

ROMANIA

Programul National de Dezvoltare Rurala 2007-2013 – (National Rural Development Programme 2007-2013)

(The text of this summary sheet was finalised in September 2010 in accordance with the version of the RDP that was current at this time)

Relevant Contact Details

Address: B-dul Carol I, Nr. 24, Sector 3, CP 020921, Oficiul Postal 37, Bucuresti, Romania Telephone number: + 40 021 307 85 65 Managing Authority Website: <u>http://www.madr.ro/</u> Other useful links: Rural Development Programme (RDP): <u>http://www.madr.ro/pages/page.php?self=03&sub=0302&tz=030202</u> National Strategy Plan (NSP): <u>http://www.madr.ro/pages/page.php?self=03&sub=0303</u> National Rural Network: Not available



Climate Change and Renewable Energy issues in 2007-2013 RDP

Climate change (CC) is fundamental to the context for agriculture and policy making. EU agriculture must play an important role in mitigating this phenomenon by curbing greenhouse gas (GHG) emissions; at the same time it needs to adapt to the expected climatic adversities which will have serious consequences on production processes.

Rural development offers a range of possibilities to support farming practices and investments that can contribute to climate change *mitigation* efforts (including the increase of the use of *Renewable Energy* (RE) resources) and additionally effect *adaptation* benefits. CC challenges have been well recognized in the baseline analysis of the 2007-2013 EU Rural Development Programmes (RDP) and addressed in their strategies. Following the Health Check (HC) of the Common Agricultural Policy (CAP), the 'new challenges' of the RD policy include 'climate change' and 'renewable energy' for which an additional budget of approximately 1 billion EUR⁽¹⁾ have been made available for Member States (MS) to spend on this issues⁽²⁾. As a consequence, the operations related to these newly introduced Community priorities have been further strengthened in the RDPs.

Introduction - overview of the Romanian RDP

All three dimensions of climate change (mitigation, adaptation and the potential for renewable energies) are addressed by the baseline analysis provided in the Romanian RDP. These three aspects have been considered and correspondingly addressed in the RDP strategy and within the implemented measures.

According to the RDP, climate change is increasingly experienced in Romania with high temperatures, long droughts and floods becoming more frequent during the last decade. These phenomena have affected the productivity of both agriculture and forestry, as well as the

 $[\]binom{1}{1}$ 19.8% of the total additional funds released.

^{(&}lt;sup>2</sup>) The budget allocated to the 'new challenges' includes the funds released by the HC of the CAP (including voluntary modulation and transfers according to Art. 136 of Regulation (EC) No. 73/2009) and the European Economic Recovery Package (EERP).

condition of many valuable habitats and ecosystems. Despite these trends, the baseline analysis clearly states that agriculture and forestry can make an important contribution to a) climate change mitigation through the use of afforestation for the absorption and retention of GHG, and; b) the production of biomass as a renewable energy source.

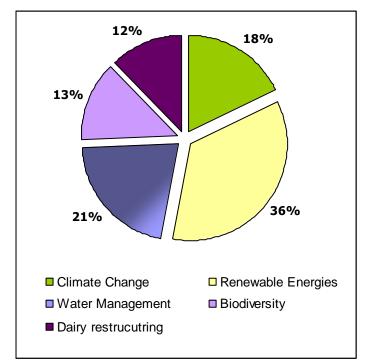
The fight against climate change is an important priority for Romania and this is reflected in the National Strategy Plan (NSP) for rural development which positions i) the mitigation of greenhouse gas emissions and climate change as a key priority for axis 2, and ii) the increased use of renewable energy sources under other axes. This commitment is further enhanced with the additional funding available under the European Economic Recovery Package (EERP) which will be used to strengthen existing activities identified in the RDP - such as improving the efficiency of nitrogen fertilisers; cultivating/processing biomass from agriculture and forestry for renewable energy; conserving biodiversity and preserving of High Nature Value (HNV) farmland; protecting water resources; avoiding further soil degradation, and; facilitating the purchasing of equipment for the production of energy other than biofuel.

Romania's response to the new challenges identified in the CAP Health Check has therefore been to strengthen existing activities related to climate change and renewable energy, rather than introduce additional measures.

Under axis 1, investment support is available for a) biofuel production and the use of biomass and other RE sources in order to reduce GHG emissions, and; b) helping meet the obligations of the Nitrate Directive and thereby improve manure management and reduce ammonia and nitrous oxide emissions. Meanwhile, axis 2 support is directed primarily towards actions that increase the adsorption of CO_2 through a) the first afforestation of agricultural and nonagricultural lands, and; b) the maintenance of extensively-managed permanent grassland, including high nature value meadows and pastures. Finally, axis 3 support is mainly targeted at supporting and encouraging the production and use of renewable energy.

