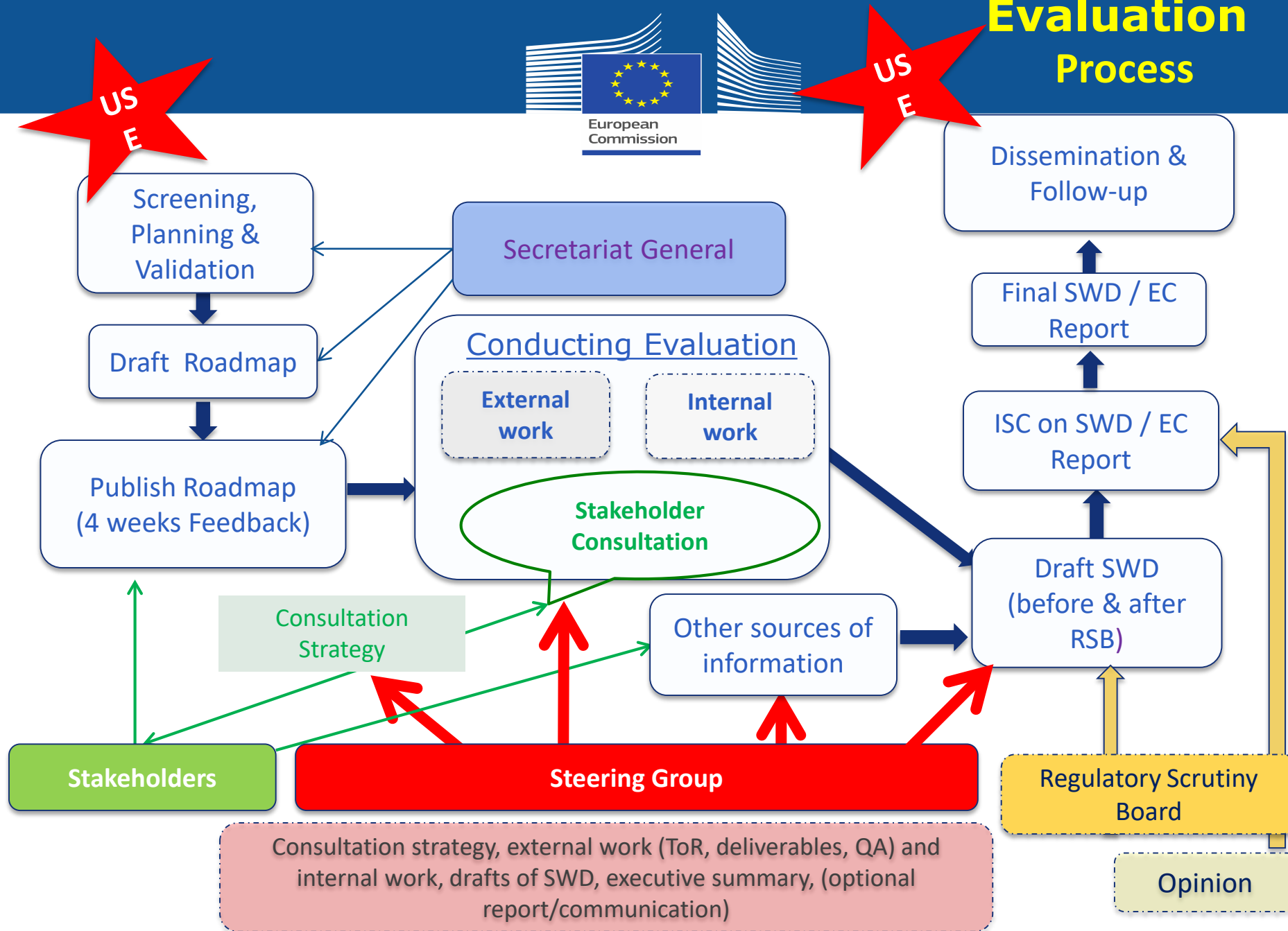
1. Introduction: Purpose and scope (what is covered, what not and why)
2. Background to the initiative: Description, objectives, baseline
3. Evaluation Questions
4. Method: Including limitations – robustness of findings
5. Results: Implementation state of play
6. Answers to the evaluation questions
7. Conclusions
8. Annexes to the final report
  - Annex 1: Procedural information concerning the process to prepare the evaluation or Fitness Check.
  - Annex 2: Stakeholder consultation
  - Annex 3. Methods and Analytical models used in preparing the evaluation/Fitness Check
  - Annex 4: Evaluation Study Questions



