

**STRATEGIC ENVIRONMENT ASSESSMENT OF  
THE CROSS-BORDER COOPERATION PROGRAMME  
ESTONIA - LATVIA  
2007 - 2013**

**ENVIRONMENT REPORT**

March 2007

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## 1. Introduction

The Strategic Environmental Assessment (further in the text – SEA) of the Cross-Border Cooperation Programme (further in the text – CBC) between Latvia and Estonia is carried out based on the contract signed between DEA Baltika Ltd. (Latvia) and the Baltic Sea Region (BSR) Interreg IIIB Joint Secretariat represented by Investitionsbank Schleswig-Holstein (Germany) in 14 June 2006.

The goal of SEA is to provide a basis for a high level of protection of the environment and to contribute to the integration of environmental considerations into preparation and adoption of plans and programmes with the goal to promote sustainable development. The legal requirements for SEA are laid down in the EC Directive 2001/42/EC on the evaluation of the effect of certain plans and programmes on the environment.

According to the Directive 2001/42/EC Annex 1 the requested information and outcomes of the SEA are presented in this Environment Report.

## 2. Description of the CBC Programme Estonia - Latvia

The CBC programme 2007-2013 “Estonia-Latvia” is being developed by a Task Force whose members include the Ministry of Regional Development and Local Governments of Latvia, the Ministry of Interior of Estonia, and selected representatives of municipalities of the border regions of Estonia and Latvia.

The **overall objective** of the CBC programme 2007-2013 “Estonia-Latvia” is to promote the sustainable development and economic competitiveness of the co-operation area by achieving an integrated approach to economic, social and environmental development in ways, which involve local people and communities.

To achieve the objective the CBC programme 2007-2013 “Estonia-Latvia” has defined the following **three thematic priority axes**, each of these covering several directions of support. The priorities are elaborated according to Art.6 of the ERDF Regulation.

### 1. Increased cohesion of the border regions

#### **1.1. Reducing isolation through improved internal and external accessibility of the programme area**

The eligible area of the Programme is covered by basic network of technical infrastructure, but the number of connection links both inside the programme area between different regions, as well as access to the area from outside is rather limited, leaving the area isolated from the rest of Europe. The aim of the direction of support is to reduce isolation by elaborating and applying new transport and logistics solutions in the programme area, repairing and restoring unused connection links, advancing development along the international transport corridors passing through the area, and applying innovative ICT solutions and services to improve the overall accessibility to the region. In regard to transportation, the emphasis is equally put on developing connections on road, rail, water and, where appropriate, air. As the majority of the programme area is covered with rural and often peripheral settlement areas, it is of great importance to improve the access of such regions into the overall transport, information and communication networks.

#### **1.2. Enhancing joint management of public services and resources**

One of the strengths of the border regions of Estonia and Latvia is rich natural resources, shared and enjoyed mutually by people from both countries, but which must be protected and displayed for visitors with great care. Also, majority of public services, such as energy and water supply, health care, fire

brigades and other services must be provided similarly on both sides of the border. The aim of the direction of support is to find joint solutions and enhance joint management of such public services and resources in order to create synergy and advance coherence of the border region. Finding joint solutions to similar environmental problems, managing together protected areas and nature reserves, as well as water, energy and other resources is financed under the direction of support. Elaborating joint public services to be provided similarly on both sides of the border is also supported under this direction.

## **2. Higher competitiveness of the border area**

### **2.1. Facilitating business start-up and development**

Despite relatively good economic growth rates of both Member States, the programme area is characterised by low levels of entrepreneurship, accompanied by rather poor competitiveness of enterprises at the EU scale. The undergoing economic activity (mainly SMEs) is in most part directed at the local or national markets with emphasis on providing simple services and manufacturing basic products based on local resources. The aim of the direction of support is on the one hand to facilitate new business initiatives by promoting entrepreneurship spirit among young people and wider population, and provide an efficient business support system (both service and infrastructure) for start-ups. On the other hand, the direction is aimed at adding value to and diversifying the existing products and services, developing niche markets, as well as extending already operating business activities in order to contribute to overall competitiveness of the businesses in the border regions. It is of great importance to improve the flexibility and innovativeness of the business sector in the programme area, as well as to concentrate gradually on sectors with higher growth potential.

### **2.2. Increasing the attractiveness for visitors**

The Programme area has a strong tourism potential, directed both to domestic and foreign visitors. The tourist flows to the region and within the region have increased gradually over the years, and it is acknowledged that there is still scope for development on the tourism market. The aim of the direction of support is to further increase the attractiveness of the programme area to visitors by utilising the characteristic strengths of the region such as diverse natural resources, attractive coastal landscape and a long coastline, islands and an abundance of wild untouched nature. The direction covers the variety of tourism sectors, including nature, maritime, and cultural tourism, as well as recreation and sports. The direction is aimed at developing further the existing basic tourism infrastructure, but it is of equal importance to diversify existing and create new tourism services and products. All tourism development activities should be accompanied by proper marketing techniques, which as far as possible market the programme area as a single tourism destination.

### **2.3. Enhancing employable skills and human resources**

Human resource development is an important part of the Programme, and especially as regards the skills needed to become and remain competitive in the labour market. The labour market in the programme area is characterised by mismatch of demand and supply, skills gaps, low productivity and high structural unemployment. Moreover, there is a large share of economically inactive people among labour force of the border regions. Therefore, the aim of the direction of support is to enhance employable skills among the labour force by enhancing the link between education and enterprises, cross border education infrastructure, developing the system of life-long learning and retraining activities, involving and educating new generation (vocational and higher education) therefore keeping them in the region and bringing economically inactive people back to labour market. As the programme area is in large part covered by sparse population, each and every member of the labour force is valued for contributing to economic growth of the region. It is thus important to create a flexible, competitive, and effective labour market in the border regions of Estonia and Latvia, and to ensure development of human capital by vocational training and higher education establishments enrolling students from the neighbouring regions across the border, improving material basis, cooperation between educational institutions, network of the neighbouring language trainers.

### **3. Active, sustainable and integrated communities**

#### **3.1. Improving environment for active and sustainable communities**

The Programme area is in large part covered by sparse population, with mostly small rural settlements which often have poor attainability of public services. Deprived rural areas and small towns are unattractive living environment especially for young people, the majority of whom move to live and work in the regional centres. The aim of the direction of support is to improve the attractiveness of rural and deprived urban/small-town areas as a qualitative living and working environment, to activate local communities so that they become vital and sustainable, and to increase local initiative among population, NGOs and communities in developing such areas. The direction supports cross-border co-operation projects for community development in various aspects such as long-term and sustainable planning, improving the (rural) life environment including the accessibility and quality of public services and recreational infrastructure, establishing multifunctional village centres, preserving the cultural value of settlements, as well as strengthening of local identity.

