



# Agriculture and climate in Europe

## - opportunities for climate initiatives

7 November 2019

Simon Kay

Directorate General for Climate Action  
European Commission



[ec.europa.eu/  
clima/](https://ec.europa.eu/clima/)



[facebook.com/  
EUClimateAction](https://facebook.com/EUClimateAction)



[twitter.com/  
EUClimateAction](https://twitter.com/EUClimateAction)  
*Climate  
Action*



[pinterest.com/  
EUClimateAction](https://pinterest.com/EUClimateAction)



[youtube.com/  
EUClimateAction](https://youtube.com/EUClimateAction)

## ★ The context: climate neutrality by 2050

### ★ Policies

- ★ Land Use, Land Use Change and Forestry
- ★ Examples of planned actions in Member States
- ★ Common Agricultural Policy and climate
- ★ Carbon Farming
- ★ LIFE



# Paris Agreement Ambition

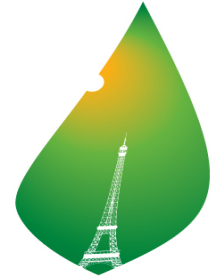
## Global goals

### ★ Mitigation (reducing emissions)

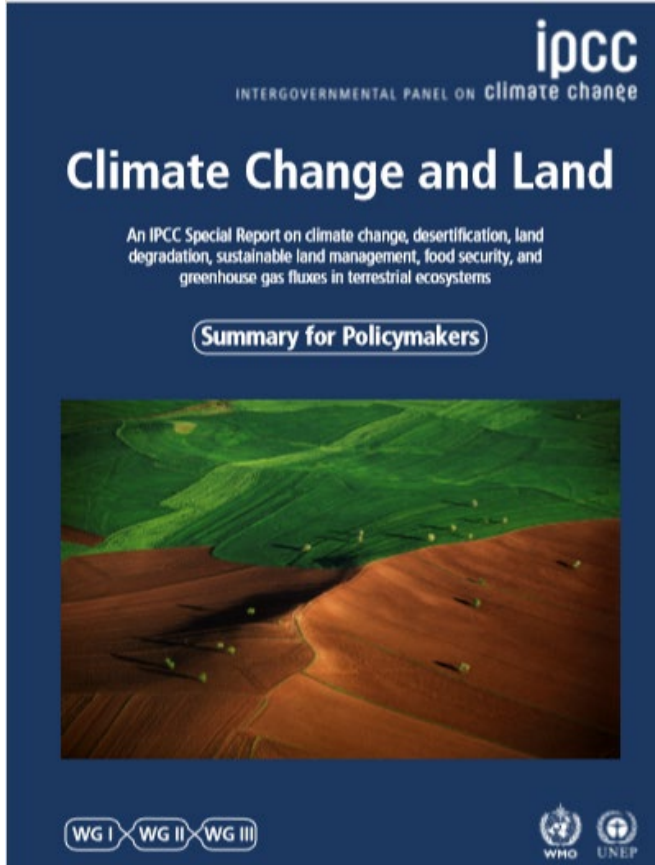
- Well below 2deg C & Efforts to limit increase to 1.5deg C
- Balance between emissions and removals of greenhouse by the 2<sup>nd</sup> 1/2 of this century

### ★ Adaptation

- ▶ Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21-CMP11




ipcc  
INTERGOVERNMENTAL PANEL ON climate change

# Climate Change and Land

An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

Summary for Policymakers



WG I | WG II | WG III

WHO | UNEP

## **CORRIERE DELLA SERA**

IL RAPPORTO

### **Allarme Onu, il riscaldamento globale aumenterà fame e migrazioni**

Il nuovo studio suggerisce anche di diminuire il consumo di carne e latticini. Coldiretti: danni per 14 miliardi all'agricoltura italiana nell'ultimo decennio

## **The Guardian**

### **Climate crisis reducing land's ability to sustain humanity, says IPCC**

UN report finds ecosystems never before under such threat and restoration is urgent

- [How climate's impact on land threatens civilisation - and how to fix it](#)

## **Le Monde**

### **Un rapport spécial du GIEC : l'humanité épuise les terres**

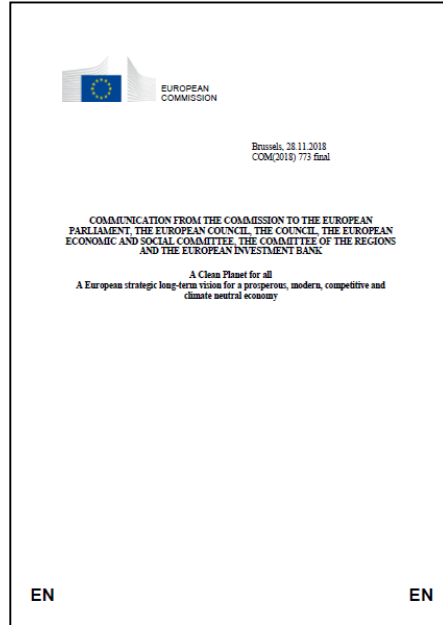
Les experts de l'ONU avertissent sur la surexploitation des ressources, qui menace la sécurité alimentaire, appauvrit la biodiversité et amplifie les émissions.

