

HUNGARY

Új Magyarország Vidékfejlesztési Program - December 2008

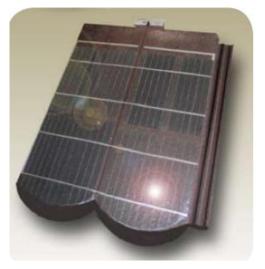
(Programme for Development of Rural Regions 2007-2013)

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

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Managing Authority Website:

http://www.fvm.hu

Other useful links:

Rural Development Programme (RDP):

http://www.fvm.gov.hu/doc/upload/201003/nhrdp v5 2009.pdf

National Strategy Plan (NSP):

http://www.fvm.hu/doc/upload/200701/nhrdsp 2007 01 12 os.pdf

National Rural Network (NRN):

http://www.mnvh.eu/

Climate Change and Renewable Energy issues in 2007-2013 RDP

Climate change (CC) is a fundamentally important issue in the context of 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 in the use of *Renewable Energy* (RE) resources) and additionally effect *adaptation* benefits. CC challenges have been well recognised in the baseline analysis of the 2007-20013 EU Rural Development Programmes (RDP) and are 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 the new challenges an additional total budget of approximately €1 billion⁽¹⁾ has been made available to Member States (MS) (2). As a result, the operations related to these newly introduced EU priorities have been further strengthened in the RDPs.

1 (08/2010)

^{(1) 19.8%} of the total additional found released.

^{(&}lt;sup>2</sup>) The budget allocated to the 'new challenges' includes the funds released by the Health Check 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).



Introduction - overview of Member State RDP(s)

All three aspects of climate change (mitigation, adaptation and the potential for renewable energies) are addressed in the baseline analysis provided by the Hungarian RDP. These three aspects have been considered and addressed by the RDP strategy and within the implemented measures. Importantly, they seek to present a framework to respond to climate change and to adhere to international standards established by the Kyoto Protocol.

Agricultural infrastructure is generally viewed as less than effective in terms of environmental performance. The RDP strategy therefore proposes that investments be made available for energy saving and resource efficient technologies for agricultural production and processing. In addition, the production of renewable energy is seen as pivotal to meeting EU regulations and responding to climate change. Funding targets crop production for energy purposes and infrastructure utilising bioenergy. To further strengthen the renewable energy sector as well as diversify the rural economy, the RDP also supports micro-enterprises and other rural entrepreneurial activities which utilise such technologies.

Although environmental pollution from agricultural sources is low in Hungary as compared to other European countries, investments are required to maintain these conditions in the long term. Therefore, holdings will have the opportunity to modernise in order to reduce negative environmental emissions such as nitrate discharges which contaminate both soil and water. This will include manure and fertiliser storage facilities.

In addition, agri-environment practices are also perceived as a means of reducing the negative impact of farming on the environment. Sustainable farming practices are therefore promoted, which are linked to improved soil and water management and the mitigation of - and adaptation to - climate change. This includes organic farming, extensive farming and the conversion of agricultural land into grasslands. Moreover it is intended that agri-environment practices will also help to preserve and strengthen Hungary's rich biodiversity and high nature value (HNV) areas which are under threat from loss of habitats. These include activities for arable farming linked to protecting biodiversity, establishing wetlands, establishing production features in line with habitats and protecting plant genetic resources.

The preservation of forests is a key aspect of the baseline analysis of the RDP strategy which identifies the strengthening of forest management as central to improving the economic role of forests, as well as mitigating climate change. As a result of deteriorating forest conditions, caused by factors such as a lack of capital and use of non-ingenious tree species, the RDP recommends a number of forestry development activities. These include projects to introduce indigenous trees, improve the forest water balance and enhance forest soils. In addition, reafforestation and agri-forestry schemes are recognised as important opportunities to respond to climate change, enhance biodiversity and introduce renewed environmental potential into the sector.

The unbalanced distribution of water is exacerbated by climate change factors but mainly results from Hungary's geographical location in a basin, relief conditions and the alternating shortage and prevalence of precipitation which leads to an excess of water in certain areas and water shortages elsewhere. Investments are therefore proposed for the preservation and use of water resources in a rational way, through improved irrigation, water storage and water retention capacities. Particular emphasis is placed on achieving good water quality standards as outlined in the Water Framework Directive to be supported by initiatives such as the changing of land use and establishing wetlands.