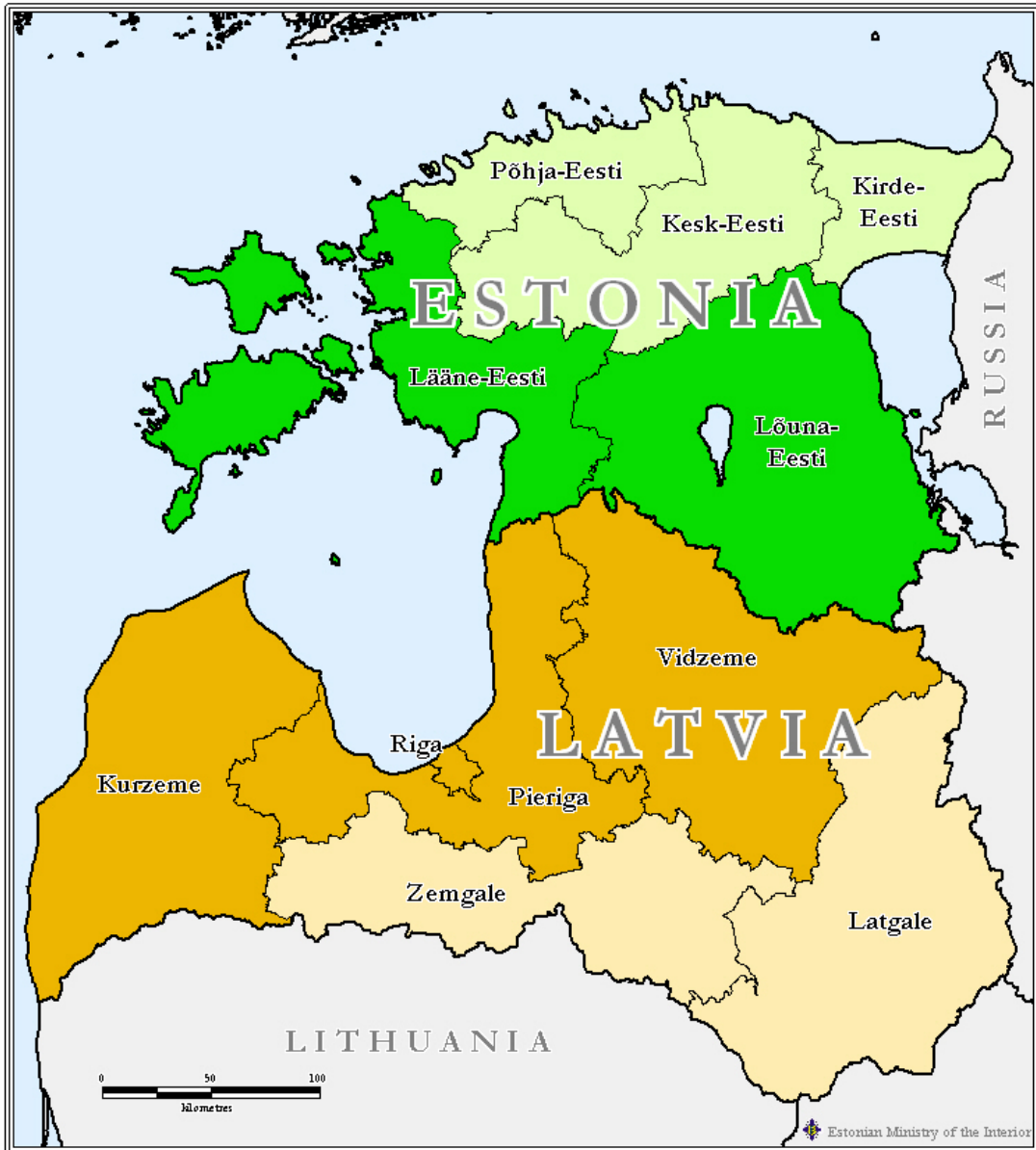
#### **3.2. Enhancing cross-border interaction**

Although cross-border contacts and interaction between Estonian and Latvian border regions have started to revive since the countries' accession to the EU, there is still the legacy of interrupted co-operation during the 1990s. New contacts across the border have to be sought and co-operation relations formed in order to organise joint activities and find together solutions to similar problems. The aim of the direction of support is to enhance the creation of new and intensifying already existing cross-border contacts in various fields into durable co-operation relations.

The CBC programme 2007-2013 "Estonia-Latvia" does not specify in detail which type of actions will be supported and which not. Consequently, the strategic environmental assessment and this Environment Report are only prepared for the priorities and the directions of its support.

The programme has relationships to various EU, national and regional plans and programmes. The programme focuses its actions to certain regions of Estonia (Lõuna-Eesti, Lääne-Eesti) and Latvia Kurzeme, Pierīga, Rīga, Vidzeme) (see also the map below). Therefore, primarily, the programme is addressing regional planning priorities.

Further on, the programme has a link to the National Development Plans of Latvia and Estonia 2007-2013. By its priorities it also supports implementation of the National Sustainable Development Plan of Estonia (2005-2030) and Latvian National Sustainable Development Strategy (2002).



### 3. Determination of the environmental issues, objectives and indicators relevant to CBC Estonia- Latvia programme

Environment is a rather complex issue, therefore, this Environment Report **reviews the objective and priorities of the CBC programme in relation to the environmental issues** aiming at identifying those issues which have a potential impact – either positive or negative.

The CBC programme “Estonia-Latvia” covers significant parts of the countries. Thus, **National Environmental Policy** documents have been used for defining the **relevant environmental issues**.

Latvian National Environmental Policy Plan has been developed in 2003 and sets out the tasks for the period of 2004-2008. It points out the priority problems, goals and measures how to deal with the mentioned problems. Latvian National Sustainable Development Strategy was adopted in August, 2002 and sets out the long-term goals for the country.

Estonian Environmental Action Programme has been developed for the period of 2004-2006 and is currently being revised. The strategic environmental goals have been set out by the Estonian Environmental Strategy, which is valid for the period up to 2010. In addition, the Estonian Sustainable Development Strategy adopted by the Parliament in September 2005 is also applicable. It sets out the long-term objectives up to 2030.

National environmental and sustainable development policy documents in Latvia and Estonia already integrate international commitments as well as the EU policy goals and tasks. National Environmental Policy goals shall be considered in regional and local planning documents.

The **overall objective of the CBC programme** primarily emphasises development towards sustainability and outlines importance of **all three pillars of sustainable development**: economic, social and **environmental** development. In general, the programme will bring **positive influence** on implementation of environment policy in the countries.