Par Pierre Le Hir - Publié le 08 août 2019 à 10h00 - Mis à jour le 09 août 2019 à 16h21

## **The New York Times**

### **Climate Change Threatens the World's Food Supply, United Nations Warns**

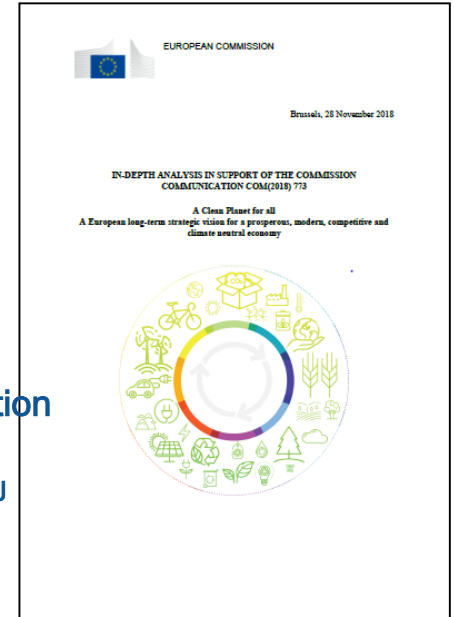
<https://www.ipcc.ch/srccl-report-download-page/>



# Communication “A Clean Planet for All” (Long Term Strategy) (Nov 2018)

25 pages

<https://europa.eu/!uJ83HG>



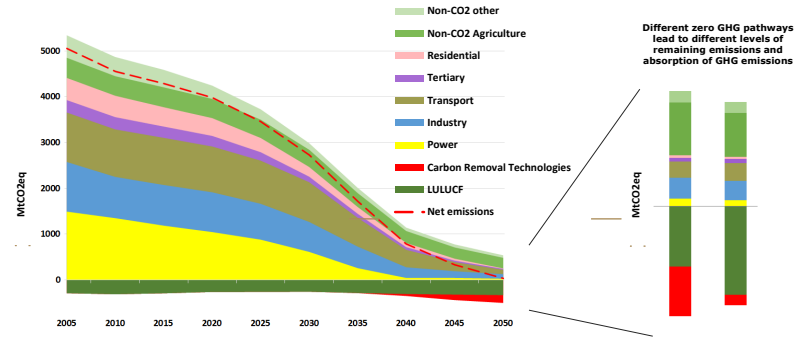
In depth analysis supporting the Communication

393 pages

<https://europa.eu/!JX39VJ>

# Our Vision for a Clean Planet by 2050

- ★ Commission vision for EU long strategy: **climate-neutral EU by 2050** (net zero GHG emissions)
- ★ **Substantial transformations** energy system, buildings, transport, industry, agriculture
- ★ A number of **pathways challenging but feasible** from technological, economic, environmental and social perspective





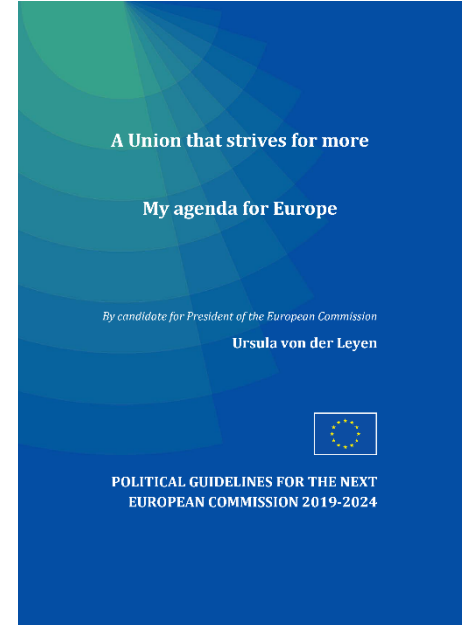
**Ursula von der Leyen**

President-elect



**Frans Timmermans**

First Vice-President  
Executive Vice-President-designate  
for the European Green Deal





# The European Green Deal

## ➤ Europe to become climate -neutral by 2050

- Proposal within the first 100 days in office, including first European Climate Law
- Extension of the ETS
- Border Carbon Tax
- Just Transition Fund
- Strategy for green financing and a Sustainable Europe Investment Plan
- Parts of the EIB become EU's climate bank
- Increase EU's target for 2030 to 50%, if possible to 55%

