

Municipal Response to Climate Change Emergencies and Lithuania

Study report on Lithuanian climate change
challenges and case of Panevezys city
municipality

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Preface

Municipal Response to Climate Change Emergencies -project studied municipalities' adaptation and response to climate change emergencies in six different EU countries during the year 2008. Lithuania was the only new EU member state in the project.

There was no project-partner from Lithuania involved in the project, but Nordregio was engaged to work with Lithuanian case studies. Two Lithuanian advisory partner municipalities Silute and Pagegiai were named at the project proposal and were supposed to be the case studies of the project. Both municipalities are situated in a flood prone area and they fit in well with the original focus of the project that was to “survey and investigate, in greater detail, the local level responses to climate change... especially in flood-prone municipalities (both inland water and coastal) in order to identify the main (perceived) challenges and the currently existing best practices.”

When the project began, however, it very soon became evident that these two municipalities did not have enough human resources to take part even as advisory partners, even though they were interested in having the end results of the project for their use. During the project it turned out that the lack of human resources is one of the main problems of Lithuanian administration in all levels.

With the help from Association of Local Authorities in Lithuania Panevezys city municipality was found, and it proved to be an enthusiastic and active advisory partner in the project. Panevezys city municipality is the fifth biggest city in the country and situated in northern central Lithuania. The city turned out to be an excellent case for a study, since it has some good examples on how the Soviet time still affects the safety of the communities in post soviet societies, and how climate change can bring these risks up again in ways that we can hardly imagine. Panevezys city municipality has also worked very hard with issues of sustainable development, and has received several awards for its good work.

In this study report I will very shortly represent the situation in Lithuania regarding climate change issues in general based on interviews made with officials and environmental actors in Lithuania, and after that the case of Panevezys city municipality in climate change related work.

More information about the project Municipal Response to Climate Change Emergencies, its end result “Climate Change Emergencies and European Municipalities: Guidelines for Adaptation and Response”, its other case study reports as well as different language versions of the “Guidelines”, can be found on the project internet page at www.nordregio.se/munires.

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How was this study report prepared?

In the beginning of this project the project personnel in Nordregio had very little knowledge on work done with climate change in Lithuania. Since the project did not have a project partner in Lithuania, we needed to find out more about what is the general situation regarding climate change in the country that still remains foreign for many of us despite of the fact that it has been an EU member country already for four years.

Since most of the studies made about climate change and Lithuania only exist in Lithuanian language, which none of us have knowledge of, the information was mostly gathered by interviewing key actors in Lithuania. Two one-week-long study trips to Lithuania took place in mid-April and end of May 2008. During these trips we visited several organisations and met many actors who work with climate change and environmental issues as well as emergency issues in Lithuania. Among the organisations visited were the Ministry of Environment of Republic of Lithuania, Fire and Rescue Service Department of the Ministry of Interior of Republic of Lithuania, Vilnius University's Department of Hydrology and Climatology, Association of Local Authorities of Lithuania, City municipalities of Panevezys, Kaunas and Klaipeda, Panevezys County, and non-governmental organizations ECAT Lithuania, BEF Lithuania and Center for Environmental Policy. You can find the list of interviewees and engaged people in the end of this report.

Interviewees were asked among other things to describe how they saw that climate change as an issue was dealt with in Lithuania, what the level of public awareness in the issue was and how they saw that Lithuania would be affected by climate change. Also more specific questions regarding interviewees own field were asked. This report is based on the material from the interviews unless other reference is made.

The common impression was that climate change is not a top priority for Lithuania and Lithuanians at the moment. Impacts of climate change are not seen to be threatening Lithuania very much in coming decades.

First part of this report deals with climate change challenges in Lithuania as a whole. Second part of this report deals with city of Panevezys as a special case study municipality. Much more could be written about the overall situation in Lithuania in issue of climate change; this report does not intent to be in anyway comprehensive, but only have a review of that.

Climate change challenges in Lithuania

Lithuania, one of the three Baltic States, has 3.5 million inhabitants and is located on the Baltic Sea coast between Latvia, Belarus, Poland and Russia (Kaliningrad). Lithuania is one of the new members of European Union. It became a member with some other Eastern European countries in May 2004 after being independent only for 13 years after Soviet period. There is a lot of new legislation and directives that Lithuania has had to put into force since it applied for EU membership. A big part of its new environmental legislation is due to EU directives.

