

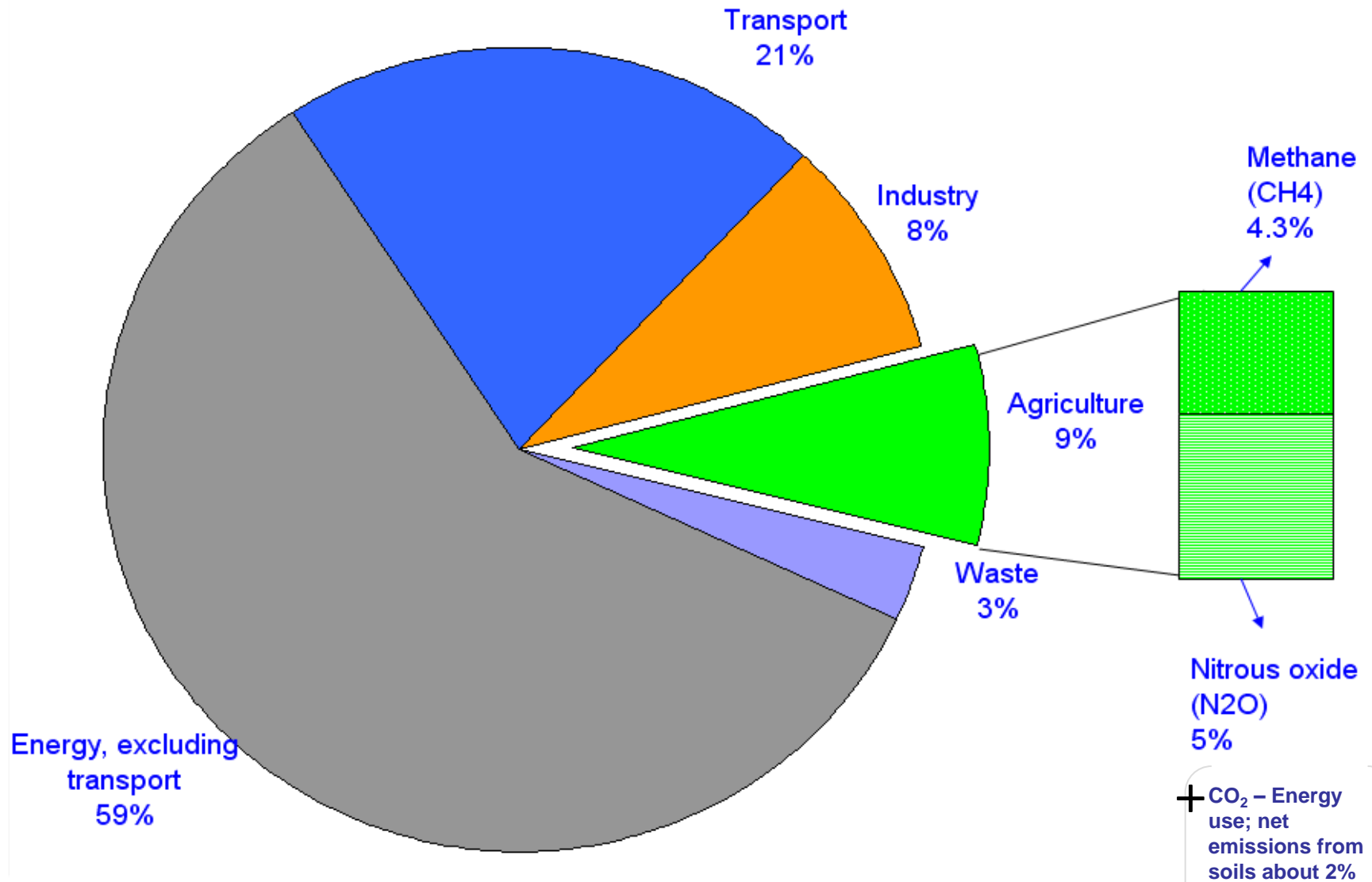
# Climate change and the CAP post 2013

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European Commission  
Agriculture and  
Rural Development

# EU agricultural GHG emissions



# Breakdown agricultural GHG emissions - 2007



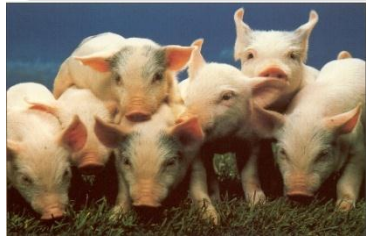
**N<sub>2</sub>O-  
Agricultural  
Soils  
44%**