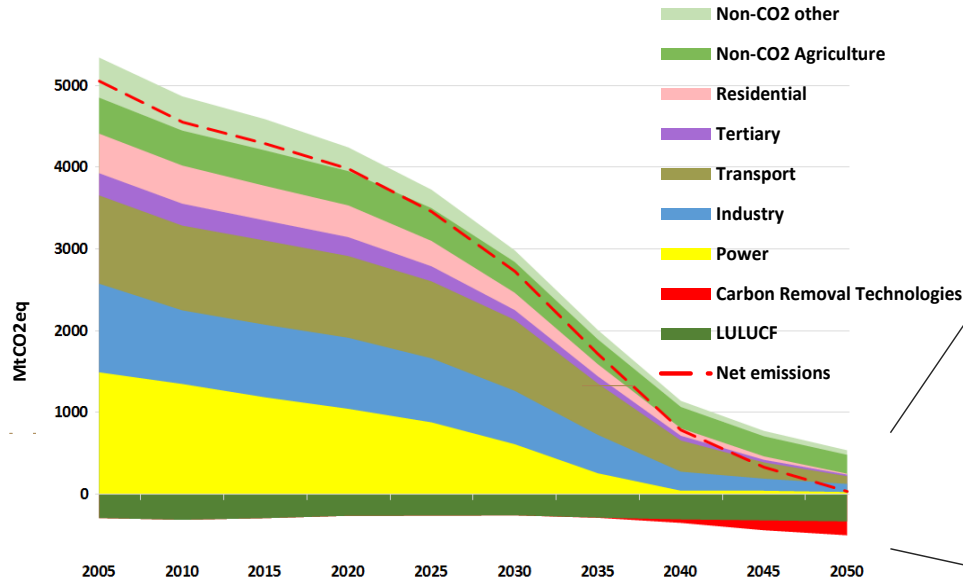
➤ **Environment** (Biodiversity Strategy, sustainable food policy, zero pollution ambition, circular Economy Action Plan, single-use plastics and micro-plastics)