European Union's strong influence on environmental policy and legislation in Lithuania has kept the debate of the issues in minimum in recent years, according to Lithuanian environmental authorities. According to officials working with climate change issues in Ministry of Environment of Lithuania, there has not been that much discussion among public or even politicians on what kind of approach Lithuania should adopt towards climate change issues.

Lithuania is still one of the poorest member countries in European Union. The administration has to prioritize on what challenges to tackle first, and unfortunately this often means that it has no capacity to deal with policy areas of environment and climate, since these questions are not considered to be among the most urgent problems that the country faces internally.

CLIMATE CHANGE IMPACTS

Still, as with the other countries of the Baltic Sea region, Lithuania is also particularly vulnerable to the impacts of climate change. Notwithstanding this however, research data on the local impacts of climate change in Lithuania remains at a premium.

According to Lithuania's third and fourth national communication on climate change to the United Nations Framework Convention on Climate Change (UNFCCC) published in 2005 (p.74-86), the country will face similar impacts as its neighbours: average temperatures will rise in winter while the time with snow cover will be shorter than was previously the case. The amount of precipitation will also rise thus increasing the risk of flooding. Sea coasts will suffer from more erosion and forest fires might become more frequent during dry periods.

Agriculture and forestry are likely to be the most affected sectors. There might be a need to change the crops and new species are likely to spread to the country. This means also new crop diseases and new pests. Climate change is also expected to lead to a number of significant health challenges as well as precipitating biodiversity loss. (ibid.)

PUBLIC AWARENESS OF CLIMATE CHANGE

There seems to be a moderate level of awareness of climate change in Lithuania, but even when most people in Lithuania are aware of climate change and its threats, there is a need for additional reliable information (Bukantis & all 2007, 181).

Many citizens consider climate change as a global problem, but do not necessarily see its relevance for them or for Lithuania. According to Bukantis & all (2007, 179) citizens don't seem to realize the scale of globalization and don't understand that even when Lithuania is not the most sensitive and vulnerable territory considering climate change impacts, extreme occurrences of changing climate, wherever they happen, will directly or indirectly effect social process and economic state of the country.

It came up also in many interviews that still many Lithuanians, even those who work with environmental issues, do not think that climate change would cause great problems in Lithuania. There are so many other, more current and pressing problems that are demanding action right now, even in the environmental sector.

One thing that was brought up as a reason for this lack of public awareness was considered to be the way media in Lithuania deals with climate change. On one hand media scares people with the worst-case scenarios of climate change, and at the same time they represent climate change as something so distant and so big that individuals can not affect on it in any way. Also the lack of knowledge and research on climate change impacts in Lithuania keeps the level of awareness low (Lithuania's third and fourth... 2005, 20).

Engaging public and politicians in environmental and climate change action remains a significant challenge in Lithuania, where so many other societal issues remain to be addressed. It is a common refrain across Lithuanian to hear that it is impossible to work with issues of climate change, which today seem so far in the future, when there are so many roads to fix and new infrastructure to build.

ADMINISTRATIVE CHALLENGES

Lithuanian administration in all levels is in large part overburdened by the amount of work it has, as well as due to the lack of financial and human resources. The fact that many young people have emigrated Lithuania after the country became independent seems to have affected the amount of the human resources that the administration has available. Environmental administration is not an exception, and since economic considerations are often put first in a country that is only on its way to greater prosperity, there is lack of also financial resources in environmental administration. For example in the Ministry of Environment there was only three (3) persons working with all climate change related issues – national as well as international – in spring 2008.

One problem is also that the old administration culture from earlier era still has its influence on the way issues are dealt. Lack of coordination and cooperation between different sectors seems to also make it more difficult to handle all the aspects of such a complex phenomena as climate change. When dealing with climate change one should be able to work together not only on environmental sector but also with transport,

agriculture, planning, trade, industry and other economic sectors. If climate change is solely a problem of environmental administration, there will not be enough action.

Among Lithuanian administration the Fire and Rescue Services seemed to be a bright spot. They were well aware of the increased risks that climate change brings to their field. They have already been working with mapping the coming risks of climate change as well as planning for the new emergencies.

In spring 2008 Ministry of Environment was preparing for climate change law that would among other things set down the different responsibilities of the different sectors of the administration regarding climate change.