Firstly, the below table indicates the link between the priorities and directions supported by the Programme and the Key Environmental Issues to which the programme items refer:

CBC Programme Priorities	Key Environmental Issues	Relevant for the further assessment
<u>1. Increased cohesion of the border regions</u>		
1.1. Reducing isolation through improved internal and external accessibility of the programme area: <ul style="list-style-type: none"> <li>• elaborating and applying new transport and logistics solutions;</li> <li>• repairing and restoring unused connection links;</li> <li>• advancing development along the international transport corridors;</li> <li>• applying innovative ICT solutions and services.</li> </ul>	Air quality Maintenance of Biodiversity	Yes (negative - the increased transportation causes various environmental problems and potential for transport accidents which could cause serious environmental damage; but there can be also positive impact if more IT solutions are promoted).
1.2. Enhancing joint management of public services and resources:	Maintenance of Biodiversity	Yes (positive – protecting biodiversity,

<ul style="list-style-type: none"> <li>joint solutions and enhanced joint management of public services and resources (managing together protected areas and nature reserves, as well as water, energy, and other resources).</li> </ul>	Water Pollution Climate Change Waste Management	saving of resources, reducing water pollution)
<p><u>2. Competitiveness of the programme area</u></p>		
2.1. Facilitating business start-ups and development: <ul style="list-style-type: none"> <li>provide an efficient business support system (both service and infrastructure) for start-ups;</li> <li>adding value to and diversifying of the existing products and services;</li> <li>extending already operating business activities in order to contribute to overall competitiveness of the businesses.</li> </ul>	Climate change Water pollution Waste Management Maintenance of Biodiversity	Yes (positive – to increase competitiveness often may lead to efficient use of resources; on the other hand if a new activity is started based on local resources it can lead to additional pressure to environment)
2.2. Increasing the attractiveness for visitors: <ul style="list-style-type: none"> <li>developing further the existing basic tourism infrastructure;</li> <li>create new tourism services and products;</li> <li>marketing techniques for a single tourism destination.</li> </ul>	Maintenance of Biodiversity Water Pollution Waste Management	Yes; the increased tourism has an impact on various aspects of the environment.
2.3. Enhancing employable skills and human resources: <ul style="list-style-type: none"> <li>link between education and enterprises;</li> <li>cross border education infrastructure;</li> <li>developing the system of life-long learning and retraining activities;</li> <li>involving and educating new generation (vocational and higher education);</li> <li>improving material basis;</li> <li>cooperation between educational institutions;</li> <li>network of the neighbouring language trainers.</li> </ul>	Maintenance of Biodiversity	Yes, if <i>new education infrastructure</i> is built in the untouched nature areas then the issue of the maintenance of biodiversity is relevant. Otherwise the priority does not have any link to the environmental objectives.
<p><u>3. Attractive living environment</u></p>		
3.1. Improving environment for active and sustainable communities: <ul style="list-style-type: none"> <li>long-term and sustainable planning;</li> <li>improving accessibility and quality of public services and recreational infrastructure;</li> <li>establishing multifunctional village centres;</li> <li>preserving the cultural value of settlements;</li> <li>strengthening of local identity.</li> </ul>	Climate Change Water Pollution Waste Management	Yes, if improvement of public services includes waste water treatment, waste management and energy supply



		<p>attention paid to the preservation of underground water resources and lakes and water bodies threatened by eutrophication.</p> <ul style="list-style-type: none"> <li>- To protect water ecosystems and water-dependent terrestrial ecosystems and wetlands.</li> <li>- To provide for protection against floods and drought.</li> <li>- To provide for the compliance of potable water to quality standards.</li> </ul>	
		<ul style="list-style-type: none"> <li>- To improve sewage treatment, reduce the contamination of water bodies due to insufficient treatment of waste water.</li> <li>- To obtain a good status of the aquatic environment and the preservation thereof.</li> </ul>	Estonia
5	<b>Waste Management</b>	<ul style="list-style-type: none"> <li>- To limit waste production and to reduce quantities of disposed waste by promoting to processing or reuse thereof.</li> <li>- To implement a regional municipal waste management system.</li> <li>- To ensure that as much waste is reintroduced in the economic system as possible.</li> <li>- To provide for the disposal of waste in a way that is safe for human health and the environment.</li> <li>- To facilitate waste processing as close to its place of origin as possible.</li> <li>- To facilitate the introduction of sorted waste collection system in municipalities.</li> <li>- To provide residents and entrepreneurs with information and to raise their awareness about waste management issues.</li> </ul>	Latvia
		<ul style="list-style-type: none"> <li>- To decrease the quantities of disposable waste i.e. waste released into the environment; to dispose of waste at a site of waste handling, which is located as near as possible to the location of waste generation and is appropriate from the aspect of technology and environmental protection; to prevent the disposal of waste into the aquatic environment.</li> <li>- To more widely promote and direct the sorting of municipal waste in households, to more intensively introduce the sorting of waste in the industry, service and commerce in order to decrease the quantities of municipal waste directed to landfills.</li> <li>- To increase the recovery of waste: in direct reuse, in material recycling, in biological processes (composting), in energy recovery (combustion of waste for producing energy).</li> </ul>	Estonia

In order to evaluate the current state of the environment against the relevant key environmental objectives the following **core-set of the indicators is proposed**:

	<b>Environmental Issues</b>	<b>Environmental Indicators</b>
1	Air quality	<ul style="list-style-type: none"> <li>- Passenger turnover in million passenger kilometers</li> <li>- Number of days when the air quality standards are not met</li> </ul>
2	Climate Change	<ul style="list-style-type: none"> <li>- Share of renewable resources in energy supply</li> <li>- Energy efficiency</li> </ul>
3	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Change in area of protected habitat types</li> <li>- Area of built-up</li> </ul>
4	Water Pollution	<ul style="list-style-type: none"> <li>- Share of waste waters at a level meeting treatment standards;</li> <li>- Water quality status (high, good, bad)</li> </ul>
5	Waste Management	<ul style="list-style-type: none"> <li>- Share of municipal waste deposited in landfills</li> </ul>

Selection of the indicators is partly driven by the availability of respective data.

## 4. Relevant aspects of the current situation and the likely evolution without implementation of the CBC programme

SEA Directive requires that the **relevant aspects of the current state of the environment** and the likely evolution thereof without implementation of the plan or programme are addressed.

To focus the assessment, this Environmental Report covers only those environmental issues which have been identified as relevant in the chapter No. 2.

The CBC programme “Estonia-Latvia” covers significant part of the countries. Therefore, the evaluation of the current situation and trends are mainly based on data at national level. Nevertheless, when regional specific information is available the evaluation is undertaken on that level. The data sources mainly are environmental statistics published by Eurostat or Estonian Statistical Office and Central Statistical Bureau of Latvia. In some cases other national data sources have been used.

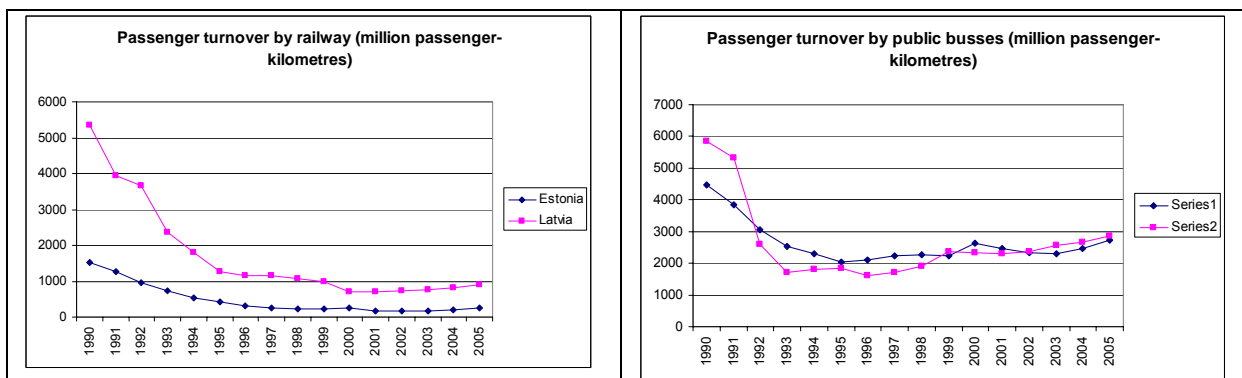
Trends are evaluated by the “potential of changes” or “no change in the pressure to environment” or in the “state of the environment” due to implementation of the CBC programme.