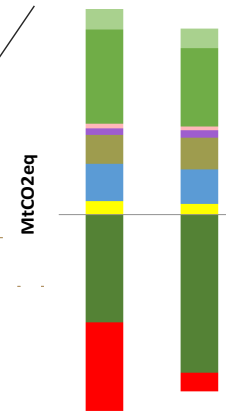


European  
Commission

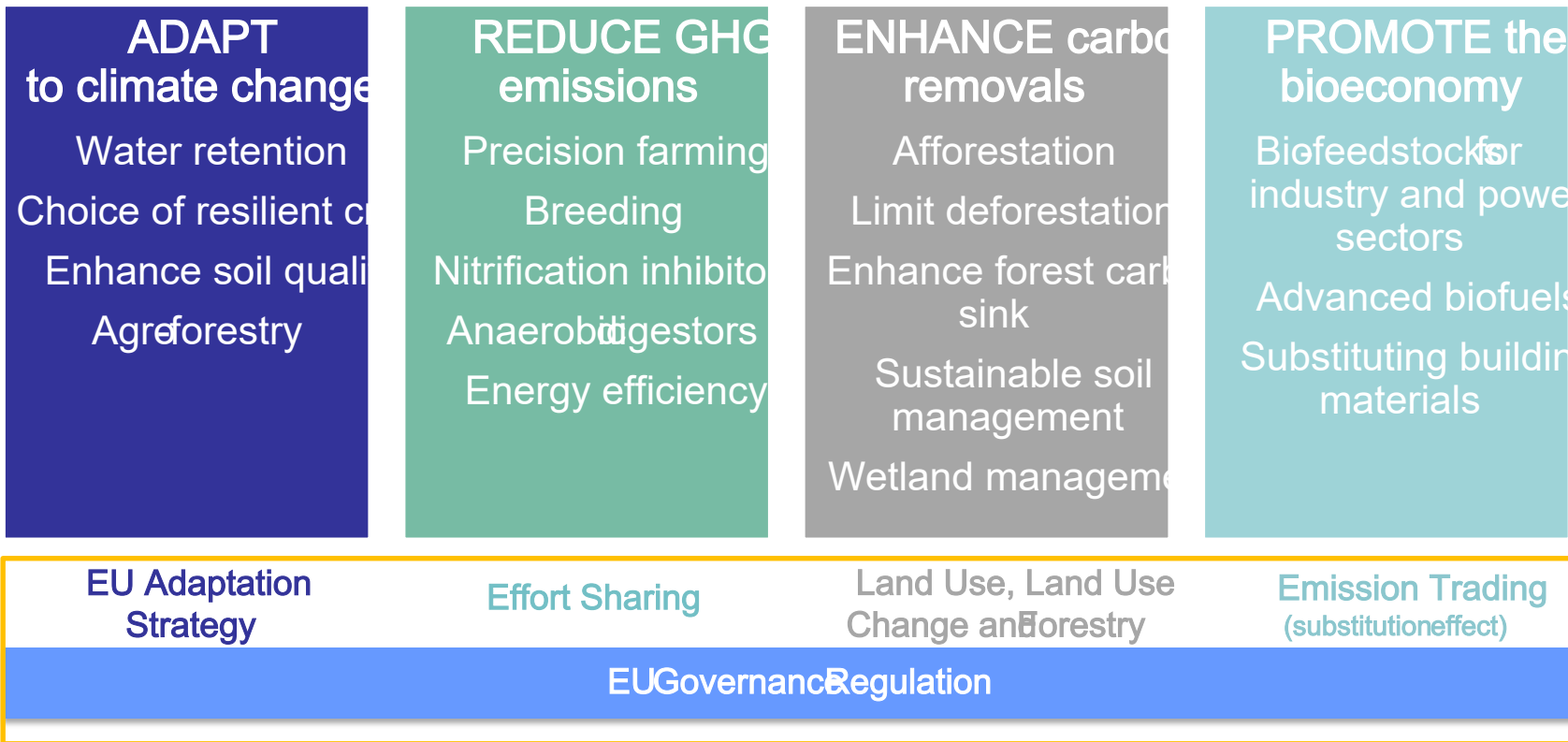
# Vision 2050 A climate-neutral EU



Different zero GHG pathways lead to different levels of remaining emissions and absorption of GHG emissions



# Agri contribution to climate policies



## EU Climate framework

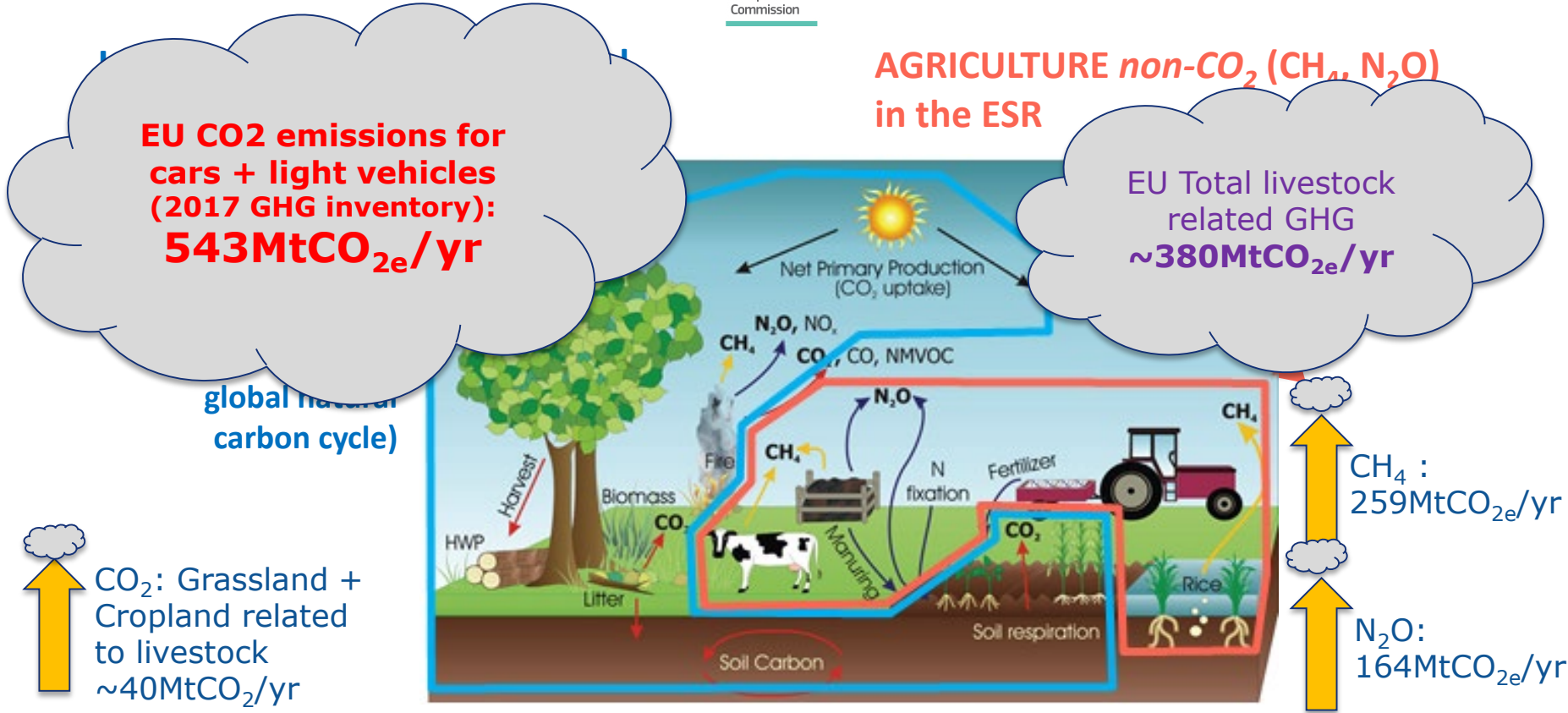
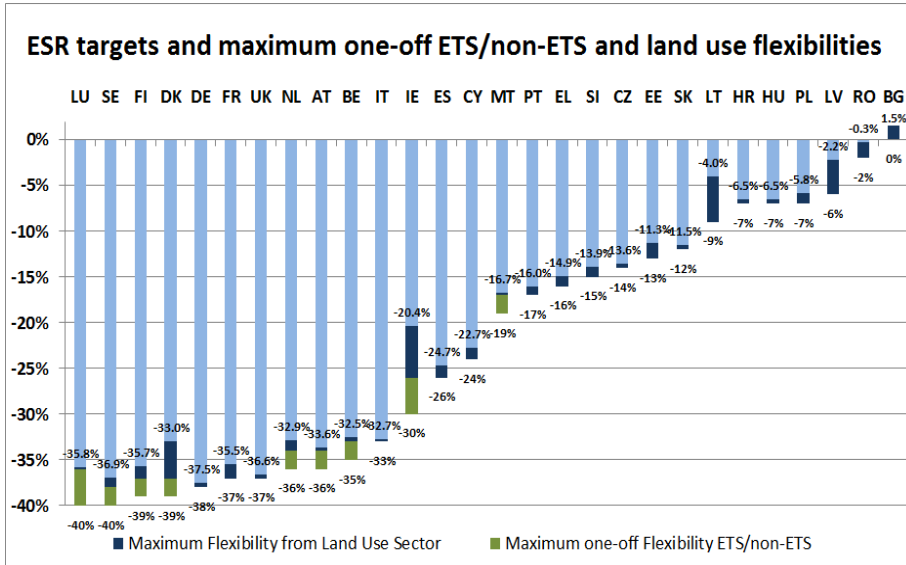