**N fertilizers, manure**



**Ruminants (80% cows)**

**CH<sub>4</sub>- Enteric  
Fermentation  
26%**



**N<sub>2</sub>O- Manure  
management  
5%**

**Storage, manipulation  
of sludge  
(50% pigs, 45% cows)**

**CH<sub>4</sub>- Manure  
management  
9%**

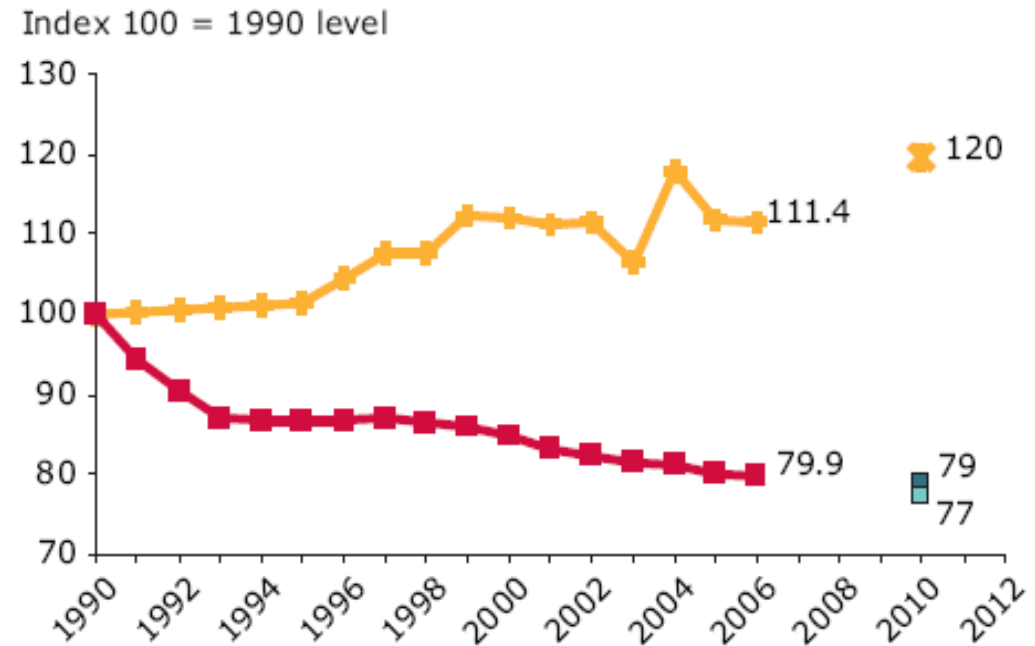
**Fuel (tractors, machinery...),  
electricity...**

**CO<sub>2</sub>- Energy  
use  
15%**



# Trends of EU agricultural emissions

- Declined by 20% by 2006 (EU-15: - 11%)
- Further decline projected by 1-3% by 2010
- Drivers: decreased livestock numbers, improved farming techniques
- EU policies are contributing: CAP reforms, environmental legislation



- Greenhouse gas emissions (past)
- Gross value added in agriculture (past)
- Gross value added in agriculture (projections)
- Greenhouse gas projections with existing and additional measures
- Greenhouse gas projections with existing measures



# Role of agriculture in mitigation and adaptation

- Effects of climate change: water availability, frequency of pests and diseases and soils, storms, fires, damages to infrastructure leading to significant changes in the conditions for agriculture and livestock production
- Agriculture must adapt to these conditions & decrease its impact on GHG emissions:

## Mitigation

Agriculture can contribute by reducing its emissions: production of renewable energies and bioproducts, carbon storage in farmland soils & adaptation of farming practices.

## Adaptation

The key objective is to ensure resilience to climatic variations, while maintaining agriculture's competitiveness and its role as supplier of high quality food and environmental and landscape services.



# EU climate change targets and objectives

- Europe 2020 Strategy's one of the 5 targets is: climate change/energy
- Relevant objectives to be achieved: 20/20/20:
  - greenhouse gas emissions reduction by 20% compared to 1990
  - 20% of EU energy consumption from renewables
  - 20% increase in energy efficiency



# How can CAP post 2013 help?

## Scope of action under Pillar I:

- Setting of provisions under cross-compliance including standards on climate change adaptation and mitigation (e.g. soil cover, soil organic matter, carbon rich soil, bio-diverse permanent pastures)
- Considering part of the direct payments as “Greening component”: ecological focus areas, crop diversification, permanent pastures, + organic farming



# How can CAP post 2013 help?

Scope of action under Pillar II:

## Policy objectives

- Competitiveness of agriculture
- Sustainable management of natural resources
- Balanced territorial development of rural areas

Under these objectives rural development will contribute to the Europe 2020 strategy for smart, sustainable and inclusive growth.