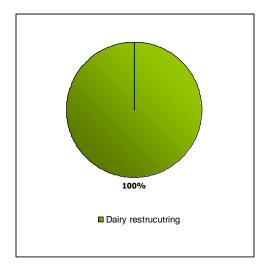
Some other aspects of the strategy do not directly mention climate change, but are closely linked. The condition of the soil in Hungary is under threat from a number of degradation processes such as wind and water erosion and soil compaction. According to estimates, 1.5



million tonnes of organic matter are lost per year. The RDP therefore suggest amelioration projects which can mitigate the harmful effects of agricultural production. This includes agrienvironment activities to reduce the impact on soil; agricultural and forestry infrastructure to reduce soil compaction processes; and afforestation of agricultural land to improve soil quality.

Modifications introduced by the Health Check, which were incorporated in the updated 2009 RDP, have aligned the RDP strategy towards restructuring the dairy sector through initiatives to improve animal welfare. These include funding for various areas, as outlined in the 'adaptation' section below, improving the housing conditions for milking cows, preventing diseases and applying better hygiene and feeding standards. The impact of the measure will have positive environmental effects by reducing the sources of pollution (ammonia and nitrates).

Allocation of the additional resources



The overall budget of the Hungarian RDP in terms of total public expenditure amounts to €5,256,813,362 of which €3,860,091,392 comprises the EAFRD contribution.

This includes an additional allocation of €54,248,000 (EAFRD contribution) as a result of the new challenges raised by the HC and the adoption of the European Economic Recovery Plan (EERP).

The additional funds will be **entirely directed** towards the restructuring of the dairy sector. No additional funds were allocated for climate change mitigation.

Further details of the overall RDP budget allocation for Hungary are available at:

http://enrd.ec.europa.eu/rural-development-policy/country-information/rural-development-policy-fiches/en/rural-development-policy-fiches home en.cfm

Mitigation

Activities aimed at reducing agricultural greenhouse gases emissions

The Hungarian RDP provides comprehensive support for a range of activities to mitigate climate change through the strengthening of agricultural and forestry activities. In terms of supporting agriculture, investments will encourage improved manure management; develop farming practices with a limited environmental impact such as organic farming; encourage the use of energy efficient processing equipment; and utilise technologies with improved environmental performance. For the forestry sector, the RDP places much emphasis on improving the condition of forests through silviculture investments; afforestation of agricultural and non-agricultural land; developing agro-forestry systems; developing forests with indigenous species; and protecting forests against natural catastrophes.

A key measure which supports mitigation activities is **Measure 121** – modernisation of agricultural holdings - which provides financial aid for energy saving and environmentally friendly equipment and techniques. It also aims to meet EU standards, in particular the Nitrate Directive in relation to the livestock sector. This includes upgrading farm infrastructure with



machinery and technology with improved environmental performance; connecting to communal energy supplies; and technology which improves manure storage and management.

The main aim of **Measure 214** – *agri environment payments* - is to encourage farmers to adopt production methods which are compatible with the sustainable use of landscape, environment and natural resources. The intention is that the funded activities encourage environmentally conscious farming, reduce agricultural pollution, reverse biodiversity decline and to protect soil and water resources. These include introducing integrated production schemes to limit nutrient inputs and organic crop production, extensive grassland management and the conversion of arable land into grasslands. The implementation of the measure will have an indirect positive affect on mitigating climate change.

The initiatives funded by **Measure 216** – Assistance provided for non-productive investments aim to support agri-environment provisions by conserving the rural landscape and enhancing biodiversity. These include non-productive investments for planting hedgerows; planting trees for wind-breaks/shelters; establishing grass margins; establishing grasslands for land use changes and nature conservation; and establishing green cover. The impact of the measure will have an indirect positive effect on mitigating climate change.

The objective of **Measure 123** – *Adding value to agricultural products* - is to increase the technological development and restructuring of enterprises, which includes investments in (processing) equipment that are energy and resource efficient and have a reduced environmental impact in terms of emissions.

The provision of funds by **Measure 122** – *Improving the economic value of forests* - aims to ameliorate the current condition of forests and improve the quality and volume of wood. This includes investments in equipment and technology for silviculture and investments for sustainable forestry in Less Favoured Areas (LFAs).

Funding under **Measure 221** – *The first afforestation of agricultural land* - aims to increase the forest cover of the country through the establishment of high biodiversity natural forests with a high ratio of indigenous tree species. As a result of the land use changes, the measure will contribute significantly to mitigating climate change. Similarly, **Measure 223** – *The first afforestation of non-agricultural land* - will deliver similar activities to Measure 221, but will cover the land areas which are not entitled to support under the previous measure.