Allocation of the additional resources per type of priority

The overall budget of the Romanian RDP in terms of total public expenditure amounts to 10,097,083,736 EUR of which 8,124,198,745 EUR of EAFRD and EERP contribution. This



includes an additional allocation of 101,694,000 EUR (EAFRD contribution) as a result of the new challenges raised by the HC and the adoption of the European Economic Recovery Plan (EERP).

Following these changes, additional financial support to the RDP objectives related to climate change (+18.19 million EUR, 18%, of the new EAFRD funds allocated to the programme), renewable energy (+35.72 million EUR, 36%), water management (+21.79 million EUR, 21%), biodiversity (+13.60 million EUR, 13%) and dairy restructuring (+12.39 million EUR, 12%) has been enhanced for the period 2010-2013.



Targeting investments in support towards increased production and use of renewable energy, through acquisition of equipment and investments in infrastructure and developing perennial energy crops, and more advanced management of water resources, including improved irrigation systems and water saving production techniques are the main climate change-related actions supported under the enhanced RDP strategy.

Full details of the overall RDP budget allocation can be found in the RDP fiche for Romania that is available at:

http://enrd.ec.europa.eu/app_templates/filedownload.cfm?id=D4B9C2EA-D449-1E21-FC04-0A71F0E2559C

Mitigation

Activities aimed at reducing agricultural greenhouse gas emissions

The Romanian RDP provides support for a range of activities which can help to mitigate against climate change and following the HC revision and the adoption of the EERP these have been strengthened – with important benefits also for more generally preserving natural resources and semi-natural habitats (including high nature value grasslands).

The most important measures for climate change mitigation under axis 2 are **measures 221** – *first afforestation of agricultural land* and **223** – *first afforestation of non-agricultural land*. Both of which explicitly referred to the importance of forests for a) directly contributing to the uptake of CO_2 emissions and b) preventing natural hazards, such as floods.

Measure 214 - *agri-environment payments* - further encourages CO₂ absorption (and reduced GHG emissions) via the preservation of high nature value grasslands. This includes compensatory payments for the maintenance of extensive farming practices and the avoidance of fertilizer and pesticide application.

Another measure that can possibly help to mitigate against climate change is **measure 121** – *modernisation of agricultural holdings.* Explicit reference is made under this measure to supporting investments in new processes and technologies which are aimed at addressing environmental and climate change challenges. For example, this includes reducing GHG emissions with investment in new technologies for improving fertilizer and manure use.

Adaptation

Prevention of, and coping with, potential impacts of climate change on agriculture

In terms of adapting to cope with the potential impacts of climate change a number are supported under **measures 121** – *modernisation of agricultural holdings;* **123** - *adding value to agricultural and forestry products* and **125** - *improving and developing the infrastructure related to the development and adaptation of agriculture and forestry.*

This includes support for investments in preventive actions such as dyke rehabilitation and the restoration of irrigation systems; improving water management through the purchase of equipment for efficient irrigation and water saving production techniques, and; installations for waste water treatment on farms and in processing establishments.

There are no concrete measures under axis 2 for encouraging adaptation to climate change.

Finally, measure 111 – *vocational training, information actions and diffusion of knowledge* can provide support for disseminating knowledge and improving skills in the fields of climate change mitigation and adaptation.



Axis/Measure	Description	Type of operation	Potential effects
Axis I			
Measure 121	Modernisation of agricultural holdings	Improved efficiency of nitrogen fertilizer use (e.g. low usage, equipments, practicing a fertilizers management based on accurate quantities), improving the fertilizers storage Installations for waste water treatment on farm and in processing and marketing	Reduction of methane (CH ₄) and nitrous oxide (N ₂ O) emissions Improvement of the capacity to use water more efficiently
Measure 123	Adding value to agricultural and forestry products	Production techniques for water saving	Improvement of the capacity to use water more efficiently and improve the water storage capacity
Measure 125	Improving and developing infrastructure related to the development and adaptation of agriculture and forestry	Techniques for water saving by carrying out investments in efficient irrigation systems	Improvement of the capacity to use water more efficiently
Axis II			
Measure 214	Agri-environment payments	Maintenance of extensive grassland management Extensification of livestock production (e.g. reduction of stocking density) Not appliance of fertilisers and pesticides on agricultural land with high natural value. Perennial crop with high natural value management, creating and preserving pastures.	Carbon sequestration Reduction of methane (CH ₄) and nitrous oxide (N ₂ O) emissions Preserving the types of vegetation rich in species, pastures protecting and maintenance Preserving birds and other wild animals and improving biotopes network, decreasing the getting through of harmful substances in riverain habitats; preserving protecting fauna and flora

