

### Promoting the Transition to a Green Economy ENRD Thematic Group on Resource Efficiency

## EU level overview of RDP support to resource efficiency





### **Thematic Group activities**

Three related but distinct strands of work in the context of the TG activities to address resource efficiency through rural development policy:

- **1.** Framing background analysis of the content and focus of RDPs across the EU;
- 2. A comparative regional analysis in different RDP regions;
- 3. Identification and collection of good practice examples.

### **Objectives of the EU overview**

- 1. Provide the EU and international context to resource efficiency
- 2. Identify policies targets driving the management of soils and water
- 3. Demonstrate the different approaches and priorities for soil and water resource efficiency across the EU





## Outline

- Global and EU policy context
- Resource efficiency of soil and water in RDP programming
- Resource efficiency of soil and water in RDP implementation





## Global policy context to resource efficiency





## **Global policy context**







# SUSTAINABLE G ALS





#### Rural Management and Resource Efficiency

# SUSTAINABLE G ALS





### SDGs – Targeting Resource Efficiency in Soil and Water Management

#### Most Relevant SDG Targets

Rural Management and Resource Efficiency



**2.4** - By 2030, ensure **sustainable food production systems** and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation and that progressively improve land and soil quality

**8.4** - Improve progressively, through 2030, **global resource efficiency in consumption and production** and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead





**15.1** - By 2020, ensure the **conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services**, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

**15.9** - By 2020, **integrate ecosystem and biodiversity values** into national and local planning, development processes, poverty reduction strategies and accounts



#### Water Management

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### SDGs – Resource efficiency in Soil and Water Management

Water Availability

#### **Specific SDG Targets of Note for Water Management**

and substantially increasing recycling and safe reuse globally

3 GOOD HEALTH AND WELL-BEING

**3.9** - By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



**6.4** - By 2030, substantially **increase water-use efficiency** across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

**6.3** - By 2030, **improve water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater

**6.5** - By 2030, implement **integrated water resources management at all levels**, including through transboundary cooperation as appropriate

**6.6** - By 2030, **protect and restore water-related ecosystems**, including mountains, forests, wetlands, rivers, aquifers and lakes



#### Soil nutrients & Soil Carbon

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### SDGs – Resource efficiency in Soil and Water Management

Soil and Nutrients and Soil Carbon

# 15 UFE ON LAND

**Specific SDG Targets Relevant to Soil Resource Management** 

**15.3** - By 2030, combat desertification, **restore degraded land and soil**, including land affected by desertification, drought and floods, and strive to **achieve a land degradation-neutral world** 

#### **Specific SDG Targets Relevant to Soil and Nutrients**

**6.3** - By 2030, **improve water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally





- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all Countries
- 13.2 Integrate climate change measures into national policies, strategies and planning



# EU-level policy context to resource efficiency





## Controlling the use of fertiliser products

- Fertiliser Directive and new proposals
  - Sewage sludge Directive

No overarching EU law determining soil priorities, therefore national policies of importance

Soil Nutrients

Changing the management of land to reduce demand for nutrient additions and emissions to the environment

- Nitrates Directive/Water Framework
  Directive
  - CAP Pillar 1 and 2
  - Effort Sharing Decision and new proposals to 2030

#### Controlling the quantity and type of nutrients present in the environment

- Water framework Directive
  - Nitrates Directive
- National Emission Ceilings
  - Landfill Directive
- Environmental Liability Directive





Driving improved holistic water management at a river catchment level

• Water Framework Directive

Water Availability – Quality and Quantity Driving changes in practice to support achievement of good environmental water status – primarily water quality • CAP – Pillar 1 and 2

 Water Framework Daughter Directives e.g. Nitrates Directive; Drinking Water Directive; Groundwater Directive

• Environmental Liability Directive

Industrial Emissions Directive

Controlling the development and management of water quantity/flows

• Floods Directive

• Environmental Impact Assessment Directive





## Limiting Carbon emissions from land use and management

- LULUCF Decision and new proposals to 2030
- CAP Pillar 1 and 2

No overarching EU law determining soil priorities, therefore national policies of importance

Changing patterns of nutrient management and promoting alternative mechanisms for soil management

- Water Framework Directive and Daughter Directives
- Effort Sharing Decision
- CAP Pillar 1 and 2