Measure 222 – *First establishment of agro-forestry systems on agricultural land* - aims to support the development of combined agriculture and forestry. The selection of trees for agriforestry will be carefully selected to provide for the multi-purpose and alternative use of agricultural land. This will include tree lines for keeping animals; the planting of arboreal plants and herbs for wooded grazing areas; trees and grassland to protect shrubbery; extensive grazing; broad networks of trees for industrial production; forest fruit; and medicinal herb and honey production.

The forest-environment payments under **Measure 225** - Forest-environment payments - support a number of schemes to promote the sustainability of forests in line with the Water Framework Directive and Kyoto Protocol. The schemes offer support for preventing the expansion of non-indigenous tree and shrub species; sustainable forest management; establishing natural mixed forests; reducing clear-cutting with artificial regeneration; ensuring the conditions for special forest habitats and natural forest regeneration; postponing final felling; maintaining forests for public welfare services; creating and maintaining forest clearings; and protecting the forest soil.

The initiatives under **Measure 226** – *Restoring forestry potential and introducing preventative actions* - will offer support to reconstitute the potential of forests which have been hit by



natural catastrophes, as well as instigating preventative actions. The operations include the establishment of protective infrastructure and protective forestry management; and the creation and development of forest fire monitoring establishments and communication tools.

Measure 227 — *Non-productive investments on forest areas* - aims to combat the degradation of private forests, in particular as a result of the spreading of non-indigenous species. Hence, the activities under this measure are targeted at fostering the development of indigenous forests and improving biodiversity. These include activities for converting non-indigenous forests to indigenous forests; enhancing biodiversity and improving forests soils.

A number of measures do not directly mention climate change, but fund activities that support mitigation measures. For example, assistance offered through **Measure 111** – *Vocational training and information activities* - will support the professionalisation of the agricultural and forestry sectors through activities such as training courses, information sessions and awareness raising. These include training on sustainable farming (cross compliance requirements, organic farming, Water Framework Directive and environmental technologies) and obligatory training in relation to axis 1 and 2 (agri-environment payments, forestry payments, Natura 2000 payments, adding value to agriculture and forestry products and modernisation of agricultural holdings).

Also the objective of **Measure 114** – *Use of advisory services* - provides advisory services to farmers and foresters in order to enhance agricultural sustainability. These include providing advice on regulations relating to maintaining environmental standards and agri-environment cross compliance standards.

Adaptation

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

In terms of adapting to the potential impacts of climate change, a number of actions have received support through the RDP. Opportunities for funding activities therefore include investments in farm infrastructure to improve water management; establishing wetland habitats; enhancing biodiversity; improving animal welfare and strengthening irrigation systems.

A key measure which seeks to support adaptation activities is **Measure 121** – *Modernisation of agricultural holdings* - which provides financial aid for energy saving and environmentally friendly equipment and techniques, as well as meeting EU standards - in particular the Nitrate Directive in relation to the livestock sector. These include upgrading farm infrastructure with machinery and technology that have an improved environmental performance; water management and irrigation equipment (in compliance with the Water Framework Directive); and connection to communal water supply networks.

The main aim of **Measure 214** – *Agri environment payments* - is to encourage farmers to adopt production methods which are compatible with the sustainable use of landscape, environment and natural resources. The intention is that the funded activities strengthen environmentally aware farming, reduce agricultural pollution, reverse biodiversity decline and protect soil and water. These include introducing arable farming to protect biodiversity; soil protection activities that limit wind and soil erosion; establishing and managing wetland habitats; and the conservation of plant genetic resources.

Activities implemented under **Measure 125** – *Infrastructure related to the development and adaptation of agriculture and forestry* - aim to introduce water and energy efficient irrigation



management facilities (in compliance with the Water Framework Directive) that reduce the harmful impact of climate change. These include investments for communal water supply, irrigation sites, and amelioration investments for retaining and storing water reserves. In addition, investments will also cover forest infrastructure to reduce soil erosion, establish reservoirs, drain harmful waters and construct exploration roads.

As a result of the finance provided by the Health Check, **Measure 215** – *Animal welfare payments* - aims to support the restructuring of the dairy sector through funding for improvements in animal welfare. This includes decreasing stocking density and providing outdoor access where possible; improving housing and feeding conditions for cows; preventing diseases and parasite infections; applying better hygiene and feeding standards; and promoting high quality production. The measure will also reduce the sources of nitrate and ammonia pollution.

The initiatives funded by **Measure 216** – Assistance provided for non-productive investments aim to support agri-environment provisions by conserving the rural landscape and enhancing biodiversity. These include support for non-productive investments such as fencing on grasslands; providing instruments made from natural materials for the protection of birds; and establishing winter refuges for insects.