Figure source: IPCC 2006. Data: EEA 2019 (2017 GHG inventory)

# National targets Regs (EU) 2018/842 and 2018/841

Including on CO<sub>2</sub> agriculture, transport, buildings, land



- ★ Every Member State has an emission reduction target by 2030
- ★ The allocation of the targets is proportional to GDP
- ★ Member State can achieve part of these targets with credits generated in the land (LULUCF) sector
- ★ Countries with a larger agricultural sector can use more LULUCF credits to comply with Effort Sharing targets

# Land Use, Land Use Change and Forestry

- ★ LULUCF includes all impacts on GHG of h management of vegetation and soils
  - ★ cropland, grassland, forests, wetlands
- ★ Both emissions and removals
- ★ LULUCF today is approx. 10% removal of the EU's total GHG budget
- ★ The forest sink, however, is projected to decline in some Member States and the EU
- ★ Additional effort can maintain these removals



# Plans in Member States

## Examples

The climate and air proposal "Together for a greener future"



### An efficient and modern agricultural sector

- C20) Less ammonia in the air.
- C21) Improvement of biogas plants.
- C22) Air- and climate-friendly technology in pig farms.
- C23) Stronger research efforts in agriculture.
- C24) Promotion of precision agriculture.
- C25) Land distribution fund focused on environment, climate and nature.
- C26) Partnership with the agricultural sector.

### Policy for GHG emission reduction in agriculture:

- Precise mineral fertilizer use
- Direct application of organic fertilizers in soil
- Liquid manure separation
- Feed Dosage Planning
- Improving nutritional quality
- Maintenance of melioration systems
- Fertilizer Planning
- Promotion of biogas production
- Nitrogen removal
- Reconstruction and restoration of land amelioration systems in arable land
- Improving the sustainability and ecological value of forest ecosystems
- Restoring forest stands destroyed by natural disasters
- Creation of new orchards
- Reconstruction and restoration of land amelioration systems in arable land
- Pasture in winter sowing
- Introduction of leguminous crops in conventional crop rotation ...



Evolutions des émissions et des puits de gaz à effet de serre sur le territoire national entre 2005 et 2050