# Evaluation Process

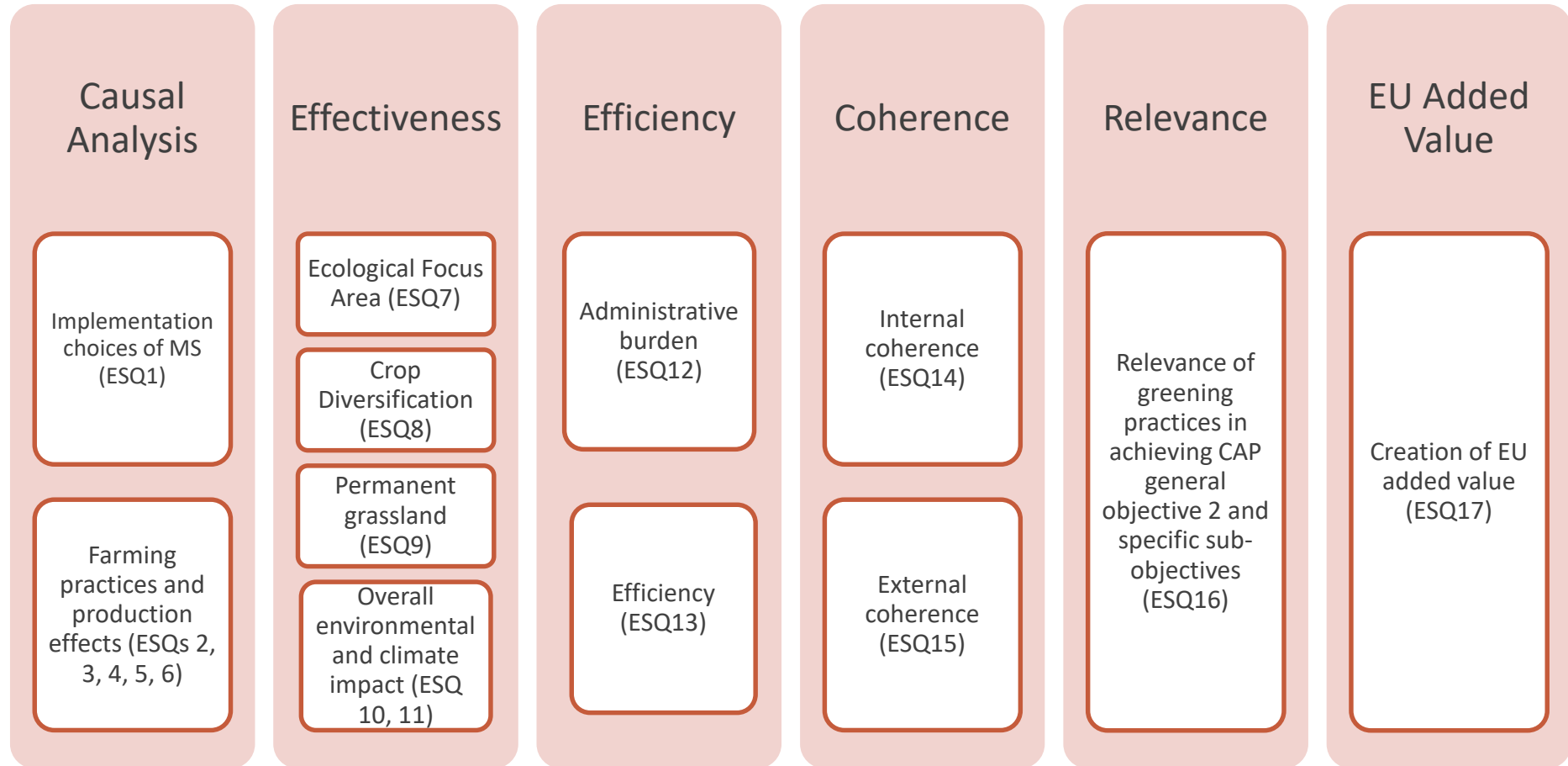


# Evaluation Process



# Scope and objectives

- Evaluation of the implementation of the 3 greening measures and their equivalent practices.
- 17 evaluation questions



# Study: EU Added Value

- Acting at the EU level is compared against the counterfactual situation whereby MSs provide financial incentives to promote a basic level of environmental performance across the countryside 'in the spirit of' the greening measures
- Assessment based on review of:
  - Positions during the negotiating phase of CAP reform;
  - Discussions during the design phase in Member States
  - Final implementation decisions
- The greening measures are considered to provide EU added value through:
  - **Setting a higher level of ambition** than Member States are likely to have done acting alone
  - Strong control system applied equally in all Member States – **increasing likelihood that the ambition will be achieved**
  - Complementarity between different policy mechanisms
  - Legal certainty on the availability of the payment over a period of time;
- There is less evidence that it has delivered EU added value to date in relation to:
  - Greater effectiveness through EU action, mainly due to absence on evidence on actual impact to date – although in theory this should be the case
  - Gains through coordination – limited evidence of knowledge exchange so far between Member States on implementation although this could increase over time.



# Study Recommendations (selection)

## To improve the environmental performance of greening:

- Member States should be required to justify their implementation choices with reference to environmental needs and priorities and report on progress.
- Suitable greening practices for permanent crops should be found.
- The types of EFA permitted and their management rules should be reviewed to ensure they are compatible with delivering environmental outcomes.
- All Annex 1 grassland habitats under agricultural use and requiring strict protection under the Birds and Habitats Directives should be designated as ESPG and the designation of ESPG outside Natura 2000 sites should be increased.

- Greater synergies between the implementation of the greening measures and the agri-environment-climate measure should be encouraged.
- Advisory services are critical – these should not be limited to the administrative and compliance aspects of greening but focus on their purpose and ways of optimising their environmental and climate effects.

## Data improvements are also required:

- Existing IACS and LPIS data should be made publically available to allow changes in land use and features to be tracked over time and enable more detailed evaluation of the effects of CAP measures on the ground.
- A 'greening' component should be added to the Farm Structure Survey

# Experience with greening measures: Towards a new CAP

Some emerging questions:

- Continue with a compulsory one-size-fits-all approach?
  - Targeting to specific (regional) needs ?
- How to increase overall the level of ambitions in terms of environmental achievements?
- Complexity and administrative burden?

# Experience with greening measures: Towards a new CAP

## CAP-proposals: Higher ambition on environmental and climate action

- In addition to ambitious mandatory requirements, farmers will have the possibility to contribute further and receive additional support through various voluntary schemes.
- A minimum 30% of pillar 2 funding will be spent on climate and environment-related measures
- 40% of the CAP's overall budget is expected to contribute to climate action;
- Annual monitoring of progress made
- Suspension of payments in case of serious under-performance
- Financial performance reserve of up to 5% of rural development allocation to reward Member States that meet their climate, environment and biodiversity targets

# Experience with greening measures: Towards a new CAP

## **CAP-proposals: Higher ambition on environmental and climate action**

- Obligation for Member States to reserve part of the direct payments to farmers for those participating in specific eco-schemes (voluntary for farmers)
- Improved synergies with other EU policies (environmental and sectorial) and programmes on climate action and the environment, such as the LIFE programme
- More favourable conditions for knowledge transfer, eco-friendly investments, innovation and cooperation

# Experience with greening measures: Towards a new CAP

## Voluntary for farmers

- Farmers will be rewarded for going beyond mandatory requirements in relation to agri-environment and/or climate commitments undertaken. All direct payments conditional to enhanced environmental and climate requirements.
- Each Member State will develop eco-schemes to support and/or incentivise farmers to observe agricultural practices beneficial for the climate and the environment, beyond their mandatory requirements



# Experience with greening measures: Towards a new CAP

## Mandatory for farmers

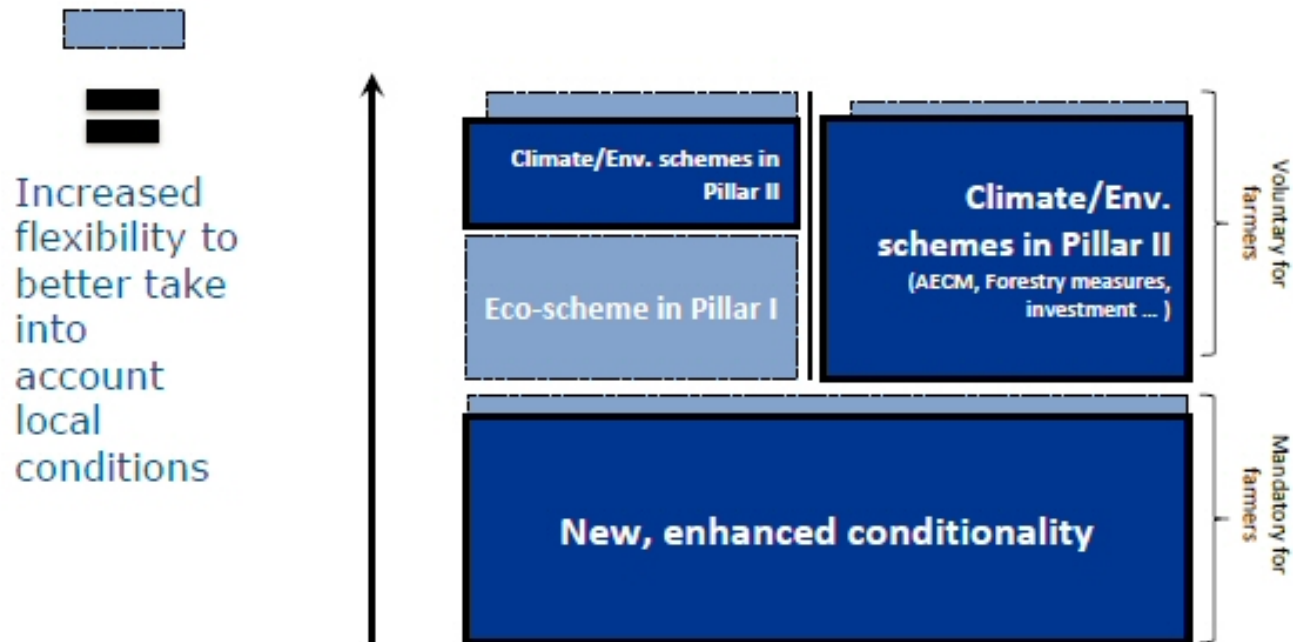
- All direct payments conditional to enhanced environmental and climate requirements. Mandatory requirements further strengthened. Obligation for Member States to reserve part of direct payments to specific eco-schemes
- Improved synergies with other EU policies and programmes on climate action and the environment, such as the LIFE programme
- More favourable conditions for knowledge transfer, eco-friendly investments, innovation and cooperation

