

## LITHUANIA

**Kaimo plėtros 2007–2013 metų programa** – Rural Development Programme for Lithuania 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)*



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### Relevant Contact Details

**Address:** Gedimino av. 19 (Lelevelio 6),  
LT-01103 Vilnius, Lithuania

**Telephone number:** +370 5 2391111

**Managing Authority Website:** <http://www.zum.lt>

**Other useful links:**

Rural Development Programme (RDP):

[http://www.zum.lt/min/index.cfm?fuseaction=displayHTML&file=File\\_202.cfm&langparam=EN](http://www.zum.lt/min/index.cfm?fuseaction=displayHTML&file=File_202.cfm&langparam=EN)

National Strategy Plan (NSP) (available only in Lithuanian): <http://www.zum.lt/lt/zemes-ukio-ministerija/kaimo-pletra/parama-pagal-2007-2013-m--programos-priemones/kaimo-pletros-2007---2013-metu-programa-ir-strategija/>

National Rural Network (NRN): <http://www.kaimotinklas.lt>

### Climate Change and Renewable Energy issues in 2007-2013 RDP

Climate change (CC) is fundamental to the changing context of agricultural 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<sup>(1)</sup> have been made available for Member States (MS) to spend on this issues<sup>(2)</sup>. As a consequence, the operations related to these new EU priorities have been further strengthened in the RDPs.

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<sup>(1)</sup> 19.8% of the total additional funds released.

<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).

## Introduction - overview of Member State RDP

All three dimensions of climate change (mitigation, adaptation and the potential for renewable energies) are addressed with varying emphasis by the baseline analysis provided in the Lithuania RDP. The relative importance of each of these three aspects has been considered and correspondingly addressed in the RDP strategy and within the measures implemented under axes 1, 2 and 3.

The priorities of the Health Check (HC) and the European Economic Recovery Plan (EERP) of climate change, renewable energy, water management and biological diversity have been successfully addressed and implemented under the original RDP, hence modifications to the programme focus on the most critical challenges for Lithuania. These are renewable energies, restructuring of the dairy sector and broadband development.

One of the main challenges clearly identified by the RDP relates to the development of renewable energies in order to exploit the untapped reserves of bio-energy and renewable energy sources. A second challenge is climate change mitigation in order to address the adverse effects of agricultural processes on emissions and to draw on forest resources for maximising carbon sequestration and protection of underground and surface waters. A third challenge is adaptation to climate change through efficient water management, in particular drainage management.

Rural areas occupy most of Lithuania (97.4% of the territory) and agriculture is the main economic activity occupying almost 40% of rural areas. From this, 48% is arable land, 45% is grasslands and pastures and rest is covered by orchards or used as fallow land and other purposes. Intensive farming practices, including the use of fertilisers and pesticides, accounts for a significant part of the GHG emissions from agriculture. There are also large areas of abandoned land, lack of sustainable forest management and poor technical conditions of water management systems which constitute further weaknesses in the fight against climate change.

The RDP strategy takes account of these weaknesses and stresses the mitigation of climate change as an explicit environmental objective of axis 2.

In relation to mitigation, the baseline analysis stresses the increase in greenhouse (GHG) emissions between 2000 and 2004 and the steps the government is taking to meet emissions ceilings set for 2020. The reduction of methane and ammonia emissions from inappropriate storage and use of fertilisers and liquid manure is, for example, one of the key objectives in implementing the Lithuanian Action programme under the EU Nitrate Directive. As the majority of farms lack proper manure storage capacities, methane and ammonia emissions are quite common. In addition, the use of fertilisers especially in intensive farming contributes to nitrous oxide emissions.

The RDP strategy therefore promotes the improvement of technology, equipment and storage facilities through '*modernisation of agricultural holdings*' under axis 1 and the adoption of environmentally friendly cultivation and production techniques through '*agri-environment*' measures under axis 2.