Main RDP measures which contribute to address CC mitigation/adaptation issues



Axis/Measure	Description	Type of operation	Potential effects
Measure 221	First afforestation of agricultural land	Establishment of forests	Uptake of CO ₂ emissions Prevention of natural hazards
Measure 223	First afforestation of non- agricultural land	Establishment of forests	Uptake of CO ₂ emissions Prevention of natural hazards

Renewable energies

Electricity, heating and transport fuels produced from biomass (such as biofuels, biogas) and other renewable sources (solar, wind, geothermal)

The Romanian RDP integrates several aspects of renewable energy. In particular, Romania has a competitive advantage due to its geographical position in exploiting potentials for producing different types of renewable energy: solar energy, wind energy, biomass and geothermal energy. Furthermore, there is a need and hence opportunity to develop a domestic biofuel market in order to meet EU membership regulations on consuming bio-fuels domestically. Central to the RDP strategy, and strengthening already existing operations with additional funding received from the EERP, is to cultivate perennial biomass crops and to process agricultural/forestry biomass for renewable energy in order to substitute fossil fuels and carbon sequestration, decrease N_2O and hence contribute to fighting climate change.

Additional support is given to purchasing equipment for producing energy from other sources than biofuels in addition to investing in systems for producing and supplying renewable energy for on-farm consumption.

The key measure for supporting renewable energies under axis I is **measure 121** - *modernisation of agricultural holdings*. The measure supports investments in cultivating forestry species with a short rotation coppice and re-generation through vegetative ways in order to produce renewable energy. The measure, whose rationale has addressed the new challenges raised by the HC, seeks to reduce the environmental effects of agriculture with specific mention of, increasing the use of renewable energy sources and improving the efficiency of its use. Finally, reduction of GHG emissions (climate change mitigation) is another positive effect addressed by the measure.

In this context, **measure 123** - *adding value to agricultural and forestry products* addresses renewable energy through investments in the production and use of renewable energies and the generation of biofuels. Furthermore, measure 125 – *improving and developing the infrastructure related to the development and adaptation of agriculture and forestry* is mentioned in the RDP to support actions that promote the usage of renewable energy.

For all the three aforementioned measures, attention is given to investments in improved irrigation systems, including those for water storage and waste water treatment, for producing and using energy from renewable sources.

As a result of the challenges identified by the HC of the CAP existing sub-measures have been reinforced under axis III in order to support investments in the production of renewable energy in rural areas.



Measure 312 – *support for the creation and development of micro-enterprises* supports investments in the acquisition of equipment for producing energy from other than biofuel renewable sources. The objective is to produce sustainable energy at local level while ensuring other positive results on local non-agricultural employment and environment. The measure can be used in combination with support under measure 123 for related on-farm facilities. As a complementary action, **measure 322** – *village renewal and development, improving basic services for the rural economy and population and upgrading of the rural heritage* supports investments in energy production and supply systems using renewable resources as part of an integrated project, e.g. in the case of a renovation of a public building etc.

Under axis II, **measure 221** – *first afforestation of agricultural land* supports the establishment of forests in designated areas. Among the other benefits produced by this scheme on environmental protection (water and air quality, soil protection, uptake of CO_2), the measure contributes to a potential increase in the production and use of renewable energy in the form of wood as sustainable energy source to replace fossil fuels.

Finally, measure 111 – *vocational training, information actions and diffusion of knowledge* can provide support for disseminating knowledge, improving skills and qualifying for implementing new green technologies on the field.

Axis/Measure	Description	Type of operation	Potential effects			
Axis I						
Measure 121	Modernisation of agricultural holdings	Perennial energy crops (short rotation coppice and herbaceous grasses)	Substitution of fossil fuels			
Measure 123	Adding value to agricultural and forestry products	Processing agricultural/forestry biomass for renewable energy	Substitution of fossil fuels			
Axis II						
Measure 221	First afforestation of agricultural land	Increase in the production and use of renewable energy	Substitution of fossil fuels			
Axis III						
Measure 312	Support for the creation and development of micro-entreprises	Purchasing equipments for producing energy from other sources than biofuel	Substitution of fossil fuels			
Measure 322	Village renewal and development, improving basic services for the rural economy and population and upgrading of the rural heritage	Investments in systems for producing and supplying renewable energy (provided that the buildings have a public character)	Substitution of fossil fuels			

Main implemented RDP measures related to the development of RE sources