## New obligations include

- - preserving carbon-rich soils through protection of wetlands and peatlands
- - obligatory nutrient management tool to improve water quality, reduce ammonia and Nitrous oxide levels
- - crop rotation instead of crop diversification

# Experience with greening measures: Towards a new CAP

## Future green architecture



# Experience with greening measures: Towards a new CAP

- A new 'enhanced conditionality' replaces the current cross-compliance and greening payment requirements. A new eco-scheme is proposed in Pillar 1. And voluntary agri-environment-climate measures (AECMs) would continue in Pillar 2.
- Slide above suggests two alternative architectures:
  1. Member States use some of their Pillar 1 money to fund the eco-scheme, and then offer a more demanding menu of options to farmers who are prepared to opt into a more ambitious AECM (left).
  2. Member States do not offer the eco-scheme and rely solely on voluntary enrollment in an AECM for management practices that go beyond enhanced conditionality.

# NEW ENHANCED CONDITIONALITY

European  
Commission

New elements	<p><b><u>Statutory Management Requirements (SMRs):</u></b></p> <ul style="list-style-type: none"> <li>• <b>Water Framework Directive</b> <ul style="list-style-type: none"> <li>• Articles applicable to farmers</li> <li>• Replaces current GAEC 2 (on irrigation) and GAEC 3 (on protection of ground water against pollution).</li> </ul> </li> <li>• <b>Sustainable Use of Pesticides (SUD) Directive</b> (Articles applicable to farmers)</li> <li>• <b>Animal Health Law</b> (Article 18 on disease notification for three diseases)</li> </ul> <p><b><u>(Good Agricultural and Environmental Conditions (GAECs):</u></b></p> <ul style="list-style-type: none"> <li>• <b>GAEC 2 - Appropriate protection of wetland and peatland</b></li> <li>• <b>GAEC 5 - Use of Farm Sustainability Tool for Nutrients</b></li> </ul>
Elements originating in greening	<p><b><u>GAECs:</u></b></p> <ul style="list-style-type: none"> <li>• <b>GAEC 1 - Maintenance of permanent grassland based on a ratio of permanent grassland in relation to agricultural area</b></li> <li>• <b>GAEC 10 - Ban on converting or ploughing permanent grassland in Natura 2000 sites,</b></li> <li>• <b>GAEC 8 - Crop rotation</b></li> <li>• <b>GAEC 9 - Minimum share of agricultural area devoted to non-productive features or areas complementing current GAEC 7 on retention of landscape features</b></li> </ul>
Reformulated elements	<p><b><u>GAECs:</u></b></p> <ul style="list-style-type: none"> <li>• "Minimum land management reflecting site specific conditions to limit erosion" → <b>GAEC 6 - Tillage management reducing the risk of soil degradation, including slope consideration</b></li> <li>• "Minimum soil cover" → <b>GAEC 7 - No bare soil in most sensitive period(s)</b></li> </ul>
Elements remaining (more or less) the same	<p><b><u>GAECs:</u></b></p> <ul style="list-style-type: none"> <li>• <b>GAEC 3 - Ban on burning arable stubble, except for plant health reasons</b></li> <li>• <b>GAEC 4 - Establishment of buffer strips along water courses</b></li> </ul> <p><b><u>Other SMRs</u></b></p>

# Experience with greening measures: Towards a new CAP

## Eco-schemes (compared to AECMs)

### 1. What can be compensated?

- Eco-schemes: Annual payment per eligible hectare
  - additional to the basic income support (so not link aid level-cost); or
  - compensating for all or part of additional costs incurred/ income foregone as a result of the commitments as set under Article 65 (AECM).
- AECMs: Only be compensated for costs incurred and income foregone resulting from the commitments made (WTO/Green Box language); flat-rate or one- off payment per unit.

### 2. Who can benefit?

- Limited in principle to genuine farmers
- AECMs: “Farmers *and other beneficiaries*”, the latter if commitments beneficial to achieving the AECM-objectives; e.g. environmental trusts.



# Experience with greening measures: Towards a new CAP

## Agri-environment-climate measures (AECM)

- The various agri-environment-climate interventions under the current Rural Development Regulation are merged into a single Article 65 which refers to environmental, climate and other management commitments.
- Eco-schemes can only fund farmers for practices which target the three specific environment and climate objectives out of the nine specific objectives specified for the CAP in Article 6 of the draft Strategic Plan Regulation. Article 65 is considerably broader than the corresponding Articles in the current Rural Development Regulation. It refers to support for environmental, climate and other management commitments, provided they target any one of the nine specific objectives set out in Article 6.

# Experience with greening measures: Towards a new CAP

## **New challenge: PMEF-monitoring CAP-proposals, i.a.:**

- Measurability of performance e.g. as regards biodiversity?
- Development of the PMEF indicators, including on landscape features
- IACS data sharing; ongoing collection of experiences from some MS on IACS data, which are already used for environmental analysis.

## **Continue the analysis of greening measures for the new CAP:**

- An update of the greening evaluation, including GAEC and Farm Advisory System, is foreseen.
- The results of the greening review after one year (e.g. ban of use of plant protection products on EFA, not included in the current evaluation due to the timing of their implementation) could be analysed