The RDP strategy also addresses climate change mitigation through land use change and especially the afforestation of abandoned lands. According to the baseline analysis about 500,000 - 600,000 hectares of agricultural land were not used for agricultural purposes in

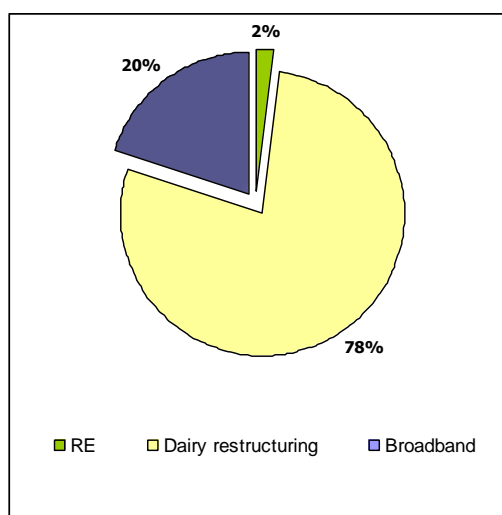
2005. Much of this was abandoned land and is now targeted by the 'afforestation measures' of axis 2.

The main issue in relation to adaptation to climate change as stated in the baseline analysis is water management, notably drainage to remove excess water. Around 80% of farmland in Lithuania requires drainage, however 54% of drainage systems are out of date and around 15% of drained areas are of low quality. The RDP strategy therefore promotes the renovation of drainage systems under measures for the 'modernisation of agricultural holdings' or 'infrastructure related to adaptation of agriculture' under axis 1.

The National Energy Policy for Lithuania stresses the importance of renewable energies with the objective that by 2010 renewable energies should account for 12% of the total energy mix. This is further supported by a 2004-2010 national programme for the promotion of the production and use of bio-fuel, including sources such as wood, straw, municipal waste, biogas and bio-fuel. Renewable energies are therefore particularly emphasised both in the original and the revised RDP following the CAP HC and the EERP.

The RDP strategy highlights the importance of renewable energies for reducing fuel imports and CO<sub>2</sub> and other emissions as well as for job creation in this field. The RDP strategy therefore promotes investments in energy production equipment, the introduction of new technologies to ensure efficient use of resources and the adaptation of existing equipment in order to use local and renewable energy sources, in particular in the context of 'modernisation of agricultural holdings' under axis 1, but also under axis 3.

A special feature of the strategy is that it highlights co-operation with experts and companies from other countries to achieve transfer of knowledge and know-how in this field. The revised RDP also stresses renewable energies by allocating additional funding to measure 121 for the production of perennial energy crops, while it also supports the installation of renewable energy power stations under axis 3 measures.



#### Allocation of the additional resources per type of priority

The overall budget of the Lithuanian RDP in terms of total public expenditure amounts to €3,145,885,773 of which €1,765,794,093 is the EAFRD contribution. This includes an additional allocation of €22,434,000 (EAFRD contribution) for new challenges, including €434,000 for renewable energy sources as a result of the adoption of the CAP Health Check (HC) and the European Economic Recovery Package (EERP).

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

[http://enrd.ec.europa.eu/rural-development-policy/country-information/rural-development-policy-fiches/en/rural-development-policy-fiches\\_home\\_en.cfm](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 gas emissions*

Mitigation of climate change is one of the specific objectives of axis 2 in the Lithuanian RDP and is also mentioned as an operational objective under measure 121 of axis 1. The RDP provides comprehensive support for a range of activities which could contribute to reducing agricultural emissions, in particular through agri-environment measures, manure management, afforestation of agricultural land and Natura 2000 payments.

The main measure through which the RDP seeks to support efforts to reduce agricultural GHG emissions is **measure 214 - agri-environment payments** - although other measures also contribute. This measure, which comprises 42% of the total axis 2 budget, includes mitigation of climate change as an explicit operational objective. A significant number of operations are referenced under this measure which could help to reduce emissions, such as support for organic farming; activities related to the management of wetlands and natural and semi-natural meadows which include provisions for reduced fertiliser use and livestock grazing restrictions, and; a scheme for the conversion of arable land into permanent pasture (meadow).