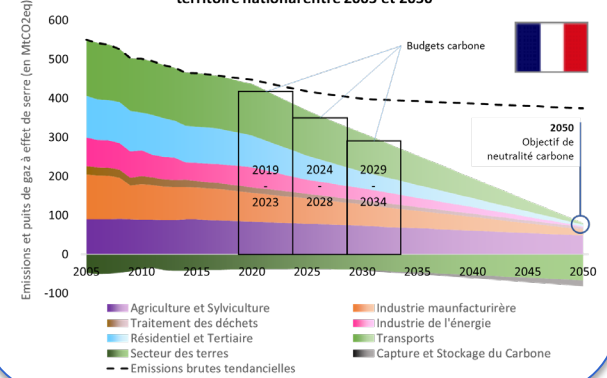
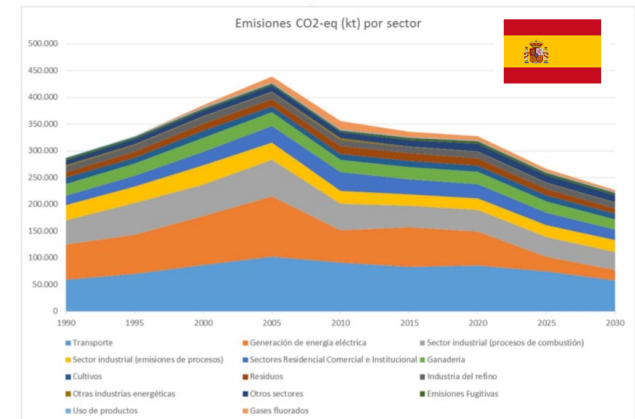


Figura 1.1. Emisiones CO<sub>2</sub> equivalente por sector. Histórico y proyección a 2030 (kt)





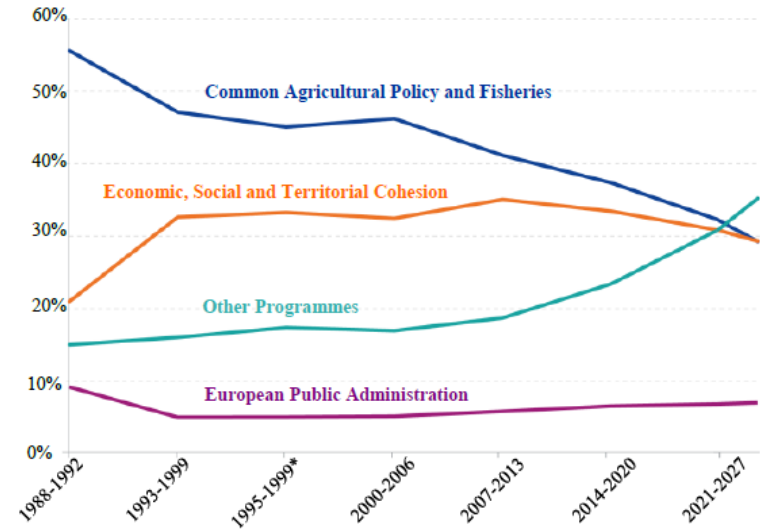
European Commission

# The Common Agricultural Policy

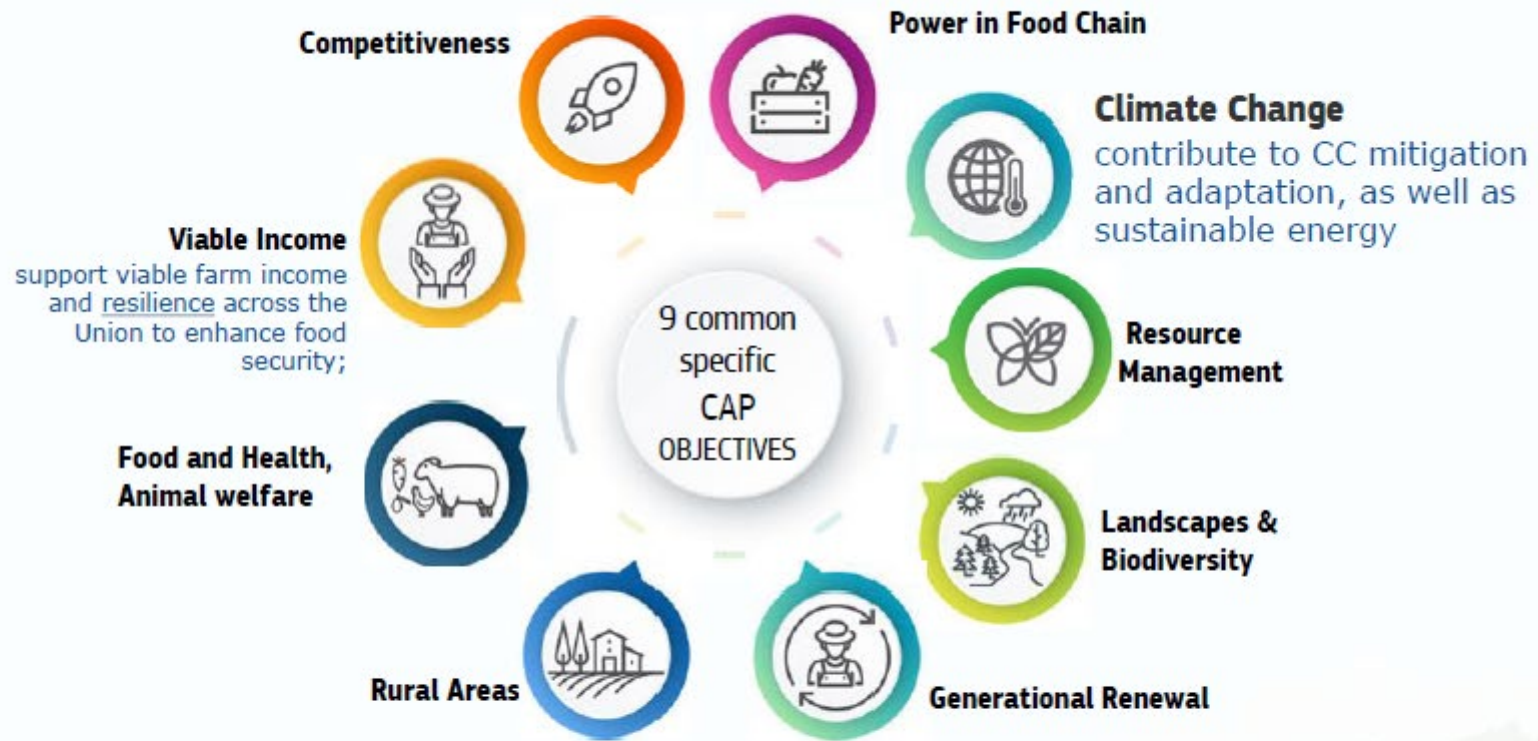
- ★ New proposal (June 2018) in negotiation
- ★ Proposed budget 365B EUR over 2021 (~28.5% of E budget)
- ★ Of which 40% => to underpin climate objectives