# Thank you for your attention

See annex for main findings of the evaluation study

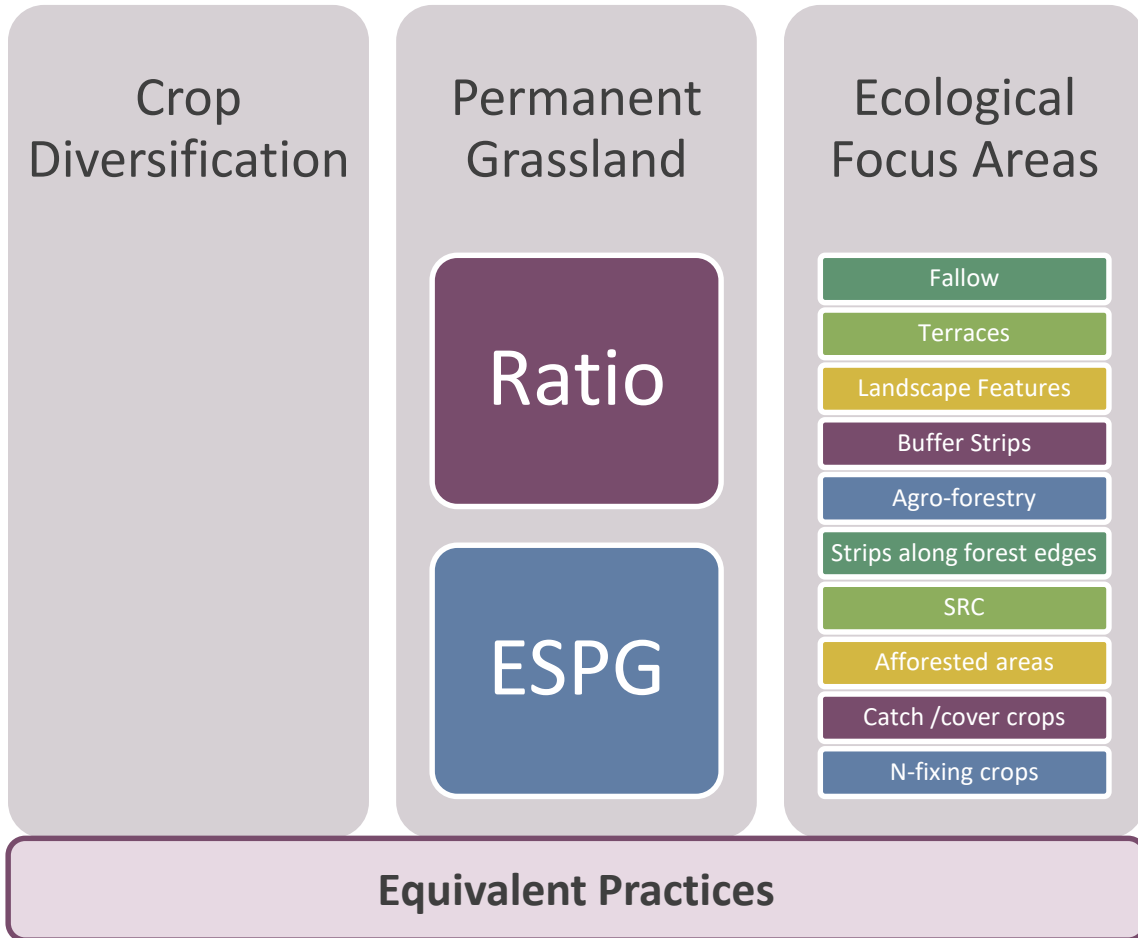
# Annex: Main findings of the evaluation study

- Drivers of implementation choices
- Changings in farming practices
- Effectiveness
- Efficiency
- Coherence
- Relevance
- EU Added value
- Recommendations

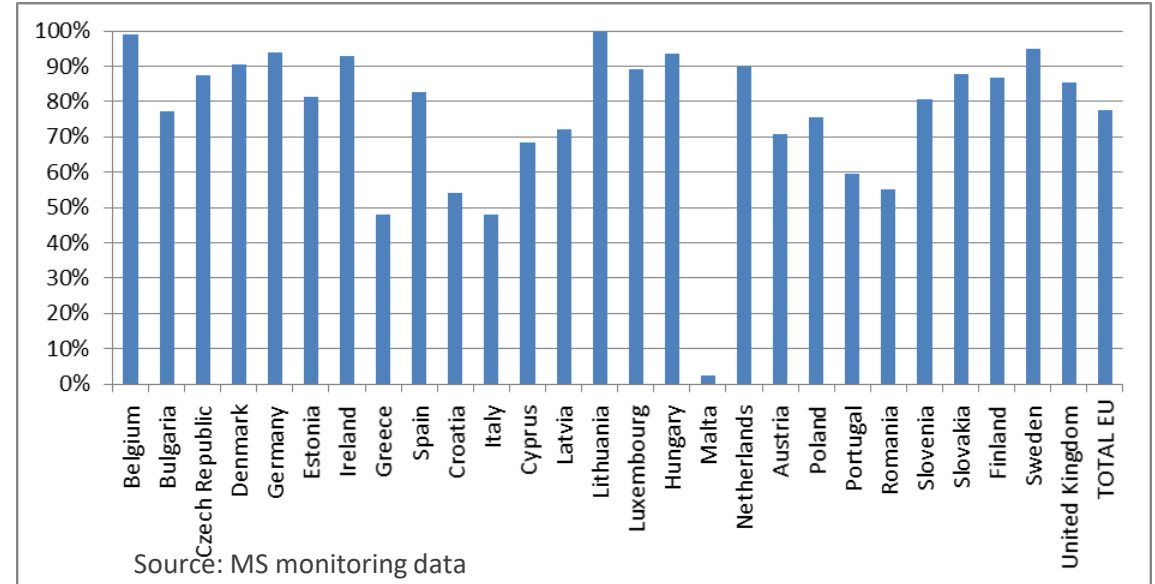
The evaluation study was drawn up by:

Contractor:	Alliance Environnement
Project Manager:	Kaley Hart (IEEP)
Deputy Project manager:	Laurence Menet (Oréade Brèche)

# Facts and figures



Percentage of total agricultural area subject at least to one greening obligation in 2016 (excl France)



- In 2016, of arable UAA:
  - 75% subject to crop diversification
  - 68% subject to EFA



# Drivers of implementation choices

## Member State

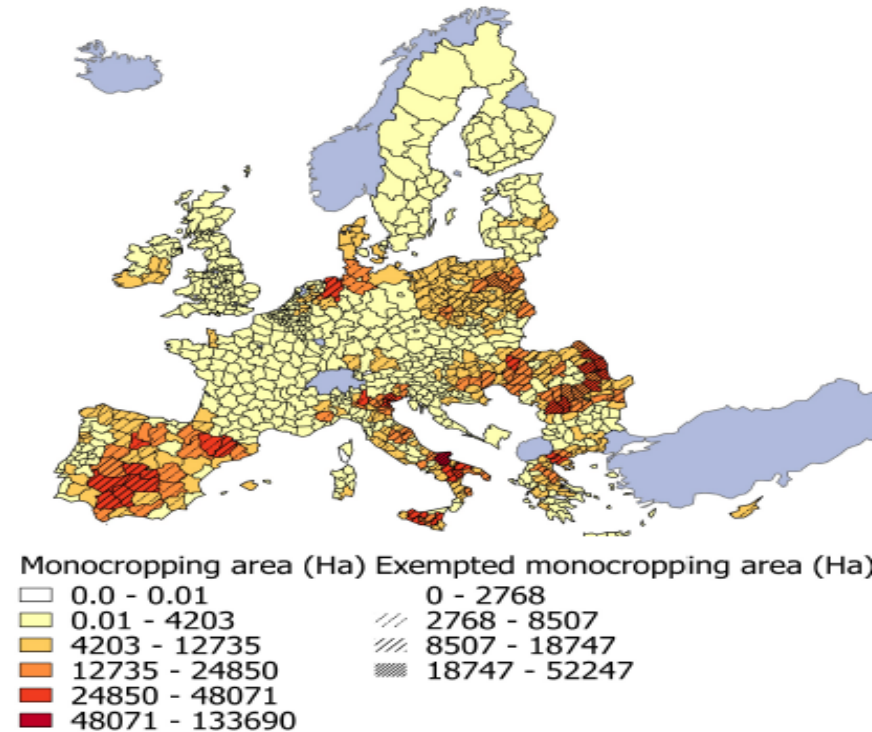
- Main driver = **administrative issues** (administrative burden, simplicity, risks of disallowance)
  - Favoured in-field options
  - Reduced number of eligible landscape features in many MS
- Significant driver = **production and income effects**
  - rationale for some implementation choices (ESPG area designated, eligible EFA types)
- Only a few MS actively considered environmental outcomes (AT, CZ, DE, NL, UK-Sc) – more often a subsidiary consideration
- Equivalent practices and regional/collective action not commonly used – administration complexity viewed as too great in comparison to likely benefits