There are some measures which do not directly mention climate change, but which fund activities that support adaptation activities.

Special management activities provided by **Measure 213** – *Natura 2000 payments on agricultural areas* - will contribute to protecting biodiversity in Natura 2000 territories. These relate to supporting agricultural producers, disadvantaged as a result of the implementation of EU directives on the protection of birds, flora and fauna, so they can continue with sustainable land practices.

Assistance offered by **Measure 111** – *Vocational training and information activities* - will support the professionalisation of the agriculture and forestry sector through activities such as training, courses, information sessions and awareness raising. These include training on sustainable farming (cross compliance requirements, organic farming, Water Framework Directive and environmental technologies) and obligatory training in relation to axis 1 and 2 (agri-environment payments, forestry payments, Natura 2000 payments, adding value to agriculture and forestry products and modernisation of agricultural holdings).

The objective of **Measure 114** — use of advisory services - is to offer advisory services to farmers and foresters in order to enhance agricultural sustainability. These include providing advice on regulations relating to maintaining environmental standards and agri-environment cross compliance standards.

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

Axis/Measure	Description	Type of Operation	Potential Effects		
Axis 1	Axis 1				
Measure 121	Modernisation of agricultural holdings	The operations include upgrading farm infrastructure with machinery and technology with improved environmental performance; connecting to communal	Significant increase in the environmental performance of holdings in terms of energy efficiency, water management and limiting the sources of pollution.		



Axis/Measure	Description	Type of Operation	Potential Effects
		energy supplies; technologies for improved manure storage and management; water management and irrigation equipment and connection to communal water supply networks.	
Measure 123	Adding value to agricultural products	The investments funded by this measure include (processing) equipment that is energy and resource efficient and has a reduced environment impact in terms of emissions.	Large number of firms supported that introduce energy efficient and environmentally friendly (processing) equipment.
Measure 125	Infrastructure related to the development and adaptation of agriculture and forestry	Activities aim to introduce investments for communal water supply, irrigation sites, and amelioration investments for retaining and storing water reserves. In addition, investments will also cover forest infrastructure to reduce soil erosion, establish reservoirs, drain harmful waters and construct exploration roads.	A large number of environmental investments will be introduced that improve water management and land consolidation and improvement.
Measure 122	Improvement of the economic value of forests	The operations aim to ameliorate the current condition of forests and improve the quality and volume of wood. This includes investments in equipment and technology for silviculture and investments for sustainable forestry in Less Favoured Areas.	Significant increase in the number of forestry owners who introduce new equipment and technology for improved silviculture and introducing sustainable forestry methods.
Axis 2	T		
Measure 214	Agri-environment payments	The measure aims to facilitate environmentally-friendly farming through multiple activities. These include introducing integrated production schemes;	The implementation of the measure will have an indirect positive affect on mitigating climate change as well as having a direct positive effect on



Axis/Measure	Description	Type of Operation	Potential Effects
		and organic crop production; extensive grassland management; conservation of biodiversity and genetic resources; soil protection activities; establishing and managing wetland habitats.	reversing biodiversity decline and improving water and soil quality.
Measure 215	Animal welfare payments	This measure provides funding for improvements in animal welfare in relation to the restructuring of the dairy sector.	The measure will improve environmental conditions and animal welfare, increase the ratio of high quality milk and strengthen consumer trust.
Measure 221	First afforestation of agricultural land	The measure aims to increase forest cover through the establishment of high biodiversity natural forests with a high ratio of indigenous tree species.	As a result of the land use changes, the measure will contribute significantly to mitigating climate change.
Measure 225	Forest environment payments	This measure funds a number of schemes to support the sustainability of forests in line with the Water Framework Directive and Kyoto Protocol.	The measure will enhance the sustainability of forests and will have a direct positive effect on mitigating climate change.
Measure 227	Non-productive investments on forest areas	The activities under this measure are targeted at fostering the development of indigenous forests and improving biodiversity. These include activities to convert non-indigenous forests to indigenous forests; enhancing biodiversity and improving the forests soils.	The impact of this measure will strengthen forests with indigenous tree species and have a direct positive effect on combating climate change.
Measure 216	Assistance provided for non-productive investments	The initiatives aim to support agri-environment provisions by conserving the rural landscape and enhancing biodiversity such as fencing on	The impact of the measure will introduce numerous investments that conserve the landscape and biodiversity which will have an indirect positive