### Evolution of main policy areas in the EU budget



\*Adjusted for 1995 enlargement





## LINKS TO NON-CAP LEGISLATION ON THE ENVIRONMENT AND CLIMATE

- **Link in CAP rules to EU legislation on:**
  - water, air, biodiversity
  - climate change, energy
  - pesticides
- **MS' CAP plans must:**
  - **take account** of analysis, targets from the relevant action plans etc.
  - make an **appropriate contribution** to achieving those targets

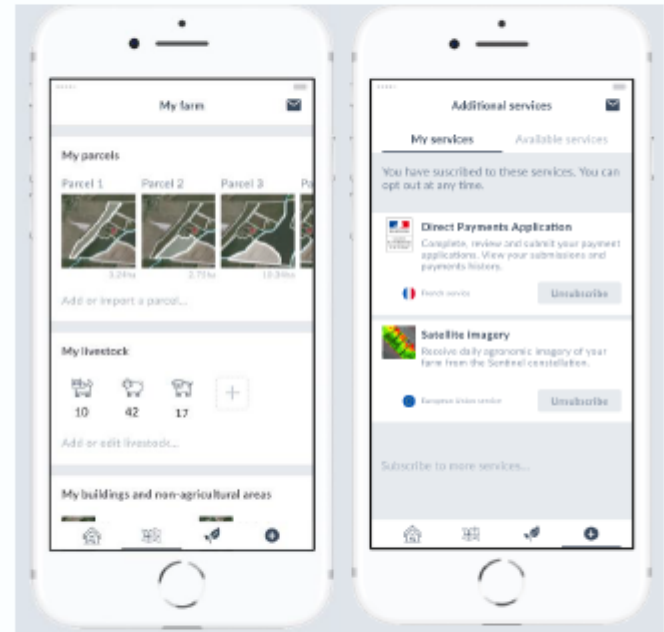


European  
Commission

# CONDITIONALITY

## GAEC 5 - Use of Farm Sustainability Tool (FaST) Tool for Nutrients

- Win-win solution beyond compliance model
- Ensure higher environmental protection while fostering economic benefits
- Improve farmers digital skills
- Promote the development/adoption of **new on-farm technology-based solutions**
- Allows **simplification** of the farmer's tasks and compliance



## PILLAR I "ECO-SCHEMES"

- Payment schemes for care for environment and climate (without co-financing)
- Environmental "top-ups" to basic income support; or compensation payments based on costs incurred, income foregone
- Mandatory for MS, voluntary for farmers
- Can be useful to design targeted schemes to specific needs related to climate, MS will define the content
- Annual payments





### Pillar II – with co-financing by MS

For farmers and other land managers

Payment per hectares, land concerned can also not be eligible for direct payments

Participation voluntary for farmers and other potential beneficiaries

Multi-annual contracts (usually of 5-7 years)

Ring-fencing of total EAFRD contribution: commitments concerned

- **30%** for interventions addressing the 3 environmental/ climate objectives



European  
Commission

# Carbon Farming Schemes

Under a result-based CAP MS can design direct incentives to climate action

- ★ E.g. “carbon farming” payments for carbon sequestration
- ★ Climate action can become a new source of income for farmers

## Ongoing activities in DG CLIMA

- ★ Study to create guidelines on EU Carbon Farming
- ★ LIFE Call (under award process) for preparatory projects on Carbon Farming