## Farmer

- **Substantial information and support provision** in all case study Member States except RO, but **mainly covered administrative issues** rather than effects on environment
- Key drivers of farmers choices:
  - **Minimising risk of non-compliance** (especially in the first year) and potential reductions in payments
  - Cost and income
  - **Technical feasibility**, fit with existing farm practices and overall business decisions
  - **Options / requirements under other policies**: mainly VCS, but also cross-compliance, N2000 and Nitrates directives

# Changes in farming practices: crop diversification

- Areas dominated by monocropping:
  - Concentrated in specific regions: mainly ES, IT, RO, PL, DE (NW), FR (SW)
  - Main crops produced: maize and wheat (+ barley and oats)
- Status of farms regarding the crop diversification measure in case study countries (FADN data) in 2014:
  - 19% arable land / 41% of farms met exemption conditions – and more than half in the areas dominated by monocropping
  - 70% arable land / 53% of farms sufficiently diversified
  - Only 11% arable land / 6% of farms not sufficiently diversified
- **Overall changes in cropping patterns on 0.8% of arable land (10 Member States) – 515,000 ha (61% in ES)**
  - Some evidence of more land being put under temporary grass to become exempt
- **Also constrained trend towards greater monocropping**
  - Declining trend in number of crops cultivated has changed direction since 2015
- Some anecdotal evidence of increased crop rotations and that it has led farmers to experiment with new crops



Source: Alliance Environment from FSS data 2010



# Changes in farming practices: permanent grassland ratio

- Similar measure operated prior to 2015 under cross-compliance
- Under greening, ratio must not decline by more than 5% (10% previously)
- **Scale of coverage changed since 2015** due to:
  - changes in the **PG definition and CAP eligibility criteria** - decrease of 3.8 million ha of PG eligible for CAP:
    - Increase in 15 Member States (+1.5 m ha)
    - Decrease in 12 Member States (- 5.3 m ha) (-31% in Spain (-2.19 million ha))
  - a change in the **baseline year**
  - change in the area of PG that contributes to the ratio, due to **exemption of farms under SFS and organic farms 'green by definition'**
  - **areas not claimed by farmers**

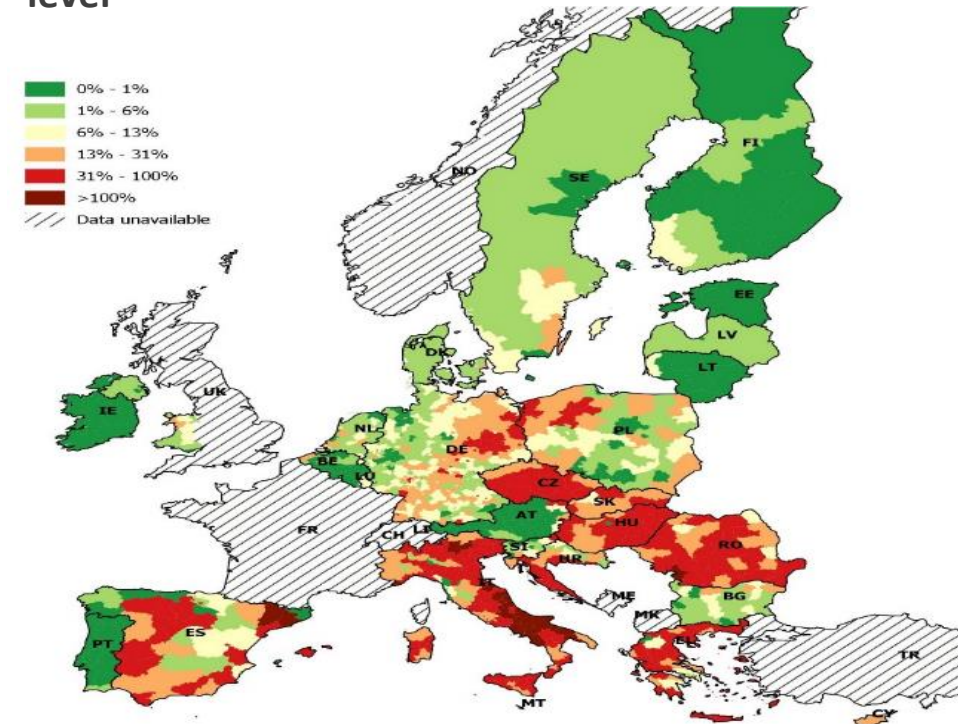
## Effects since 2015:

- Pressures on PG evident already:
  - >5% decrease in ratio by 2016 in CY, EE, EL, FR Haut de France, RO and decreases of 2-5% in DE (Bayern & Niedersachsen), FR (Normandie)
- Resetting the baseline to 2012-2015:
  - countries where declines were previously experienced can start again (converse for those where increases took place)
- Operation at national level in all except BE, DE, FR, UK masks changes more locally
- The setting up of prior authorisation regime' and authorisation regimes (e.g. CY, DE, IT, LU, PT and FR) can act as a disincentive to convert PG

# Changes in farming practices: ESPG

- Data still unstable: areas of PG designated as ESPG designated in Natura 2000 areas varied markedly between 2015 and 2016 due to data and calculation issues
- **Designation of ESPG in Natura 2000 sites:** 51% overall
  - 2% (EE) to 100% (BG, CZ, HU, EL, NL, SK, FI).
- **Declaration of designated ESPG by farmers:** 31% overall
  - 5% (BG) to 99% (EL)
  - different interpretations of what “needs strict protection”
- **Designation of ESPG outside Natura 2000:** BE, CZ, LV, LU, UK-Wales
- **Scale of coverage** (ESPG declared on all PG declared):
  - EU: 15.7% (no data for FR, UK-En, UK-Sc)
  - IT = 71%; HU = 45%; EL = 40%;
  - 10 – 39%: CZ, CY, ES, HR, RO, SK
  - < 10% in BE, BG, DE, DK, EE, IE, LT, LV, LU, NL, AT, PL, PT, SI, SE, UK-W, UK-NI

% ESPG declared on total PG declared 2016 at NUTS 3 level



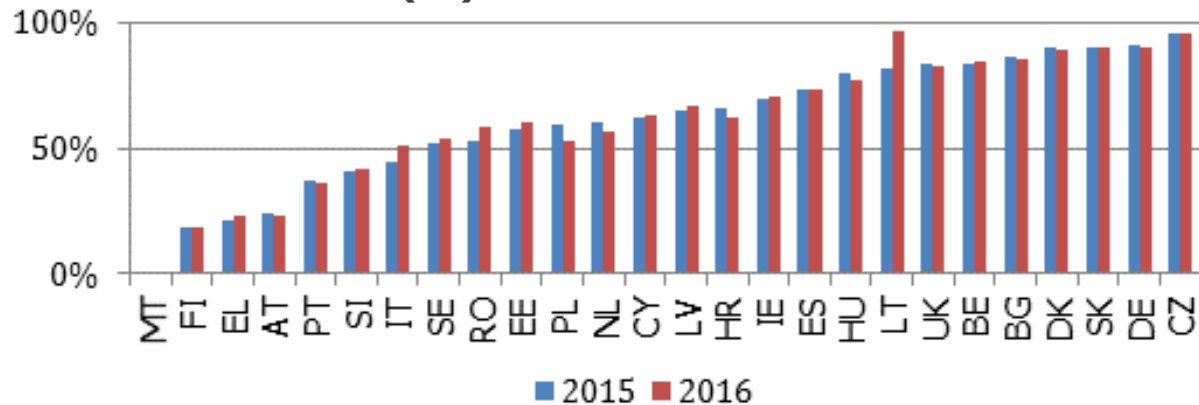
- Existing protection (via the Birds & Habitats Directives) means **net effect inside Natura 2000 areas is uncertain**, but likely that ESPG designation leads to closer controls,
- **Net effect outside Natura 2000 is low** due to small area designated most of which is already protected under national legislation