Axis/Measure	Description	Type of Operation	Potential Effects
		grasslands and establishing grasslands for land use changes.	effect of tackling climate change.
Measure 226	Restoring forestry potential and introducing preventative actions	The operations include establishing protective forest infrastructure and protective forestry management; and the creation and development of forest fire monitoring establishments and communication tools.	The implementation of the measure will help to protect forests from natural disasters and have a direct positive effect in combating climate change.
Measure 223	First afforestation of non-agricultural land	The measure aims to increase the forest cover of the country through the establishment of high biodiversity natural forests with a high ratio of indigenous tree species.	As a result of the land use changes, the measure will contribute significantly to mitigating climate change.
Measure 222	First establishment of agro-forestry systems on agricultural land	The operations aim to support the development of combined agriculture and forestry. This will include tree lines for keeping animals; the planting of arboreal plants and herbs for wooded grazing areas; trees and grassland to protect shrubbery; extensive grazing; broad networks of trees for industrial production; forest fruit; and medicinal herb and honey production.	A large area of land will be under agro-forestry production which will have a direct positive effect on mitigating climate change.

Renewable Energy

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

The Hungarian RDP specifically encourages the development of the renewable energy sector. This includes efforts to develop renewable energy on farms such as growing energy crops and investments for biogas, geothermic, wind-wheel and biodiesel energy (axis 1). In addition, initiatives are geared towards developing the rural economy and businesses, in the area of renewable energy (axis 3).



A key measure which seeks to support renewable energy activities is **Measure 121** – *Modernisation of agricultural holdings* - which provides financial aid in relation to diversifying agriculture and promoting the production of renewable energy including the plantation of short rotation coppice for energy purposes, as well as storage facilities and harvesting equipment; utilisation of wind-wheel energy supply technology; investments for biogas facilities; investments for the use of on-farm biodiesel; and investments for the utilisation of geothermic energy.

The objective of **Measure 123** – *Adding value to agricultural products* - is to increase the technological development and restructuring of enterprises, which includes the processing of biomass for energy purposes.

Activities implemented under **Measure 125** – *Infrastructure related to the development and adaptation of agriculture and forestry* - aim to promote the use of biomass in agricultural holdings; biodegradable municipal waste for energy efficiency purposes; and geothermic energy in greenhouses.

The initiatives to support entrepreneurship under **Measure 312** - *Support for business creation and development* - aim to establish and develop micro-enterprises in the field of energy efficiency and renewable energy (investments will be available for construction, building, renovation, modernisation and engineering).

Measure 311 – *Measures to diversify the rural economy* - aims to achieve its goals through activities that support sustainable environmental development. Funds are therefore targeted towards engineering, construction and building initiatives that increase energy efficiency and utilise renewable energy.

Assistance offered by **Measure 111** – *Vocational training and information activities* – indirectly supports renewable energy activities through the provision of training courses, information sessions and awareness raising. These include training on the production, utilisation and processing of biomass for energy purposes and the raising of awareness of health and safety with regard to renewable energy technologies.

Main implemented RDP measures related to the development of RE sources

Axis/Measure	Description	Type of operation	Potential effects
Axis 1			
Measure 121	Modernisation of agricultural holdings	This measure provides investments in the field of renewable energy including energy crops, geothermic energy, biodiesel, wind-wheel energy and biogas. In the case of on-farm diversification small-scale on-farm bio-diesel facilities using own rawmaterial can also be supported, including bio-diesel for private use.	Increase in the number of holdings utilising renewable energy.



Axis/Measure	Description	Type of operation	Potential effects
Measure 123	Adding value to agricultural products	The investments funded by this measure include processing equipment for biomass energy and the establishment of small capacity bioethanol plants.	Large number of firms supported that introduce biomass processing equipment.
Measure 125	Infrastructure related to the development and adaptation of agriculture and forestry	Activities aim to introduce investments for the use of biomass in agricultural holdings; biodegradable municipal waste for energy efficiency purposes; and geothermic energy in greenhouses.	A large number of environmental investments will be introduced that exploit renewable energies.
Axis 3			
Measure 312	Support for business creation and development	The measure aims to establish and develop microenterprises in the field of energy efficiency and renewable energies.	Increase in the number of activities and jobs connected to the development of renewable energies
Measure 311	Measures to diversify the rural economy	Funds are targeted towards engineering, construction and building initiatives that increase energy efficiency and utilise renewable energies. In case of investments in renewable energy on the farm, investments, which generate revenue on the farm.	Increase in the number of activities and jobs connected to the development of renewable energies.