### 4.1. Air quality

Compared to densely populated and highly industrialised European countries, air quality in Estonia and Latvia can be regarded as good. The situation is different, however, in bigger cities, especially in the capital cities –Riga– where the population is concentrated and transport intensity is high with quick growing potential.

#### 4.1.1. Passenger turnover in million passenger kilometres

Mobility is an essential criterion for our lifestyle – reaching work place, schools, shops, etc. Having good, regular, reliable public transport is a precondition that inhabitants choose this transportation mode instead of driving the individual cars. In Estonia and Latvia the public transport has been reducing its turnover since 1990, thus giving more need to drive a car in order to reach the needed destination in a given time. The trend has lead to a negative effect on the air quality especially in big cities.



Data source: Estonian Statistical office and Latvian Central Statistical Bureau

#### Likely evolution if the CBC programme is not implemented

One of the CBC programme’s priorities is to support elaboration and appliance of new transport and logistics solutions and repairing and restoring unused connection links. This might lead to positive trend in increasing use of public transport against individual cars.

#### 4.1.2 Number of days when the air quality standards are not met

Several big cities have been located in the eligible area of the Programme – Liepāja, Ventspils, Valmiera, Rīga, Jūrmala in Latvia; Pärnu and Tartu in Estonia. However, air quality monitoring is performed only in Rīga, Liepāja and Ventspils.

Results of the air quality monitoring of 2005, <sup>1</sup> air quality standards in terms of NO<sub>x</sub>, PM<sub>10</sub> concentrations are not met in Riga and Liepāja. These parameters indicate the pressure of transport sector on environment therefore measures, which would reduce emissions caused by transport sector would be needed.

#### Likely evolution if the CBC programme is not implemented

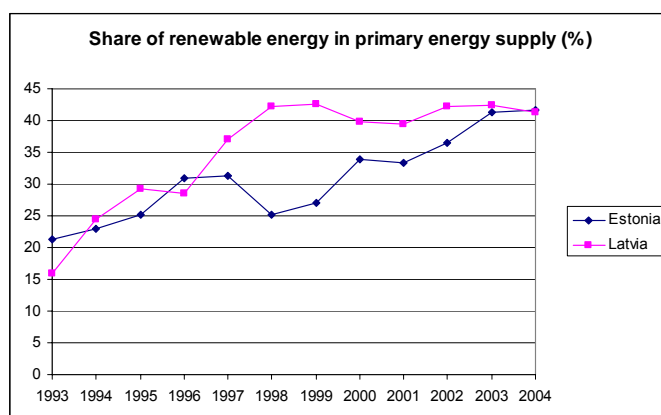
The programme is aiming to improve accessibility to border regions and not to solve the transport in the big cities. Therefore, it is highly unlikely that due to the planned activities the situation will be influenced.

### 4.2. Climate Change

Although climate change is considered as a global environmental issue, many measures to reduce the problems shall be taken on a local level. Energy and transport are the key economy sectors driving the trend in emissions of greenhouse gasses. Burning of fossil fuel like oils, gas and coal are the source of emissions of greenhouse gasses. When increasing the percentage of renewable energy sources (wood, hydro-power, solar energy, etc.) in the consumption of primary energy, the use of fossil fuels decreases and thus, also the emissions of greenhouse gases which, in the end, contribute to the impact of the climate change.

#### 4.2.1. Share of renewable resources in energy supply

There is an increasing tendency to use renewable, domestic resources (wood, wood residues and hydro energy) in Estonia and Latvia. The use of wind, biogas, geo-thermal and solar energy is, however, still far negligible. Renewable energy resources were not popular in the past because of low energy prices and due to available unlimited resources of fossil fuel in the former Soviet Union. Today, the increased energy prices have made it more attractive to use domestic, renewable resources. In particular, in smaller municipalities and settlements it has been feasible to switch the heating supply from coal to wood.



Data source: Eurostat

#### Likely evolution if the CBC programme is not implemented

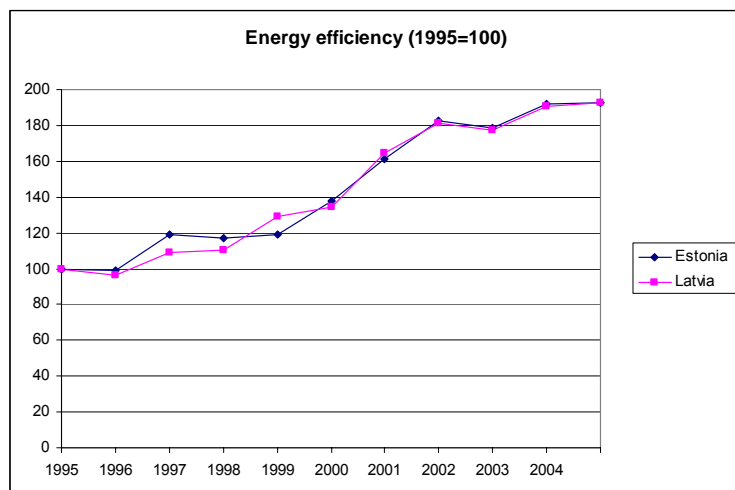
<sup>1</sup> Air Quality Annual Report 2005, LEGMA 2006.

Due to high political commitments, the use of different renewable energy resources will be increasing in future. Nevertheless, the CBC programme by financing measures targeted to promote the use of local renewable resources would support the achieving the environmental goals.

#### 4.2.1. Energy efficiency

Energy efficiency is an indicator to illustrate how much any country uses energy resources to generate a unit of Gross Domestic Product (GDP). When less energy is needed to generate the same amount of products and services, that country also produces less greenhouse gasses. Thus, many efforts are allocated to increase energy efficiency.

In Estonia and Latvia the energy efficiency has similar, positive trend. The data shows that since 1997 the countries' economy is getting more energy efficient, the efficiency has been almost doubled. Increase in energy efficiency is influenced both by structural changes of the economy (from energy-intensive industries to service oriented) and improvements in the technical efficiency of appliances or processes or better insulation in buildings. Despite of the positive trend, the energy efficiency in 2004 was still below the EU average for about 20-50 %.



Data source: Total energy supply- Eurostat, GDP at constant process of 2000 – National statistics.