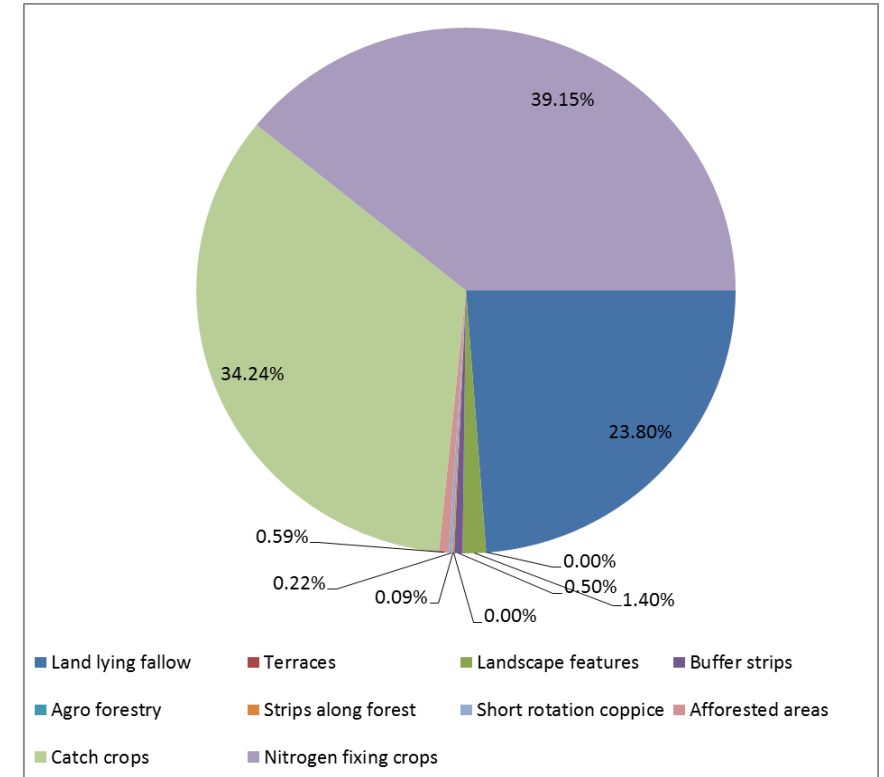
# Changes in farming practices: EFA (1)

- Applies to 68% of EU arable land
- Covers a physical area of 8.5 million ha (14% arable land)
- Main reason for exemption: area of arable land

**Share of arable land area subject to the EFA obligation in 2015 and 2016 (%) – no data for LU or FR:**



**Proportion of different EFA types declared by farmers in 2016 (physical area, before weighting factors applied):**





# Changes in farming practices EFA (2)

- **N-fixing crops:**

- N-fixing crops account for over 50% of the EFA area in CZ, EE, HR, LT, MT, SK
- Uptake of N- fixing crops increased in area by 7.2% between 2015 and 2016.
- The main crop declared as EFA N-fixing crops varies greatly between Member States (soybean, alfalfa, lupins, broad beans, field peas, field beans)
- At EU level: increase in areas of pulses (broad and field bean, field pea, lupin), soybean and leguminous fodder
- Farmers may have started planting or increased the area of N-fixing crops as a result of the EFA measure in PL (lupin); in LV, UK-En, UK-Sc, and IT (broad and field beans); UK-En, UK-Sc, ES, FR, DE, CZ (field peas)
- Other factors driving change: VCS, crop diversification, markets

- **Catch and cover crops:**

- No “before and after” data but catch crops declared for EFA higher than FSS 2010 levels in DK,HU, RO
- Management restrictions don’t appear to affect uptake
- Other factors: Other regulations such as Nitrate plans, GAEC and SMR1, or agronomic factors

- **Land lying fallow**

- Stabilization of the negative trend at EU level
- The EFA measure may have had an impact in 5 MS (SL, HR, DK, SK, LV)
- Other factors: crop diversification measure, AECD
- In 2015, **30.5%** of EU fallow area was declared as EFA

- **Other EFA types (very low uptake):**

- Most **landscape features and buffer strips** declared as EFA were already protected under other legislation → **the additionality of the EFA measure is overall low.**



# Influence of greening on production areas

- No significant impact of EFA measure on area available for crop production at EU level
- Variable impact on area of specific crops:
  - Overall low negative impact on soft wheat and barley but not significant on maize and durum wheat
  - Small positive impact on oilseeds (but soybean mainly driven by market and VCS)
  - Significant positive impact of EFA and CD on dry pulses and leguminous crops
  - Significant effects in Spain
- No significant effect on cereals and oilseeds prices - mainly driven by the market
- or on geographical distribution, except in the case of dry pulses, to be confirmed after a few years (increased shares for PL and LT, compared to FR and UK)

Crops	Positive impact	Negative impact	% area impacted (10 CS MS)**
Soft wheat		FR, DE, PL, RO, UK, <b>ES*</b> , CZ	<b>-1.1</b>
Barley	FR, DE, RO, CZ	<b>ES*</b> , UK, <b>PL*</b>	-0.8
Maize	RO, PL, CZ	FR, DE, ES	-0.7
Durum wheat	FR	ES	0.0
Rapeseed	FR, DE, PL, UK, <b>RO*</b> , CZ		0.3
Sunflower	<b>RO*</b> , ES, FR		0.7
Soybean	RO, FR, AT, CZ		<b>2.0</b>
Leguminous	RO, <b>ES*</b> , <b>DE*</b> , NL, FR	PL, CZ	<b>16.2</b>
Dry pulses	<b>ES*</b> , <b>PL*</b> , <b>FR*</b> , <b>UK*</b> , <b>DE*</b>		<b>7.2</b>

\*Change in area > 1% of the national area in 2014

\*\*% change in area of newly diversified farmers on area grown in 2014



# Influence of the greening measures on economic viability

- Proper counterfactual analysis possible only for CD measure. Probably low or marginal effects of EFA and PG measures (interviews).
- No significant impact of the measure on **profitability** (FNVA/ha) at national level but in some specific monocropping regions: Weser-Ems-DE (-), Zachodniopomorskie-PL (+)
- Specific impacts on **production costs** depending on costs and regions:
  - **Seed costs** increase in UK and Castilla y Leon (ES)
  - **Crop protection costs** increase in Castilla y Leon: more protection needed for protein crops
  - **Fertiliser costs** decrease in DE and Zachodniopomorskie (PL): limited need of nitrogen fertilisers for leguminous and protein crops
  - **Feed costs** : some evidence of negative pressure on costs due to increased area of fodder crops
- Possibly more significant impacts on the longer term (positive effect of crop diversification on soil productivity, on farm income volatility...)