Also under Axis 2, **measure 221 - first afforestation of agricultural land** – and **measure 223 – first afforestation of non-agricultural and abandoned land** - support afforestation activities stating explicitly their importance for carbon sequestration and biomass production in the context of climate change mitigation.

There are further measures under axis 2 that include climate change mitigation in their specific operational objectives. These are measures related to Natura 2000 areas (**measure 213 – Natura 2000 payments and payments linked to the Directive for support of Natura 2000 areas in agricultural land** – and **measure 224 – Natura 2000 payments**). In addition, **measure 212 – payments to farmers in less favoured areas** - includes a specific result target of 110,000 hectares of land managed successfully with a view to mitigate climate change.

Another key measure is found under axis 1, **measure 121 – modernisation of agricultural holdings** – which makes provision for investment in new manure and slurry management facilities and equipment for livestock farms. Although the purpose of these investments is to help farmers meet the requirements of the Nitrates Directive they also have important benefits for reducing GHG emissions.

Further support for activities which could help to mitigate climate change is possible under **measure 114 – use of advisory services**. This measure includes a specific activity which involves advisory services on agri-environmental issues for farmers who intend to participate in agri-environmental schemes.

## Adaptation

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

In terms of preventing and coping with the potential impacts of climate change the main emphasis in the Lithuanian RDP is upon the renovation/improvement of drainage, followed by preventive actions against natural risks.

One of the main measures through which the RDP addresses adaptation to climate change is found under axis 1, namely, **measure 125** - *infrastructure related to the development and adaptation of agriculture and forestry*. The key focus of this measure is on the improvement of drainage infrastructure as a basis for viable agriculture. In order to address the persistent problem of inadequate operation of drainage systems, the measure covers water management operations such as reconstruction of drainage systems and renovation of hydro-technical constructions in artificial water bodies.

Another important measure under axis 1 is **measure 121** – *modernisation of agricultural holdings* – which supports, amongst others, investments in the construction and reconstruction of drainage and water equipment.

Under axis 2, **measure 226** - *restoring forestry potential and introducing prevention actions* – is first of all intended to contribute to restoration of private and state forests affected by natural disasters and fires. It is also planned to support relevant preventive measures thereby preserving the environmental and economic value of forests. The measure includes investments in the restoration of forests affected by natural disasters, installation, renovation and maintenance of fire protection barriers, fire prevention plans, forecasting and monitoring equipment and systems, fire prevention dissemination installations and equipment, creation of water collection points and artificial water reservoirs.

Again under axis 2, **measure 214** – *agri-environment payments* - supports the management of wetlands, prevention of soil erosion etc. All of which will contribute to the maintenance of diverse habitats and viable agro-ecosystems in the face of changing climatic conditions.

In addition to mitigation, **measure 114** – *use of advisory services* – promotes adaptation through emphasis on increasing awareness about the implementation of agri-environmental measures.

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

Axis/ Measure	Description	Type of operation	Potential effects
<b>Axis 1</b>			
Measure 121	Modernisation of agricultural holdings	Installing manure storage facilities and sewage tanks.  Construction and reconstruction and drainage and water equipment.	Reduced GHG emissions.  Improved water management.
Measure 125	Infrastructure related to the development and adaptation of agriculture and forestry	Construction, reconstruction and renovation of drainage systems.  Renovation of hydro technical constructions in artificial water bodies.	Reduce excess moisture of soils.  Improved efficiency of water use.
Measure 114	Use of advisory services	Provision of advisory services to increase awareness and improve implementation of agri-environment schemes.	Improved farmer awareness of climate mitigation and adaptation issues.