#### Likely evolution if the CBC programme is not implemented

A lot of attention in national planning documents has been placed on increasing the energy efficiency. By supporting measures of improving public services related to energy consumption or supporting new competitive on productivity focused businesses activated by the CBC programme would contribute to the process.

### 4.3. Maintenance of Biodiversity

Compared to the Western Europe, the Baltic States still have relatively undisturbed natural areas, which provide a good basis for rich biodiversity. The well-preserved biodiversity of the Baltic region, particularly the eligible area of the CBC Programme “Estonia-Latvia”, contributes significantly to the whole European natural heritage. This places a particular responsibility on the Baltic countries for its conservation and sustainable management.

#### 4.3.1. Change in area of protected habitat types (ha)

There are certain types of habitats which are threatened and therefore need to be protected to ensure that biological diversity is not declining. In the European Union, the Directive on Habitats (92/43/EEC) lists those habitats and species for which the countries shall take a special care by establishing protected areas (Sites of Community Importance - SCI)

Further on, the special attention has been put on the protection of birds. The EU Directive (79/409/EEC of 2 April 1979) on the Conservation of Wild Birds is a legal instrument which requires to establish Special Protection Areas (SPAs) for the 194 threatened species and all migratory bird species in EU.

The both – SCI and SPA areas form the EU's network of protected nature sites, called as Natura 2000.

Currently, 331 site of SCI are designated in Latvia and 509 in Estonia. They cover 11% of the terrestrial territory of Latvia and 15.9% of that in Estonia. The sites ensure that more than 50 different habitat types (and more than 600 species) are protected in this part of Europe.

With regard to SPAs, 66 sites have been designated in Estonia and 97 in Latvia. They cover 18.8% of the terrestrial territory of Estonia and 9.6% of Latvia. Some of the SCI and SPA areas are overlapping since being important for protection of birds and habitats and their species.

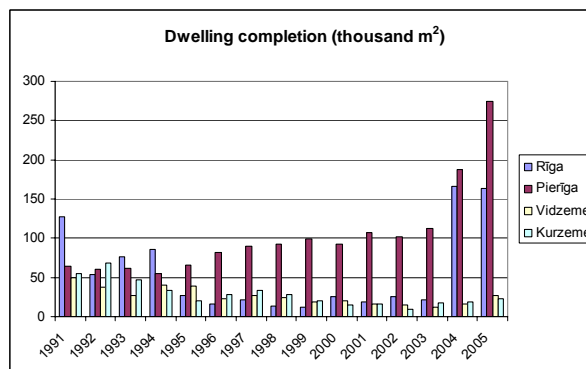
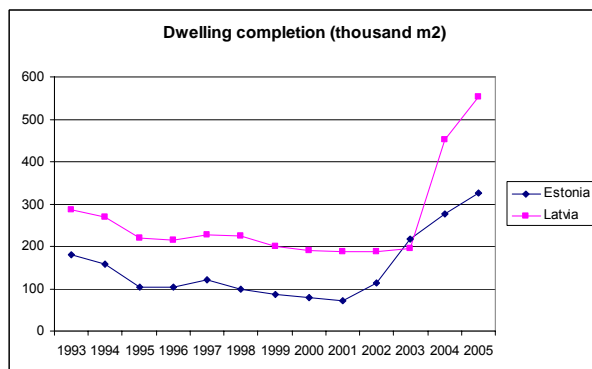
The countries shall report to the European Commission in six year period on the conservation status of the protected habitats and species thus to monitor the progress or regress with regard to maintenance of biodiversity. The current reporting period is 2000-2006 for which the data shall be compiled and reported to the European Commission in the middle of 2007. The report shall serve as a baseline for assessment of the situation and to monitor the progress in the next reporting period up to 2013.

#### Likely evolution if the CBC programme is not implemented

Protection of the habitats and species of Community importance is ensured by legal protection status within Natura 2000 sites, but the habitats/species might be endangered outside the network by increasing local economic interest (forestry, road construction, tourism, urban spatial planning, etc.). This aspect shall be considered by supporting the activities.

#### 4.3.2. Area of built-up

Any new built-up area means that a natural area has been offended. Currently, a gradual growth occurs mainly in the vicinities of bigger towns where the new settlement areas are being erected. In the countryside there are regional differences; the coast and western islands are the major building areas. New housing areas are connected with building of summerhouses and cottages, sometimes with creating of new industries and infrastructure. This trend is confirmed by the statistics on the built dwellings.



Data source: Estonian Statistical office and Latvian Central Statistical Bureau

#### Likely evolution if the CBC programme is not implemented

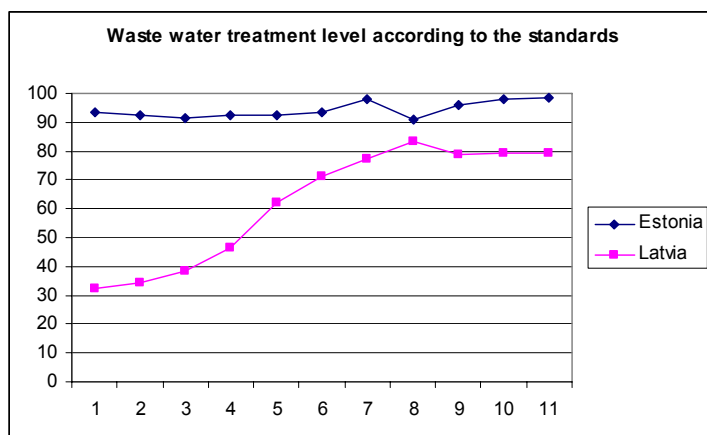
The general trend in an urban sprawl and urbanising of the coastline seems will continue regardless the CBC Programme. The process is mainly controlled by spatial plans on regional and local level.

### 4.4. Water Pollution

Since the beginning of development and implementation of the environmental policy in Estonia and Latvia, water has been one of the priority sectors where investments have been allocated. The key problem was to reduce pollution load mainly of nutrients (nitrogen and phosphorus) which causes the overgrowth of lakes, rivers, coastline, the process called as eutrophication. The key measure has been to improve waste water treatment by reconstructing or building new waste water treatment plants.

#### 4.4.1 Share of waste waters at a level meeting treatment standards

This indicator illustrates the general pressure on the water resources by discharging waste waters into surface bodies. Due to heavy investments allocated to this priority environmental sector, the positive trend can be observed; particularly the progress is seen in Latvia where more and more properly treated waste water is discharged into environment.



Data source: Estonian Statistical office and Latvian Central Statistical Bureau

However, according to the data of Eurostat only 71-72% of population in Estonia and Latvia have connection to any kind of sewage treatment (primary to tertiary) in municipal treatment plants run by public authorities or by private companies (on behalf of local authorities), whose main purpose is sewage treatment. Particularly, lower connection rate is in rural settlements.

#### Likely evolution if the CBC programme is not implemented

Other national and the EU funded programmes primarily support achieving the targets of the water policy. Their task is to set up the needed infrastructure for adequate waste water treatment. However, these programmes are primarily focused on larger settlements; therefore actions financed by the CBC programme could improve the situation in less dense areas by supporting public services there.