ENERGY CHALLENGE AND CLIMATE CHANGE MITIGATION

Lithuania's greenhouse gas emissions declined for years after it became independent, but during last ten years they have started to grow again (Lithuania's third and fourth... 2005, 11).

Lithuania is currently dependent on nuclear energy and that trend is probable to continue in the future. When accessing to EU Lithuania made a commitment to shut down its only nuclear power plant Ignalina by the year 2005 (this was later put forward until 2009), since it has the same kind of reactor as was in notorious Chernobyl nuclear power plant.

Lithuania has already decided together with Estonia, Latvia and Poland that it will build a new nuclear power plant next to old Ignalina, but partnership has not been signed and Lithuania still needs to develop further the plans for the new plant (Baltic Course 2008). During the building process it is likely that Lithuania's greenhouse gas emissions will rise, because it needs to use more fossil fuels in order to compensate the lack of energy production. According to officials in Ministry of Environment it is an optimistic estimation to assume that the new plant is up and running in year 2020 due to all environmental assessment work that needs to be done before the construction can start, as well as due to the changes in the public opinion and economical situation in the country.

Enhancing the energy efficiency in housing is the one climate change mitigation thing that is most frequently mentioned all over the whole country. Demand for new housing has been large due to the poor quality of old buildings. Also big projects to improve the energy efficiency in old houses have been developed. Officials in Lithuania like to mention this also as an important action in reducing Lithuania's greenhouse gas emissions.

ADAPTATION WORK IN LITHUANIAN MUNICIPALITIES

There are 60 municipalities and 10 counties in Lithuania. The municipalities vary significantly in their approach to, and activity in respect of, climate change related issues. In October 2008 12 Lithuanian municipalities signed the Covenant of EU

Mayors, launched by the European Commission in January 2008, designed to go beyond the greenhouse gas emission objectives set by the EU for 2020.

According to people working at ECAT Lithuania, a nongovernmental organization that helps municipalities in implementing environmental regulations, around 15 to 20% of Lithuanian municipalities are currently active in respect of climate change issues. More important than the size of the municipality or the impacts that the municipality is likely to face due to climate change, however, are the individuals in municipalities and their interest in climate change issues.

As other levels of administration, also municipalities in Lithuania face lot of challenges due to high work loads, limited human resource capacities and lack of coordination between different sectors. One thing that affects climate change is also the changing consumption habits and way of living in Lithuania. Due to the economic growth in the country, people's way of living has changed more towards being like the old EU countries with similar kind of consumption habits. This, among other things, increases the energy consumption in Lithuania.

Climate change impacts and adaptation in Panevezys city municipality

Panevezys is the fifth largest city of Lithuania. It has 116200 inhabitants and it is located in central northern part of Lithuania, in half way between capitals of Lithuania and Latvia, Vilnius and Riga. Panevezys lies on the banks of the river Nevezis which runs through the city. The river has given its name to the city as well as is considered to be the symbol of the city. (Panevezys city municipality 2008)

FLOODING AND POLLUTION

For the city of Panevezys river flood is nothing new, but it will become even more common due to warming climate and increasing precipitation. The interesting thing is that the amount of water during the flood is not as big a problem for Panevezys as is the composition of the water. Due to the Soviet time factory in Panevezys there are now large amounts of chemical pollutants in the river bottom.

When the river Nevezis floods the worse damage caused by flooding is that caused to the private well system by polluted river sediments. Inhabitants are still largely dependent on private wells rather than public water pipes and drainage systems. The Nevezis' riverbed is highly polluted by chemicals such as mercury, lead and cadmium used by the Soviet-era factory that used to stand on its banks.

The city has now, however, finally begun to address this issue by cleaning the river and removing the polluted sediments. About 1.2 km of riverbed has been cleaned so far and the city has technical plans ready for cleaning another 12 km of riverbed. To be able to do this the city is applying for money from the European Union's Structural Funds.

Another problem for the city due to the lack of adequate drainage is water that stands on the fields and land areas after flash rains or if it has been raining many days in a row. The city is planning for a project to build more adequate drainage system as well as public water pipes, and is applying EU project funds also for this purpose.