Soil Carbon Conservation and Sequ<u>estration</u>

## Promoting monitoring of soil condition

- GHG accounting linked LULUCF and ESD
- Data gathering activities including LUCAS



# CAP and resource efficiency of soils and water

EU priority: Europe 2020 Strategy

#### **CAP** general objectives:

- Sustainable management of natural resources and climate action
- Balance territorial development
- Viable food production

#### **CAP** specific objectives

- Provision of environmental public goods
- Pursuit of climate change mitigation and adaptation

# Resource efficiency of soil and water in EAFRD:

- Implementation and enforcement of legislation
- Incentives to farmers to encourage action beyond those required
- Knowledge sharing and capacity building
- Monitoring to provide data on the state of the resources
- Improve interaction between relevant stakeholders

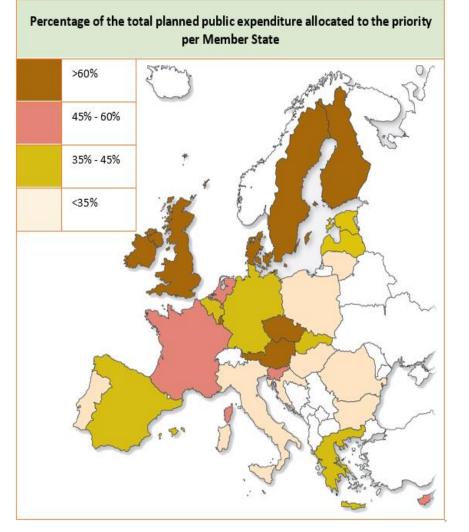


# Resource efficiency of soil and water in RDP programming





### **RDP programming: Soil nutrients (1)**



Priority 4: restoring, preserving and enhancing ecosystem dependent on agriculture and forestry

# Wide variation in total planned public expenditure:

- From 54% in France (9 billion €
- To 0.02% in Malta (52,500 €)

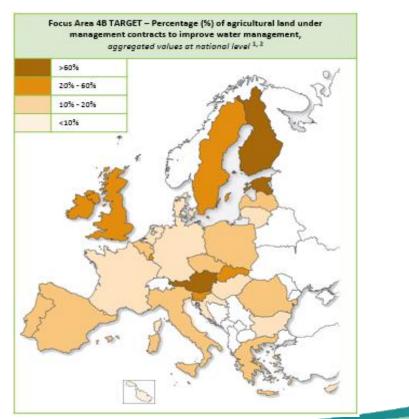
Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Priority 4, 2017



### **RDP programming: Soil nutrients (2)**

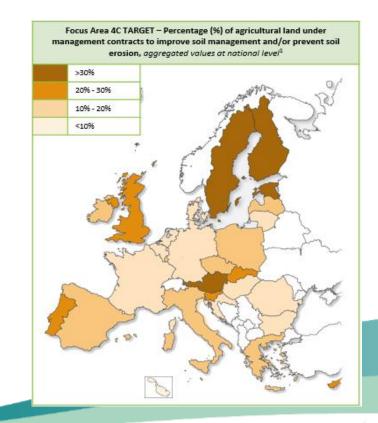
Focus Area 4B: Improving water management, including fertiliser and pesticide management

 108 RDPs set a target for water management on agricultural land, while 37 RDPs for forest land



Focus Area 4C: Preventing soil erosion and improving soil management

• 108 RDPs address soil management on agricultural land, while 55 for forest land



Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Focus Areas 4B and 4C, 2017Funded by the

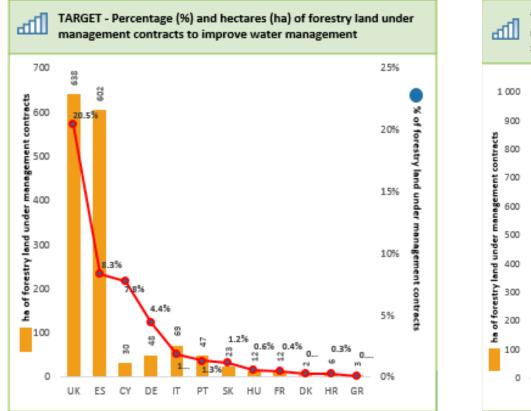




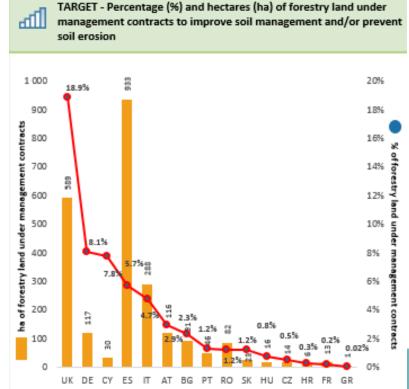
### **RDP programming: Soil nutrients (3)**

Focus Area 4B: Improving water management, including fertiliser and pesticide management

# Focus Area 4C: Preventing soil erosion and improving soil management



The red line shows the % of money spent on the FAs compared to overall EAFRD spending.