#### 4.4.2 Water quality status

The water quality is evaluated based on a set of chemical, ecological and hydro-morphological parameters. Results are expressed in the following quality classes: high, good, moderate, bad and poor.

In 2004 the overall assessment was carried out in the frame of implementation of the Water Framework directive by the competent authorities of Estonia and Latvia. The assessment report pointed out how big

is the risk not to achieve “good” water status by the target date of 2015. It concluded that 49 out of 207 water bodies (about 24%) of Latvia will achieve the “good” status while the almost same amount of water bodies are at risk not meeting the set objectives since they are evaluated either as of moderate, bad or poor quality. In Estonia, the situation also indicates that a number of rivers and lakes are at risk to achieve good water status by 2015. Therefore, when supporting activities it is important to consider whether these will deteriorate or improve the water quality of that particular lake or river.

The eligible area of CBC programme belongs to different river basins. Regions of Latvia are a part of all four assigned river basin districts: Gauja/Koiva, Daugava, Lielupe and Venta. Regions of Estonia are also part of all three assigned basin districts: Lääne-Eesti, Ida-Eesti and Koiva/Gauja.

The Gauja/Koiva river basin district is the only shared one and according to the EU policy coordination and cooperation is required for management of the transboundary basins.

#### Likely evolution if the CBC programme is not implemented

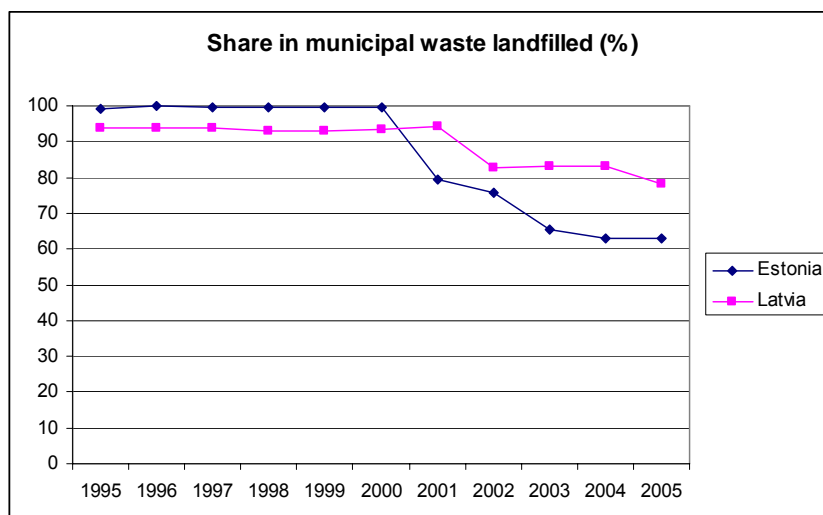
This issue is very difficult to be assessed due to different type of priorities and support directions envisaged by the Programme. Some of the activities are planned for support of the improvement of public services amongst others waste water treatment, thus it could contribute to positive improvement of local waters. On the other hand, a support will be granted also to businesses which might lead to extra pollution load.

## 4.5. Waste Management

Similar to water sector, the waste management has also got a particular attention, specifically due to accession to the European Union. The EU waste policy sets out ambitious tasks for waste management sector aiming at waste prevention, recycling and reducing waste to be disposed at landfills. Further on, the EU has defined high environmental standards for landfills to reduce environmental pollution load from potential leakage to groundwater.

### 4.5.1. Share of municipal waste deposited in landfills

National and regional waste management policies of Estonia and Latvia aim to increase the recovery and recycling of the waste. Consequently, fewer amounts shall be deposited in the landfills. The data on the deposited waste amounts into the landfills are recorded for several years. They are showing a positive trend: from almost 100% waste brought to landfill in the middle of nineties to 60-80% in 2005.



Data source: Eurostat

To reduce the amount deposited the prerequisite is sorting and recycling of the waste. Currently, the separate waste collection systems are under development and the availability to this public service varies from a region to region.

Likely evolution if the CBC programme is not implemented

National Waste Management Plans of Estonia and Latvia as well as regional programmes primarily deal with achieving the targets of the waste policy. Their task is also to plan setting up needed infrastructure for waste management system in the country including waste sorting sites and building of new regional landfills.

Nevertheless, the CBC programme can strengthen development of the waste recycling thus less waste would be deposited and more efficient use of natural resources achieved.

## 5. Assessment of the environmental effects of specific development objectives and priorities

This chapter aims at presenting assessment of the positive and negative effects of the development priorities of the CBC Programme on the relevant environmental issues and thus on the objectives. When a negative effect or uncertainty with regard to measures financed under the given priorities is identified, the Environment Report proposes measures which could be envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment.

Relevant Environmental indicators	Likely significant effects from the priority ⊗ - negative effect ⊕ - positive effect ⊖ - no significant effect ? - uncertainty	Recommended measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment
<b>1. Increased cohesion of the border regions</b>		
<b>1.1. Reducing isolation through improved internal and external accessibility of the programme area</b>		
Passenger turnover in million passenger kilometers	⊕ - positive effect on air quality if the measures will focus on public transportation issues and promote IT solutions instead of the use of single cars.	
Number of days when the air quality standards are not met	⊖ - no significant effect The priority is focussed on the rural areas where air quality is not a problem.	
Change in area of protected habitat types	⊗ - negative effect The restoration of the unused roads might cause damage to the valuable habitats outside protected areas. It also increases fragmentation effect of the landscapes and nature areas.  On the other hand, the maintenance and restoration of roads is also the essential prerequisite for the protection of landscapes and biodiversity which is ensured by the targeted human activities.	There would be a need for individual assessment of the specific measure targeted to restoration of the roads.
<b>1.2. Enhancing joint management of public services and resources</b>		
Change in area of protected habitat types	⊕ - positive effect Positive effect could be from joint management of the protected areas, also if the same protection measures are taken on both sides of the boarder	