# LIFE programme 2021-2027



- ★ Proposed budget of €5,45 billion, divided into two fields:
  - ★ Environment with 2 subprogrammes
    - ★ Nature and Biodiversity (€2,15bn)
    - ★ Circular Economy and Quality of Life (€1,35bn)
  - ★ Climate Action with 2 subprogrammes
    - ★ Climate Change Mitigation and Adaptation (€0,95bn)
    - ★ Clean Energy Transition (€1bn)
- ★ Building on previous LIFE programmes, more focus on strategic projects
- ★ National contact points for guidance on formulating applications

## Examples of LIFE projects (mitigation)

Projects can contribute to the wider adoption of\*:



- ★ Conservation agriculture
- ★ Agro-forestry
- ★ Wetland management (e.g. peatland restoration)
- ★ Sustainable forest management
- ★ Enhanced soil carbon management
- ★ Carbon accounting tools
- ★ Local ‘Carbon Farming’ schemes (carbon credit markets)
- ★ Improved monitoring of carbon emissions and removals

- ★ Replacement of fossil-based materials with bio-based materials
- ★ Bio-based circular economy

- ★ Improved nutrient management and nitrogen fixing
- ★ Better livestock management (feeding, breeding. .)
- ★ Better manure management

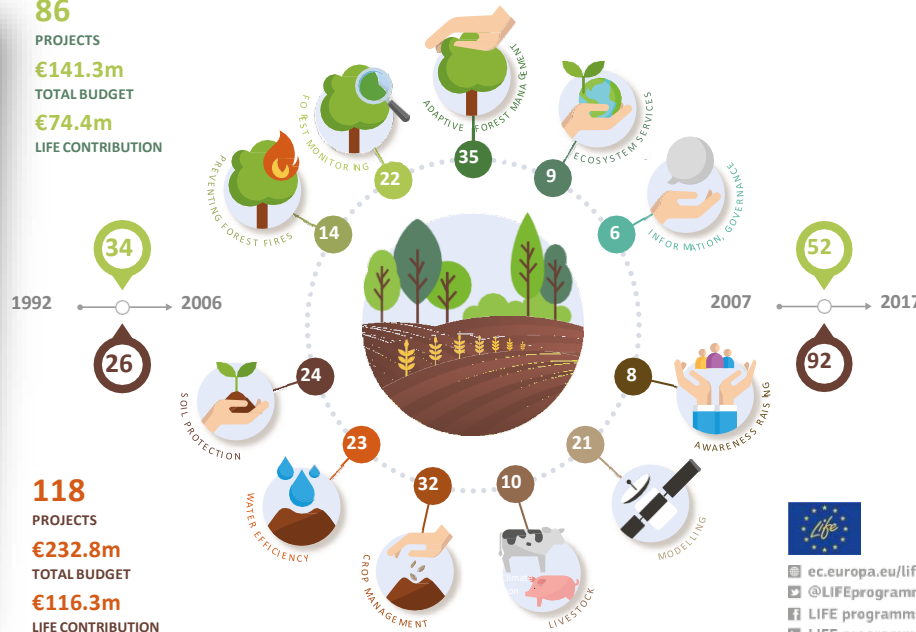


European Commission

# Examples of LIFE projects (adaptation)



**86**  
PROJECTS  
**€141.3m**  
TOTAL BUDGET  
**€74.4m**  
LIFE CONTRIBUTION



**118**  
PROJECTS  
**€232.8m**  
TOTAL BUDGET  
**€116.3m**  
LIFE CONTRIBUTION



ec.europa.eu/life  
@LIFEprogramme  
LIFE programme  
LIFE programme



**The Green Link** **90 %** tree survival rate



**LIFE AgroClimaWater** **15 %** water saved on olive and citrus farms



**LIFE VinEcoS** **22 %** less pesticides used on vineyards



**LIFE BIODELEAR** **0 %** insecticide used on fruit orchards



**SigAGROasesor** **400** farmers given real-time recommendations



**PTD LIFE** **120** livestock breeders tested adaptive grazing plans



**LIFE+ DEMORGEST** **60 %** extra CO<sub>2</sub> savings alongside new anti-forest fire practices



**LIFE+ ForBioSensing PL** **22 million** trees mapped to track climate change effects



[ec.europa.eu/easme/en/life](http://ec.europa.eu/easme/en/life)





# Thankyoufor yourattention



[ec.europa.eu/  
clima/](https://ec.europa.eu/clima/)



[facebook.com/  
EUClimateAction](https://facebook.com/EUClimateAction)



[twitter.com/  
EUClimateAction](https://twitter.com/EUClimateAction)



[pinterest.com/  
EUClimateAction](https://pinterest.com/EUClimateAction)



[youtube.com/  
EUClimateAction](https://youtube.com/EUClimateAction)