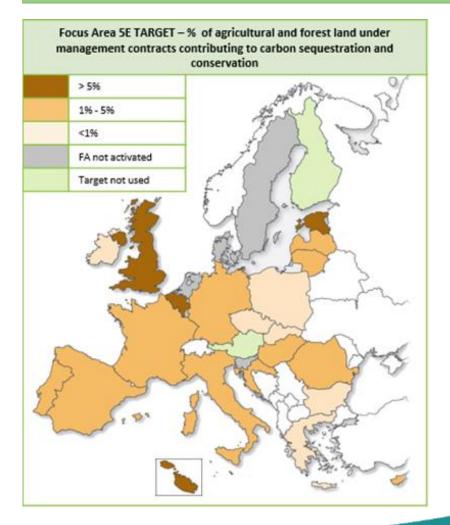
Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Focus Areas 4B and 4C, 2017<sup>Funded by the</sup>





## **RDP programming: Soil carbon (1)**

#### Focus Area 5E: Fostering carbon conservation and sequestration in agriculture and forestry



- 80% of total RDPs (88 out of 112) set targets for fostering carbon conservation and sequestration on agriculture and forestry land
- Wide variation among targets:
  - From 15% in Estonia
  - To 0.02% in Slovakia

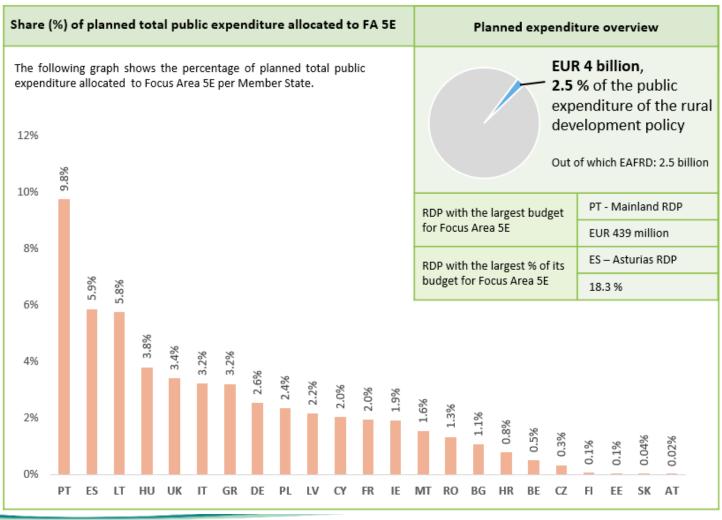
Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Focus Area 5E, 2017





## **RDP programming: Soil carbon (2)**

#### Focus Area 5E: Fostering carbon conservation and sequestration in agriculture and forestry



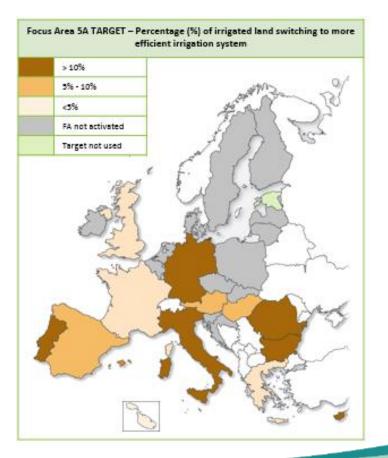
Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Focus Area 5E, 2017



### **RDP programming: Water availability (1)**

**Priority 5:** promoting resource efficiency and supporting the shift towards a lowcarbon and climate-resilient economy in the agriculture, food and forestry sectors

Focus Area 5A: Increasing efficiency in water use by agriculture



54 out of 112 RDPs address water availability

Wide variation in target setting:

- 50% for Bulgaria
- 1% for the UK

Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Focus Area 5A, 2017

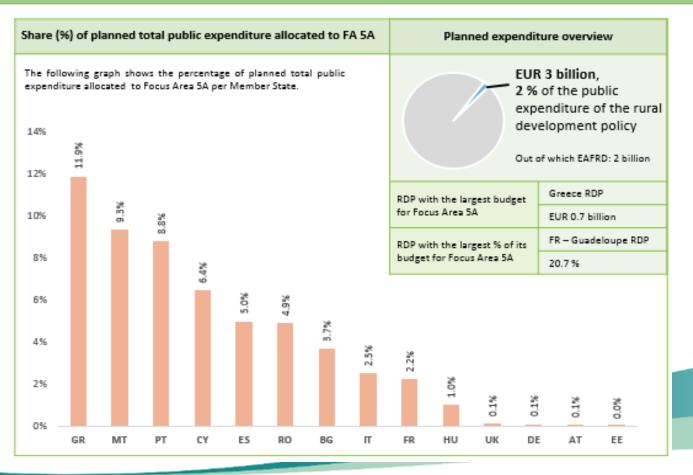




### **RDP programming: Water availability (2)**

**Priority 5:** promoting resource efficiency and supporting the shift towards a lowcarbon and climate-resilient economy in the agriculture, food and forestry sectors

#### Focus Area 5A: Increasing efficiency in water use by agriculture



Source: ENRD Rural Development Programmes 2014-2020: Key facts & figures. Priority 5, 2017









### **Resource efficiency in RDP implementation (1) \***

#### **Priority 4:**

- Most MS activated a mix including M10, M13, M11
- Coupled with M8 and M4
- 1% spent on M16, M1 and M2

#### Focus Area 5A:

- 95% of spending is on M4
- 2% on M16, while 1% each went to M1 and M2
- All MS (except HU) have activated a mix of M4, M1 and M2
- Estonia supports only M2, while CY significant use of M10

#### Focus Area 5E:

- More than 70% allocated to M8
- Approx. 20% to M10 and M13
- 3% to M4, 1% to M1 and M2
- BE, IE, CZ, HU, LV, PL and RO selected almost only M8
- Most MS used a mix of M8, M16, M10, M2 and M1
- DE, FR, GR and the UK used M4





### **Resource efficiency in RDP implementation (2) \***

#### Soil and nutrients

- Agri-environment-climatic measures (M10) most relevant to support sustainable agricultural practices (BG, FI, Brittany - FR)
- In some instances, M10 is coupled with non-productive investments (M4.4) (BG, Emilia-Romagna - IT, FI and Brittany – FR)
- Investments in physical assets (M4) also relevant to enhance soil nutrients (BG, Extremadura – ES and Brittany – FR)
- **Organic farming** (M11) used to reduce chemical inputs to land to improve water quality
- Knowledge transfer (M1) and advice (M2) (Extremadura – ES, NL, SI, North-Rhine Westphalia – DE, Scotland – UK)

#### Water availability

- Investments in physical assets (M4) especially in relation to water saving irrigation systems (BG, Emilia-Romagna – IT, Extremadura, ES) or to improve water use and reduce pollution in the food and drink industry (DE)
- BG, Emilia-Romagna IT and Extremadura – ES use M4 to ensure more efficient use of water, while DE uses them to support improve storage of silage, slurry or manure, or to reduce ammonia
- In the NL, M4.4 are used to complement agri-environmentclimatic schemes (M10) – BG, Emilia-Romagna – IT, FI and Brittany – FR
- Agri-environment-climatic schemes (M10) are both relevant to water availability and soil management. Few MS (SI and PL) explicitly reference M10 to address RBMPs

#### Soil carbon

- No compiled information is available on the implementation choices in RDPs to address specific soil carbon needs
- Investments in forestry (M8) appear to play an important role in addressing soil carbon (70% of EU-28 public expenditure allocated to M8 under FA 5E)
- Agri-environment-climatic schemes (M10) relevant to soil carbon, especially in Emilia-Romagna – IT and PL

\*CAP evaluation (2016) included analysis on a cluster of MS – BU, Extremadura (ES), North-Rhine Westphalia (DE), FI, Brittany (FR), Emilia-Romagna (IT), NL, PL, SI and the UK.





### Further information on the ENRD TG on Resource Efficient Rural Economy can be found at:

<u>https://enrd.ec.europa.eu/thematic-work/greening-</u> <u>rural-economy/resource-efficiency\_en</u>

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