Share of waste waters at a level meeting treatment standards	☺ - positive effect Improvements in waste water treatment lead to less pollution load to environment	
Water quality status	☺ - positive effect If the pollution load is reduced the water quality status would increase.	
Share of renewable resources in energy supply	☺ - positive effect Implementation of the energy supply measures based on new alternative local renewable sources would limit greenhouse gas emissions and in that way contribute to prevention of the climate change	
Energy efficiency	☺ - positive effect Improvement of the public services usually takes into account the need for increase of the efficiency. By doing that, the emissions of the greenhouse gasses or even use of renewable resources are reduced.	
Share of municipal waste deposited in landfills	☺ - positive effect When the efficiency of the use of resources are achieved the less waste is generated, thus also needed to be deposited in landfill. Support to the waste sorting and recycling as a part of public waste management system reduces waste amount being disposed of.	
<b>2. Competitiveness of the programme area</b>		
<b>2.1. Facilitating business start-ups and development</b>		
Change in area of protected habitat types	? – uncertainty Impacts cannot be determined at this point.	Nature conservation expert or relevant authority shall be consulted before granting support in the areas of protected habitats.
Area of built-up	? – uncertainty Impacts cannot be determined at this point.	Nature conservation expert or relevant authority shall be consulted before granting support in the areas of protected habitats.
Water quality status	? – uncertainty The impact on water quality depends on the type of business to be supported.	The assessment of water body's status and a capacity to bear a new pollution load shall be looked at before supporting business having waste water discharges. Thus, the environmental expert or relevant authority shall be consulted. If support is granted to existing business then use of cleaner technologies shall be promoted.
Share of renewable resources in energy supply	? – uncertainty Impacts cannot be determined at this point. Development of energy intensive business based on fossil fuel can increase emissions of greenhouse gasses.	Promote and require that supported business activities use renewable energy sources when possible.
Energy efficiency	? – uncertainty Impacts cannot be determined at this point. Development of energy intensive business may increase energy demand. There are opportunities to implement energy saving schemes.	Promote and require that supported business activities use energy saving schemes.
<b>2.2. Increasing the attractiveness for visitors</b>		
Change in area of protected habitat types	Depending on the supported measures, the priority may have either negative or positive effect.	The activities envisaged in the nature conservation areas should be in line with already developed nature management

	<p>⊖ - negative effect                  The increasing number of tourists can create a stress to the protected habitats and species if a tourism product is focused on natural resources (forests, waters, bogs, etc), coastlines and valuable landscape sites. Certain locations have rather small carrying capacities.</p> <p>⊕ - positive effect                  Many nature conservation areas are already attractive for the visitors and tourists. To prevent from the caused damage, the proper infrastructure is needed to be set-up. A Support to such measures would bring a positive effect on biodiversity.</p>	<p>plans. When such management plan has not been elaborated yet, a nature conservation expert or relevant authority shall be engaged in developing new tourism products and infrastructure, thus, the carrying capacity of nature would be taken into account.</p> <p>Further on, adequate environmental monitoring system which would support identification and prevention of the negative impacts, supervision of visitors flow shall be foreseen.</p>
Area of built-up	<p>⊖ - negative effect                  The priority envisages supporting <i>new infrastructure</i>. Depending on the location, a nature area might be threatened by a new construction activity.</p>	<p>It is advisable to locate a tourism related infrastructural buildings (housing) in already built-up areas. Otherwise there would be a need for individual assessment.</p>
Water quality status	<p>? – uncertainty                  The impact on water quality depends on the type of tourism developed. If the focus is on water tourism and the caring capacity of the particular water body is not considered it can reduce the water chemical and/or ecological quality status. The water related recreation and tourism is often causing littering of the water.                  On the other hand, other tourists might have no effect on the environment.</p>	<p>A water expert shall be engaged in developing new water related tourism products and infrastructure, thus, the carrying capacity of water body would be taken into account.</p> <p>The development and implementation of the adequate water quality and tourism flow monitoring system would support with information for preventive and mitigation measures.</p>
Share of municipal waste deposited in landfills	<p>? – uncertainty                  Impact cannot be determined at this point. However, any tourist usually generates waste in the site which he/she is visiting.</p>	<p>When developing a tourism product, the waste management issues shall be tackled as well. The proper infrastructure shall be set-up to guarantee waste collection (containers at the camping sites and places of recreation, etc.). Established waste collection system shall promote waste sorting and further recycling.</p> <p>It is also important to ensure the supervision and control at tourism sites and camping places.</p>
<b>2.3. Enhancing employable skills and human resources</b>		
Change in area of protected habitat types	<p>⊖ - negative effect                  The priority envisages supporting <i>new cross border education infrastructure</i>. Depending on the location a nature area might be threatened by a new construction activity.</p>	<p>It is advisable to locate a new cross border education infrastructure in urban areas/existing settlement structures. Otherwise, there would be a need for individual assessment.</p>
Area of built-up	<p>⊖ - negative effect                  The priority envisages supporting development of existing basic tourism infrastructure. Depending on the location, a nature area might be threatened by a new construction activity.</p>	<p>It is advisable to locate a new cross border education infrastructure in urban areas/existing settlement structures. Otherwise there would be a need for individual assessment.</p>
<b>3. Attractive living environment</b>		
<b>3.1. Improving environment for active and sustainable communities</b>		
Share of waste waters at	<p>⊕ - positive effect</p>	

a level meeting treatment standards	Improvements in waste water treatment leads to less pollution load to environment.	
Water quality status	☺ - positive effect If the pollution load is reduced, the water quality status would increase.	
Share of renewable resources in energy supply	☺ - positive effect Implementation of the energy supply measures based on new alternative local renewable sources would limit greenhouse gas emissions in that way contributing to prevention of the climate change.	
Energy efficiency	☺ - positive effect Improvement of the public services usually takes into account the need for increase of the efficiency. By doing that, the emissions of the greenhouse gasses or even use of renewable resources are reduced.	
Share of municipal waste deposited in landfills	☺ - positive effect When the efficiency of the use of resources are achieved, the less waste is generated, thus also needed to be deposited in landfill. Support to the waste sorting and recycling as part of the public waste management system reduces waste amount being disposed of.	
<b>3.2. Enhancing cross-border interaction</b>		
	☹ - no significant effect Contacts itself does not have impact on the environment.	

## 6. Assessment of cumulative effects of the entire programming document

This chapter of the Environment report is aiming to assess the cumulative effects of all proposed measures in the programming document on the relevant environmental issues. This analysis uses information generated by the preceding assessments of individual priorities in the CBC programming document carried out in the chapter No. 5.

### 6.1. Air quality

In general, the CBC programme can be assessed as **neutral** towards the air quality since the CBC programme activities are not focused on localities facing air quality problems. However, the **positive** contribution could be if a support would be granted to improvement of public transportation related activities, especially in the cities.

### 6.2. Climate Change

In general, the CBC programme can be assessed as **positive** towards the Climate Change issue, especially by implementing its priorities No. 1.2 and 3.1 on improved public services which would aim at more efficient use of energy resources or replacing of fossil fuel with renewable resources (wood, straw or other alternative energy sources). However, **attention shall be** put also on the priority *2.1 Facilitating business start-ups and development* by requiring that supported business activities use renewable energy sources when possible and implement energy saving measures.

### 6.3. Maintenance of Biodiversity

It is rather **uncertain** about the cumulative effect of the CBC programme on the maintenance of biodiversity: on the one hand, the priority *1.2. Enhancing joint management of public services and resources* aims at supporting managing together protected areas and nature reserves which will bring **positive** results to this environmental issue. Further on, the support to the tourism infrastructure (*the priority 2.2. Increasing the attractiveness for visitors*) in areas which are already attractive for visitors would be also seen as positive activity.

On the other hand, some activities might cause pressure for shorter or longer time or even destroy certain habitats. To prevent this, assessment of the supported measures shall be carried out in those activities where potential negative effect could be (see assessment in the chapter 4). The existing nature management plans for the nature conservation areas as well as other impact assessment studies can be an input for such assessment.