AWARENESS RAISING AND EDUCATION

Panevezys city has been active in engaging the citizens to the environmental policy making. The city organises public gatherings to discuss all the environmental projects that are planned. It publishes ads and articles in local newspapers as well as has information campaigns in local TV channel in order to inform its inhabitants. City has organised meetings for its policy-makers where it invited also politicians from neighbouring municipalities to participate.

The environmental department of the city frequently publishes new information material to warn inhabitants about the risks that river floods and pollution can cause. At the moment the city is building a warning system that uses TV-monitors or displays all over the city. These TV-monitors can be used to warn citizens about different kind of emergencies or problems, such as heat waves or flooding.

The city has a special focus on children's education. It gives funding to Nature School that functions as an after school club for children to teach them more about nature. At Nature School children can learn to take care of animals and cultivate plants, but also how to recycle their waste and what kind of renewable energy sources there are. Specially built demonstration field helps them in learning process. Children bring the techniques to their homes where they can also teach their parents. Nature School also encourages pupils to do their own art and organises regularly international drawing competitions for school children. This year the topic of the competition was climate change. Winners in the competition get publicity as well as acknowledgement from the high-level political decision-makers in the city and county.

COMMITMENT TO CLIMATE CHANGE WORK

One of the examples of commitment to environmental work and at the same time enhancing the public environment has been the pioneering work that Panevezys has been doing in building the best cycle paths in whole Lithuania.

The city is known across Lithuania for its extensive cycle paths which run throughout the entire city. The city started to construct these paths in 1995 and now has a network of some 120km. Panevezys encourages people to use bicycles instead of cars, since the city has not been built to digest increasing amount of cars. In many places houses have been built so close to the streets that it is impossible to construct broader streets, even when it would be necessary due to the increased amount of traffic.

Investing in cycle paths gives the inhabitants a clear sign of what could be the long term solution for traffic problems. There are plans to build even more paths in the future as well as fix some of the existing ones. The most vulnerable land area in the middle of the city adjacent to the actual course of the river Nevezis is dedicated to a beautiful park area crisscrossed by cycle paths and pathways.

The case of Panevezys city municipality very clearly shows the importance of individuals for the environmental and climate work that has been done in local level. The Environmental Department of the city municipality of Panevezys consists of only three people, and it is a small department inside of a large municipality administration. Still the head of the department, Ms. Zita Tverkute, has been very successful in her work and has got lot of things done inside the city. Due to her work the municipality has received several awards on sustainable development work and she has managed to involve also political decision-makers to the environmental work of the city.

Panevezys city Mayor was also among the 12 city Mayors in Lithuania who signed the Covenant of EU Mayors, launched by the European Commission in January 2008.

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<http://www.panevezys.lt/DeskTopDefault.aspx?TabID=2061> 1.12.2008

Interviewees

The Association of Local Authorities in Lithuania
Ieva Andriulaityte, Adviser on Environmental and Energy issues

Baltic Environmental Forum (BEF) Lithuania
Sergej Suzdalev, Project Coordinator

Center for Environmental Policy
Dr. Romas Lenkaitis

ECAT Lithuania
Audrone Alijosiute, Director
Vaiva Ramanauskiene, Project Manager
Elena Talockaite, Project Manager

Fire and Rescue Department Under the Ministry of Interior of the Republic of Lithuania, Civil Protection Board
Viktoras Burbulis, Head of Population Protection and Planning Division
Edmundas Kuciauskas, Head of Civil Protection Regulation Division
Stasys Stasiunas, Chief Specialist of Population Protection and Planning Division

Kaunas city municipality
James McGeever, Head of Transport Division

Klaipeda city municipality
Daiva Berankiene, Head of Environmental Department
Indre Buteniene, Head of Strategic Planning and Monitoring Division

Ministry of Environment of the Republic of Lithuania
Vytautas Krusinskas, Head of Climate Change Division
Jurga Rabauskaite

Panevezys city municipality
Zita Tverkute, Head of Environmental Department
Povilas Vadopolas, Mayor of Panevezys city
Regina Kliminskienė, Director of Panevezys Nature School
Arturas Gruce, Director of Regional Waste Center.

Panevezys County
Gema Umbrasiene, Governor
Alfonsas Pulokas, Deputy Governor
Rita Abareviciute, Head of Development Department.

Vilnius University, Department of Hydrology & Climatology:
Arunas Bukantis, Head of Department
Egidijus Rimkus
Gintautas Stankunavicius