# Effectiveness: EFA

- Net environmental impacts (compared to counterfactual) are **generally small** at EU level, but can be greater at local level – both positive and negative;
- The EFA measure is not the only policy measure influencing action on the ground for most of the measures (e.g. cross-compliance, Nitrates Directive etc)
- Specifically:
  - Land lying fallow option is the option with the greatest additional environmental potential across the EU, although rules for management and duration limit biodiversity benefits;
  - N-fixing crops measure has helped slow the decline of traditionally planted forage legumes in ES (with benefits for biodiversity);
  - Use of catch/cover crops have increased – generally positive for soils, water, climate but possible negative effect on biodiversity where these replace overwinter stubbles or field margins;
  - Low coverage of other EFA elements and inclusion in other policy measures limits their net effect
- **Environmental effects are dependent on the rules and conditions put in place** on: management, species types, timings etc
- In most cases suitable conditions are not in place
- Examples of conditions that help ensure environmental benefits are achieved are exceptions rather than the norm:
  - Post harvest management of N-fixing crops in DE, ES, CZ, NL
  - Field margins required around N-fixing crops in UK-Sc
  - Ban on pesticides on green forage crops in NL
  - Possibility to sow wild-bird and pollen mixes on buffer strips in UK-En
  - AT's equivalence scheme via the AECM

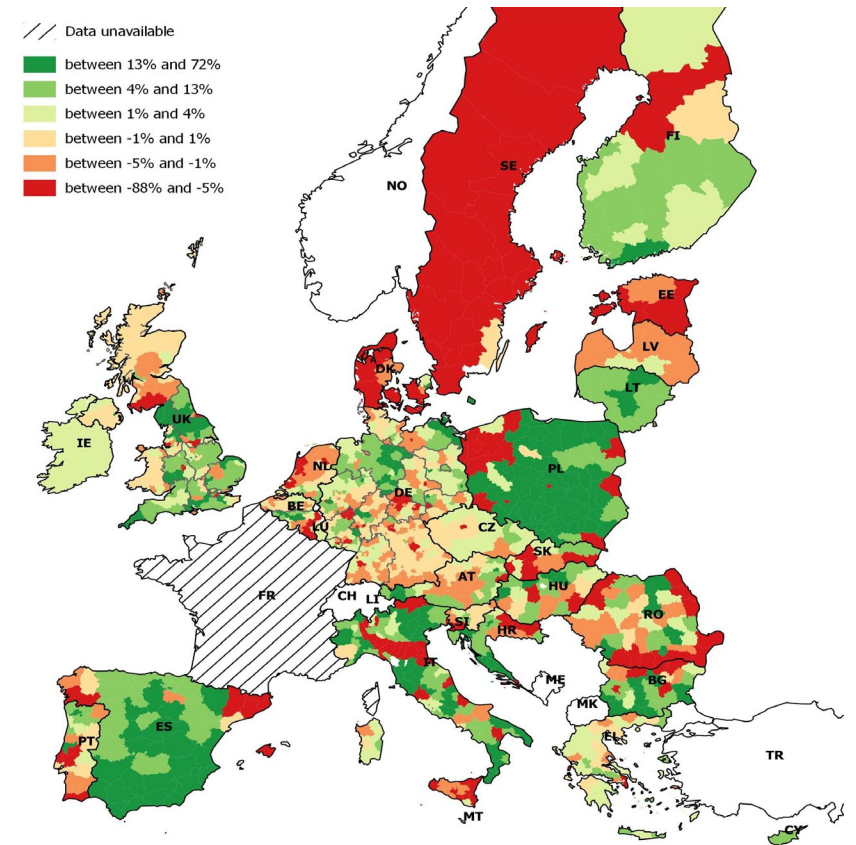
# Effectiveness: Crop Diversification (ESQ8)

- Environmental effects depend on the types of crops introduced and their management
- Direct environmental effects are small given scale of change
- Effects reported do not take account of benefits of preventing shifts towards greater monocropping
- **Main benefits in Spain:** for soil & water quality and GHG emissions due to increase in forage legumes and anticipated lower use of N-fertilisers (also to lesser extent in LV, PL, UK)
- **Soil erosion** benefits mixed:
  - positive where maize replaced by a crop with greater soil cover (e.g. FR, DE, NL)
  - Detrimental where new crop leave soil bare for longer (e.g. peas) or where replaced by another row crop (e.g. sunflowers in FR)
- **Water quality & climate effects** mixed – depends on crop and its management
- Move to greater spring cropping creates benefits for **biodiversity** – evidence is anecdotal
- Effects more generally on biodiversity are difficult to ascertain as depend on management (e.g. use of pesticides)
- **Equivalent practices** are not widely offered or taken up for this measure

# Effectiveness: Permanent Grassland ratio

- Greater protection overall compared with the previous situation – decline is the ratio limited to 5% rather than previous 10%
- Magnitude of benefits uncertain due to data issues:
  - Biodiversity benefits depend on grassland type
  - Other environmental/climate benefits depend on location, whether ploughed or not, intensity of management
- Lack of safeguards to protect semi-natural or carbon rich grasslands outside Natura 2000 areas – e.g. agricultural improvements / ploughing and reseeded are not constrained (see also ESPG)
- Operation at national level in all except four Member States masks some significant changes more locally (see map).
- Where prior authorisation processes are in place, far greater environmental and climate benefits are likely to occur – currently in CY, DE, IT, LU, PT and FR, particularly in Germany.

**Figure 1: Change in the ratio of permanent grassland as a % of total agricultural area (2015-2016)\* (NUTS3)**



\*Sweden: inconsistencies of ISAMM data and Monitoring data

Source: Alliance Environnement based on ISAMM data 2015&2016

# Effectiveness: Permanent Grassland ESPG

- Extent of benefit depends on:
  - areas of important habitats designated and
  - protection afforded via implementation of EU and national legislation – this varies between countries

## Outside Natura 2000 areas:

- Benefits are small due to size of area protected (only 5 MSs to date) and mainly reinforces existing rules
- Area designated accounts for only 2% of Annex 1 habitats outside Natura 2000 areas



## Within Natura 2000 areas:

- Protects 31% of permanent grassland within Natura 2000 network (area designated and declared by farmers), complementing existing protection under Birds & Habitats Directives
- Declared areas vary between MSs:
  - >75% in EL, IT, SE
  - < 20% in 10 MSs: AT, BE, BG, EE, ES, IE, LT, LV, LU, UK
- Effects are limited by the low area Annex 1 grassland and bog habitats designated in many Member States, particularly where large areas are in unfavourable conservation status.

# Effectiveness: Overall contribution to the environmental performance of farming

- At EU level the overall net contribution is small although locally positive in some situations, e.g.:
  - Where effect on farming practices induces change or maintains status quo against a negative trend AND
  - The conditions put in place encourage management that is environmentally positive
- In many cases the measures reinforce existing requirements on the areas to which they apply (e.g. cross-compliance, Nitrates Directive, SUPD, WFD, Birds & Habitats Directive + national legislation)
- **Biodiversity:**
  - ESPG – bolsters protection of some sensitive grassland habitats & associated species in N2K areas, but only from ploughing, not drainage, fertiliser use etc
  - EFA & CD: variable effects on arable farmland – dependent on management, crop choice etc
- **Soils and Water:**
  - Permanent grassland: positive where ploughing is prevented or reseeded directly to grass
  - EFA & CD: varied effects, can work together to promote less erosion prone crops and covering bare soil over winter, plus longer rotations.
- **Climate mitigation & adaptation**
  - Positive contribution made by the PG measure, where carbon rich soils are prevented from ploughing, but also adaptation function of PG generally
  - On arable soils EFA & CD likely to have made a small contribution to GHG emission reductions via increasing fallow and use of N-fixing crops