### 6.4. Water Pollution

In general, the CBC programme can be assessed as **positive** towards reducing water pollution. Two priorities (1.2 and 1.3) deal with improvement of public services by improving waste water treatment system or reducing pollution load.

However, **attention shall be put** also on the priority *2.2. Increasing the attractiveness for visitors* if water based tourism activities are going to be supported in particular in a local lake or little stream. The status of a water body shall be clarified and its carrying capacity assessed. The same stands for the priority *2.1 Facilitating business start-ups and development*.

## 6.5. Waste Management

In general, the CBC programme can be assessed as **positive** towards the waste management issues. Two priorities (1.2 and 3.1) deal with improvement of public services amongst others, this might include waste management activities. However, **attention shall be put** also on the priority 2.2. *Increasing the attractiveness for visitors* by setting up waste management infrastructure (waste containers on sites), promoting waste sorting and further recycling as well as ensuring proper supervision and control on the waste management.

## 7. Envisaged measures for monitoring system for the programming document

According to Article 10 of the SEA Directive, significant environmental effects of implementation of plans and programmes shall be monitored to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.

Existing monitoring arrangements may be used, if appropriate, with a view to avoid duplication of monitoring.

The chapter No. 12 of the Programme is devoted to monitoring. It requires that the granted projects shall monitor their significant impact on the environment. For that purpose the projects shall use basic indicators selected for the relevant priority and measure of the Programme in the Environment Report. The projects may include some own indicators adjusted to their specific needs and targets. The monitoring reports on environmental impacts shall be a part of the regular reporting.

The following table contains potential environmental indicators which would support to monitor the impact on environment caused by the measures and/or the programme as whole.

CBC programme	Environmental Issue	Potential indicator for monitoring (P - applicable on programme level; M - applicable on measure level)
<b>1. Increased cohesion of the border regions</b>		
1.1. Reducing isolation through improved internal and external accessibility of the programme area	Air quality	<ul style="list-style-type: none"> <li>- Number of days when the air quality standards are not met (P);</li> <li>- Passenger turnover in million passenger kilometers (P, M)</li> </ul>
	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Change in area of protected habitat types (P, M)</li> </ul>
1.2. Enhancing joint management of public services and resources:	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Change in area of protected habitat types (P, M);</li> </ul>
	Water Pollution	<ul style="list-style-type: none"> <li>- Share of waste waters at a level meeting treatment standards (P, M)</li> <li>- Water quality status (M)</li> </ul>
	Climate Change	<ul style="list-style-type: none"> <li>- Share of renewable resources in energy supply (P, M);</li> <li>- Energy efficiency (P, M)</li> </ul>
	Waste Management	<ul style="list-style-type: none"> <li>- Share of municipal waste deposited in landfills (P, M)</li> </ul>
<b>2. Competitiveness of the programme area</b>		
2.1. Facilitating business start-ups and development	Water Pollution	<ul style="list-style-type: none"> <li>- Water quality status (M)</li> </ul>
	Climate Change	<ul style="list-style-type: none"> <li>- Share of renewable resources in energy supply (P, M);</li> <li>- Energy efficiency (P, M);</li> </ul>
	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Area of built-up (M)</li> <li>- Change in area of protected habitat types (P, M);</li> </ul>
2.2. Increasing the attractiveness for visitors	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Change in area of protected habitat types (P, M);</li> <li>- Area of built-up (M)</li> </ul>
	Water Pollution	<ul style="list-style-type: none"> <li>- Water quality status (M)</li> </ul>
	Waste Management	<ul style="list-style-type: none"> <li>- Share of municipal waste deposited in landfills (M)</li> </ul>
2.3. Enhancing employable skills and human resources: <i>if infrastructure is supported</i>	Maintenance of Biodiversity	<ul style="list-style-type: none"> <li>- Area of built-up</li> <li>- Change in area of protected habitat types (P, M);</li> </ul>

3. Attractive living environment		
3.1. Improving environment for active and sustainable communities	Water Pollution	<ul style="list-style-type: none"> <li>- Share of waste waters at a level meeting treatment standards (P, M);</li> <li>- Water quality status (M)</li> </ul>
	Climate Change	<ul style="list-style-type: none"> <li>- Share of renewable resources in energy supply</li> <li>- Energy efficiency (P,M)</li> </ul>
	Waste Management	<ul style="list-style-type: none"> <li>- Share of municipal waste deposited in landfills (P, M);</li> <li>- Share of waste recycling (P, M)</li> </ul>
3.2. Enhancing cross-border interaction	-	-

## Summary

The Environmental Report of the Cross Border Cooperation programme 2007-2013 “Estonia-Latvia” has been developed based on the EC Directive 2001/42/EC *on the evaluation of the effect of certain plans and programmes on the environment* (called as Strategic Environmental Assessment). It includes the results of the assessments based on the draft Programming Document, January 15, 2007.

The CBC programme “Estonia-Latvia” is being developed to support cross border cooperation between two countries in the period of 2007-2013. The **overall objective of the CBC programme** is to promote the sustainable development and economic competitiveness of the co-operation area by achieving an integrated approach to economic, social and environmental development in ways which involve local people and communities.

It is very important that the Programme primarily outlines the importance of **all three pillars of sustainable development**: economic, social and **environmental** development. Therefore, one shall conclude that this Programme shall bring **positive influence** on implementation of environment policy in the countries concerned.

To achieve the objective the CBC programme 2007-2013 “Estonia-Latvia” has defined **three thematic priority axes**, each of these covering several directions of support. However, the CBC programme 2007-2013 “Estonia-Latvia” does not specify in detail which type of the actions and what specific criteria (including environmental ones) will be applied to grant the support. This will be developed within the Secondary Document. Consequently, the strategic environmental assessment and this Environment Report assess only the priorities and the directions of support as specified by the Programming document.

The Environmental Report reviews potential positive or negative effects of the CBC programme 2007-2013 “Estonia-Latvia” on the following environmental issues: **air quality, climate change, maintenance of the biodiversity, water pollution and waste management**.

In general, the priorities of the CBC programme can be assessed as **positive** towards reducing water pollution, improving waste management and the climate change issue. Two priorities deal with improvement of public services which would also lead to reduced pressure to the environment.

However, **attention shall be put** on the second priority *2.Competitiveness of the programme area*. Currently, there is uncertainty with regard to effects of this direction of support. Nowadays, the higher competition can be achieved with high productivity which means less resource used for the same output and thus also better for environment. However, this is not pointed out by the Programme. Therefore, it is recommendable for the Programme to highlight that the activities which will be supported are required to consider also environmental measures such as energy saving schemes, use of renewable energy, waste prevention and sorting.

It is rather **uncertain** about the cumulative effect of the CBC programme on the maintenance of biodiversity. To avoid irreversible effects, the environmental assessment of individual measures, particularly related to restoration of the roads, building infrastructure and business support would be recommendable.

The CBC programme foresees regular monitoring and reporting including the effects of the measures on environment.