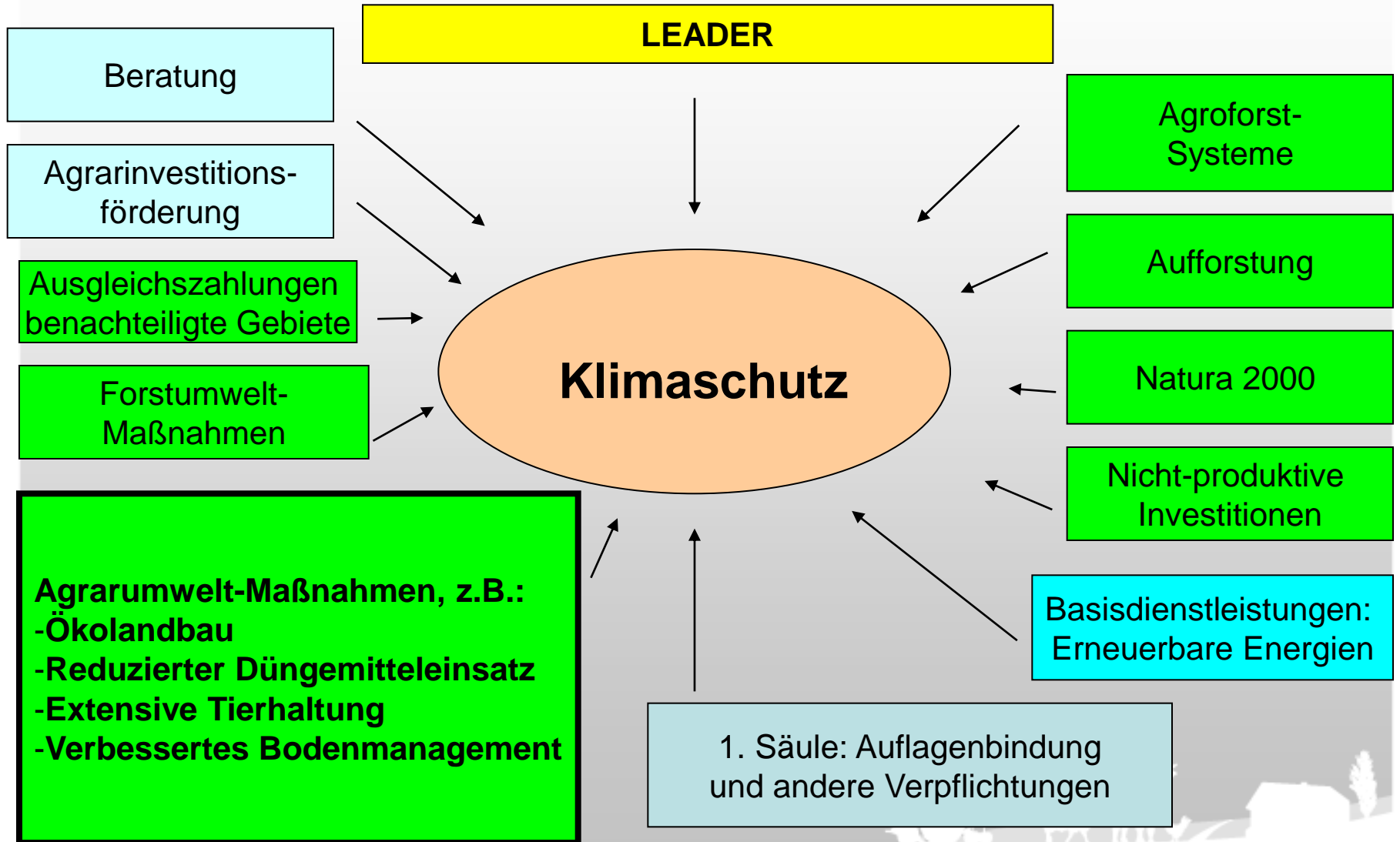




# Rural development priorities

- **Knowledge transfer** in agriculture and forestry
- Competitiveness of agriculture, farm viability
- Food chain organisation, risk management in agriculture
- **Preserving & enhancing ecosystems** dependent on agriculture & forestry
- **Resource efficiency & transition to low-carbon economy** in agri-food and forestry sectors