# Administrative burden

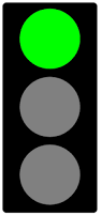
- Focus on additional public and private administrative costs due to greening
  - Evidence:
    - **Public administrative costs:** Responses to MS survey (21 MS responded; 17 provided quantitative estimates); information from European Commission
    - **Private transaction costs:** Farmers (from CS interviews – 51 farmers in 8 MSs plus evidence from Commission consultation).
  - Results = conservative estimates
- **European Commission:** €0.6 million / year
  - **Administrations (MS):** ~€27-76 million / year (€0.2-0.6/ha)
    - Equates to:
      - 0.2-0.65% of the budget dedicated to greening
    - Influenced by range of factors: size of country/region; pre-existing legal/support frameworks;
    - Over 5 year period running costs are 80-90% of total public administrative costs
    - *Implementation costs:* Set up costs account for 50-90% of additional implementation costs
    - *Running costs* correlate with area covered by greening measures and influenced by cost of labour. Control costs account for ~50% of running costs
  - **Farmers:** ~3-9 hours/farm/year (€36-217 million/year)
    - Fairly independent of farm size
    - Split between information gathering and admin tasks



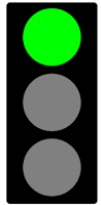
# Overall efficiency of the greening measures

- Relationship between:
  - Additional costs of implementation (excludes cost of greening payment)
  - Net environmental/climate performance of the measures
- True efficiency analysis not possible due to lack of data, particularly on benefits
- Analysis looked at factors relevant to efficiency:
  - Area covered by the measures
  - Control system, reductions and penalties
  - Requirements
  - Flexibilities
  - Costs
- Fairly low administrative costs associated with the greening measures;
- Policy design provides a strong incentive for farmers to comply with the greening obligations
  - linking requirements to a sizeable proportion of DPs
  - a rigorous control regime, with reductions and penalties in case of non-compliance
- An increase in overall efficiency could be achieved if greater environmental and climate benefits were delivered
  - But this type of approach cannot achieve the degree of targeting and specificity possible with programmed measures such as the AECM
- Greater benefits could be achieved by changing the rules associated with the measures:
  - Some of these are already in place for 2018 as a result of the new delegated regulation (2017/1155)

# Coherence



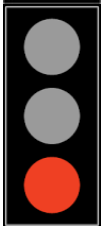
- Generally coherent (no conflicts) with other relevant measures to achieve the objective **‘sustainable management of natural resources and climate action’**,
  - particularly cross-compliance and the agri-environment-climate measure
  - more could be done to make these work together in a synergistic way.



- No particular conflicts identified with the wider CAP objectives of **viable food production and balanced territorial development**.



- Full or partial coherence with other **EU environmental and climate legislation**



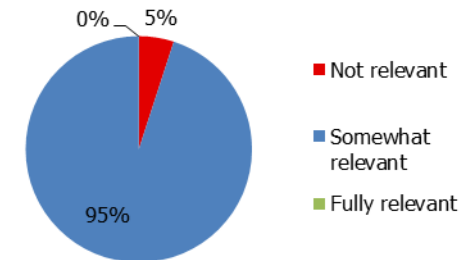
- Incoherence between **CAP eligibility rules and definition of permanent pasture**



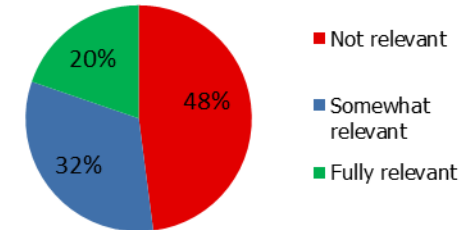
# Relevance

- Relevance assessed for each measure against Member States' environmental and climate problems and needs: fully, somewhat or not relevant (for 10 case study MSs).
- A semi-quantitative analysis was carried out:
  - All greening measures have some relevance for addressing all environmental and climate priorities
  - Relevance is limited by the absence of rules requiring the most suitable forms of management
  - The relevance of the crop diversification measure against all objectives (even soil quality) is far lower than the other greening measures
  - **Biodiversity**: ESPG of highest relevance overall, but some EFA elements very relevant for biodiversity priorities on arable farmland (esp. fallow)
  - **Soils, water, climate**: ESPG very relevant, as well as EFA components, e.g. SRC, agro-forestry, buffer strips, cover and catch crops

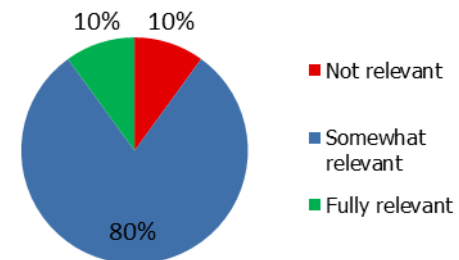
Relevance assessment for crop diversification to the soils objective



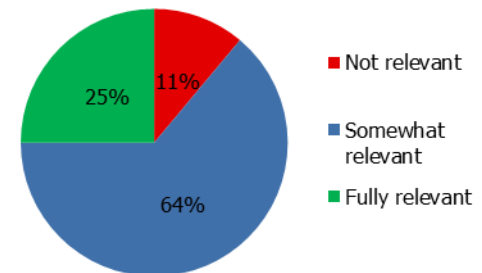
Relevance assessment for EFA to the biodiversity objective



Relevance assessment for maintaining the PG ratio for soil carbon



Relevance assessment for ESPG against biodiversity objectives



# EU Added Value

- Acting at the EU level is compared against the counterfactual situation whereby MSs provide financial incentives to promote a basic level of environmental performance across the countryside 'in the spirit of' the greening measures
- Assessment based on review of:
  - Positions during the negotiating phase of CAP reform;
  - Discussions during the design phase in Member States
  - Final implementation decisions
- The greening measures are considered to provide EU added value through:
  - **Setting a higher level of ambition** than Member States are likely to have done acting alone
  - Strong control system applied equally in all Member States – **increasing likelihood that the ambition will be achieved**
  - Complementarity between different policy mechanisms
  - Legal certainty on the availability of the payment over a period of time;
- There is less evidence that it has delivered EU added value to date in relation to:
  - Greater effectiveness through EU action, mainly due to absence on evidence on actual impact to date – although in theory this should be the case
  - Gains through coordination – limited evidence of knowledge exchange so far between Member States on implementation although this could increase over time.

# Recommendations (selection)

## To improve the environmental performance of greening:

- Member States should be required to justify their implementation choices with reference to environmental needs and priorities and report on progress.
- Suitable greening practices for permanent crops should be found.
- The types of EFA permitted and their management rules should be reviewed to ensure they are compatible with delivering environmental outcomes.
- All Annex 1 grassland habitats under agricultural use and requiring strict protection under the Birds and Habitats Directives should be designated as ESPG and the designation of ESPG outside Natura 2000 sites should be increased.

- Greater synergies between the implementation of the greening measures and the agri-environment-climate measure should be encouraged.
- Advisory services are critical – these should not be limited to the administrative and compliance aspects of greening but focus on their purpose and ways of optimising their environmental and climate effects.

## Data improvements are also required:

- Existing IACS and LPIS data should be made publically available to allow changes in land use and features to be tracked over time and enable more detailed evaluation of the effects of CAP measures on the ground.
- A 'greening' component should be added to the Farm Structure Survey