Axis/ Measure	Description	Type of operation	Potential effects
<b>Axis 2</b>			
Measure 214	Agri-environment payments	Organic farming. Management of wetlands. Management of natural and semi-natural meadows. Conversion of arable land into permanent pasture. Stubble field in winter period.	Reduced use of fertilisers and phytosanitary products.  Reduced GHG emissions.  Increase in the area of land under organic farming.  Increased area of permanent grassland.  Reduced area of agricultural land at risk of soil erosion.  Maintenance of diverse agro-ecosystems.
Measure 221	First afforestation of agricultural land	Afforestation activities.	Counteracting climate change through the uptake of CO <sub>2</sub> .
Measure 223	First afforestation of non-agricultural and abandoned land	Afforestation activities.	Counteracting climate change through the uptake of CO <sub>2</sub> .
Measure 226	Restoring forestry potential and introducing preventive actions	Installation, renovation and maintenance of fire protection barriers and belts of deciduous trees.  Fire prevention plans.  Forecasting and monitoring equipment and systems.  Dissemination installations and equipment.  Water collection points and artificial water reservoirs.	Carbon retention from forests and reduction of (CO <sub>2</sub> ) emissions, mitigation of climate change impact to forests, better adaptation to natural disasters.

*Note: Measures are presented by axis and by order of importance in terms of their contribution to climate change mitigation/adaptation.*

## Renewable energies

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

The Lithuania RDP stresses the strategic need to search for competitive renewable sources of energy and other sources of energy with lower CO<sub>2</sub> emissions. It promotes renewable energies mainly through the modernisation of agricultural holdings, which has also received additional funding in the revised RDP for the promotion of perennial energy crops. Renewable energies are included as key impact indicators under axis 2, namely, the production of renewable energy from wood, wood waste and woody material and utilisable agricultural area (UAA) devoted to energy and biomass crops (non-food set aside + energy crops + short rotation coppice on UAA).

The main measure that promotes renewable energies is found under axis 1, **measure 121 – modernisation of agricultural holdings**. Operations include the production of biogas from agricultural and livestock waste to be used for farm needs only. This measure has also been the subject of additional financial support as a result of the CAP HC and the EERP for investments in perennial crops (short rotation coppice and herbaceous grasses). Emphasis is placed on the development of the usage of renewal energy sources to encourage the production of green energy, reduce the environmental pollution and complement other measures, designed for the maintenance of the efficiency of the policy for the management of the climate change processes.

The growing share of the production of energy from renewal energy resources, such as short rotation plants, wind energy, solar energy, water power resources and etc. aims to contribute to implementation of a) the European Climate Change Strategy, and b) EU objectives to develop the use of bio-fuel. The production of energy from local and renewable energy sources will become increasingly important since the 'Ignalina' nuclear power plant closed on 1 January 2010.

Under axis 2, **measures 221 - first afforestation of agricultural land** - and **223 – first afforestation of non-agricultural and abandoned land** - are designed to implement the EU Forest Action Plan which aims to promote afforestation with the purpose of environmental protection and to encourage the production of energy from forest biomass.

Renewable energies can be also financed under Axis 3 – the main measures are 311 and 312.

If the measures 121 and 123 support production of bio gas / energy for the needs of the holding only, support under 311 and 312 can be granted for production oriented to the market's demand, i.e. projects shall be designated for production of bio energy and renewal energy, which is to be sold on the market.

### Main implemented RDP measures related to the development of RE sources

Axis/Measure	Description	Type of operation	Potential effects
<b>Axis 1</b>			
Measure 121	Modernisation of agricultural holdings	Biogas from agricultural and livestock waste.  Perennial energy crops (short rotation coppice and herbaceous grasses).	Increased use of bio-energy and other sources of renewable energy to reduce GHG emissions.
<b>Axis 2</b>			
Measures 221 and 223	First afforestation of agricultural or non-agricultural land	Production of energy from biomass.	Increased use of biomass to reduce GHG emissions.  Increase in the production of renewable energy from wood, wood waste and woody material.
<b>Axis 3</b>			
Measure 311	Diversification into non-agricultural activities	Support for the development of renewable energies	Increase in the production of renewable energy
Measure 312	Support for business creation and development	Support for the development of renewable energies	Increase in the production of renewable energy

*Note: Measures are presented by axis and by order of importance in terms of their contribution to renewable energies.*