# Positive Anreize zum Klimaschutz in der ländlichen Entwicklungspolitik der EU



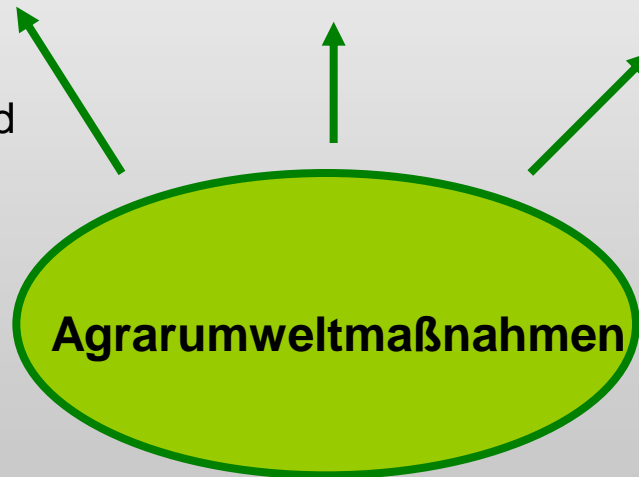
# Agrarumweltmaßnahmen und Klimawandel im „Health Check“

## Beispiele für Operationstypen im Bereich der Agrarumwelt-Maßnahmen und ihr Beitrag zu den „neuen Herausforderungen“\*

### Wassermanagement:

- Rekultivierung von Feuchtgebieten
- Umwandlung von Ackerland in Sumpf
- Verbessertes Bodenmanagement

Klimawandel



### Biodiversität:

- Eingeschränkter Einsatz von Produktionsmitteln auf HN VF
- Extensive Formen der Tierhaltung
- Ökolandbau
- Schutz genetischer Vielfalt

\* Beispiele für Typen von Agrarumweltmaßnahmen, die im Gesundheitscheck identifiziert wurden.



# Rural development & climate change – type of eligible actions

## Training and advice

Vocational training on climate friendly agricultural practices, set up and use of advisory services to analyse and improve the situation on farm

## Forestry measures

Afforestation, agriforestry and measure to strengthen the viability of forests as a major tool for carbon sequestration

## LEADER, co-operation, village renewal, basic services:

Measures which allow in combination the establishment climate change related integrated concepts and their implementation on local level



# Operationstypen im Bereich der Agrarumwelt-Maßnahmen und ihr Beitrag zum Klimawandel\*

<b>Beispiele für Operationstypen</b>	<b>Potenzielle Wirkung</b>	<b>Operationstypen implementiert in</b>
<ul style="list-style-type: none"> <li>- <b>effizientere Verwendung von Nitratdünger (z.B. eingeschränkte Verwendung, bessere Ausrüstung, Präzisionsackerbau)</b></li> <li>- <b>bessere Düngemittellagerung</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reduktion der Methan (CH<sub>4</sub>)- und Stickoxid (N<sub>2</sub>O)-Emissionen</b></li> </ul>	<p><b>Lazio (Italien), Wales</b></p>
<ul style="list-style-type: none"> <li>- <b>verbesserte Bodenbearbeitung (z.B. Zwischenkultur, diversifizierte Fruchtfolge, Uferzonenmanagement)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Anpassung an die Auswirkungen des Klimawandels auf den Boden</b></li> </ul>	<p><b>Österreich, Bayern, Niedersachsen, Sachsen-Anhalt, Thüringen, einige ital. Regionen, Schottland, Wales, Finnland</b></p>
<ul style="list-style-type: none"> <li>- <b>Landnutzungsänderung (z.B. extensive Grünlandbewirtschaftung, Umwandlung von Ackerland in Dauergrünland, Langzeitbrachen)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Kohlenstoffbindung</b></li> </ul>	<p><b>Österreich, Bayern, Rheinland-Pfalz, einige ital. Regionen, Schottland</b></p>
<ul style="list-style-type: none"> <li>- <b>Extensivere Tierhaltung (z.B. geringere Bestockungsdichte)</b></li> <li>- <b>Grünlandbewirtschaftung</b></li> </ul>		<p><b>Bayern, BaWü, Saarland, Rumänien, La Rioja, England, Schottland, Wales</b></p>

\* Beispiele für Operationstypen, die im Gesundheitscheck identifiziert wurden.

# Monitoring and measuring the policy

- Establishment of a system of output, result and impact indicators to measure policy achievements
- Indicators linked to the priorities of the policy
- Follow-up during implementation (monitoring in annual reports) and evaluation (ex-ante, ex-post and during period)



# *Neue Politik nach 2013 – Neue Wege?*

## *Fragen zur Programmierung:*

- Wie kann der Zielbeitrag der AUM zum Klimawandel quantifiziert werden?*
- Wie kann die Analyse des Beitrags der Landwirtschaft & ländlicher Räume zum Klimawandel/-schutz in der Ausgangssituation verbessert werden?*
- Wie können AUM/Klimawandel auch für intensiv wirtschaftende Betriebe attraktiver gestaltet werden?*
- Wie sollte die Kombination mit Beratung aussehen?*



# CAP after 2013 – timetable

