

Annual Programme Report
EEA Financial Mechanism 2009-2014 Programme LV02 “National Climate Policy”
Reporting year – 2016

Checklist questions before submitting the Annual Programme Report	YES	NO
Does the executive summary serve as a stand-alone document?	X	
Does this report provide analyses on how activities so far have contributed to progress towards targeted results using agreed output and outcome indicators?	X	
Have successful bilateral achievements been highlighted?	X	
Have all the sections in the Annual Programme Report been addressed, including any relevant horizontal concerns?	X	

1. Executive summary

2016 has been crucial year for EEA Grants programme “National Climate Policy” (hereinafter – Programme) implementation as well as significant developments in Programme area – climate change – took place. On 22 April 2016 Paris Agreement was opened for signature and ratification. The EU and its Member States, including, Latvia, is bound by the Paris Agreement to implement its Nationally Determined Contribution (NDC), which is at least 40% greenhouse gas (GHG) emission reduction by 2030 compared to 1990 levels. New commitments create new challenges for Latvia and Programme measures will help to prepare for them.

During the reporting year significant progress has been made towards achievement of most of the Programme output indicators since all 18 small grant scheme “Capacity Building in the Field of Research and Measures for Enhancing Society’s Understanding about Climate Change and its Consequences” (hereinafter – small grant scheme) projects and 6 out of 7 open call “Emission reduction technologies including renewable energy, sustainable buildings and technology development” (hereinafter – open call) projects were completed. Both pre-defined projects received extension of the final date of eligibility until 30 April 2017.

Within framework of pre-defined project “Development of Proposal for National Adaption Strategy, including Identification of Scientific Data, Measures for Adapting to Changing Climate, Impact and Cost Evaluation” (hereinafter – ADAPT pre-defined project) climate change future scenarios for Latvia for the period until year 2100 are developed. Also draft of Maritime Spatial plan and 4 out of 6 planned reports about climate change risk and vulnerability assessment and cost-benefit and cost-effectiveness assessments for adaptation measures in the most vulnerable sectors were prepared. Within pre-defined project “Development of the National System for Greenhouse Gas Inventory and Evaluation and Reporting on Policies, Measures and Projections” (hereinafter – INVENT pre-defined project) development of integrated database for climate change and air quality data aggregation and a tool to report projections for international reporting purposes is finished. Additionally, 2 studies for inventory improvement were completed, as well as 2 seminars and 2 educational events for sectoral experts were organized.

Programme Operator (hereinafter – PO) sees that not all defined Programme target indicators will be achieved as planned because according to open call’s selection results in 2014 2 of planned 3 projects on

innovative low carbon technologies were implemented and no projects related to the renewable energy technologies were selected. According selection results in 2014 within small grant scheme 6 research projects were approved therefore Programme output target on implemented 7 researches on climate research methodologies, indicator systems and horizontal issues also will not be achieved in full amount.

Programme is being implemented in cooperation with 2 Norwegian institutions – Norwegian Environment Agency (NEA) and Norwegian Directorate for Civil Protection (DSB). Programme considerably strengthened bilateral relations between Latvia and Donor State and contributed to the improvement of projects' results since in 20 out of 27 projects were involved project partners from Norway. All 4 open call and 14 small grant scheme partnership projects were successfully completed during reporting year and both pre-defined projects will be completed on 30 April 2017. In 2016, there have been organized 3 events under the Fund for Bilateral Relations (hereinafter – bilateral fund), which enhanced cooperation between entities in Latvia and Norway and ensured transfer of knowledge and best practise examples. Also PO reallocated financing from leftovers of complementary actions and savings from open call and small grant scheme projects to bilateral fund in order to provide possibility to all 119 Latvian municipalities to organize experience exchange events with Donor States entities. Additionally, PO participated in 9 complementary actions in Poland, Estonia, Greece, Hungary, Bulgaria and Lithuania. These events provided possibility to meet with several EEA Grants' POs and to share experience in environmental and climate change programme implementation.

2. Programme area specific developments

The Programme area – climate change - has significant developments during reporting period. Kyoto Protocol's second commitment period (Doha Amendment to the Kyoto Protocol) ends in 2020 and existing climate change agreement will be replaced by the Paris Agreement in 2020. 2016 was a milestone year for the Paris Agreement, which was adopted on 12 December 2015. On 22 April 2016 Paris Agreement was opened for signature and ratification. 175 States signed the Paris Agreement, and 15 States deposited instruments of ratification. Despite the fact that the Paris Agreement entered into force already in 2016, Parties are now working to prepare for the full implementation of the Paris Agreement. On 4 November 2016 Paris Agreement entered into force reaching the two necessary thresholds and the first session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA1) took place in Marrakech in conjunction with Conference of the Parties (COP) 22. During Climate Change Conference in Morocco Parties set up a work programme for elaborating the rule book for the Paris Agreement which will have to be finalized by the end of 2018. Paris Agreement was ratified on behalf of the EU, including Latvia, on 5 October 2016. The law ratifying the Paris Agreement in Latvia was adopted in the Parliament of the Republic of Latvia on 2 February 2017.

The EU and its Member States, including, Latvia, is bound by the Paris Agreement to implement its NDC. The EU's NDC is the at least 40% GHG emission reduction by 2030 compared to 1990 levels. On 20 July 2016, the European Commission presented a legislative proposal, the "Effort Sharing Regulation", setting out binding annual GHG emission targets for Member States for the period 2021–2030. These targets cover sectors of the economy that fall outside the scope of the EU Emissions Trading System (EU ETS). These sectors, including transport, buildings, agriculture and waste management, account for almost 60% of total EU emissions. Latvia as part of the EU will have a specific target for GHG reduction once the negotiations of the Effort Sharing Regulation in the EU are finalized.

According to the Paris Agreement Parties will have to enhance their adaptive capacity, strengthening resilience and reducing vulnerability to climate change. Each Party according to the Paris Agreement shall engage in adaptation planning processes and the implementation of actions, including the development

or enhancement of relevant plans, policies and/or contributions. Latvia is currently working on developing the National Adaptation Strategy.

Latvia's total GHG emissions in 2014 were 11393,29 kt CO₂ eq that is 52% less than 1990 level and this is only 0,27% of EU total GHG emissions. The latest available data shows that in 2014 Latvia's GHG per capita indicator was 25th of the EU 28 Member states and GHG per GDP was 12th of the EU 28 Member states. As of 2014 Latvia has fulfilled the annual non-ETS targets for 2013 and 2014 set in the EU legislation and is on track to fulfil annual targets up to 2020. In the EU legislation Latvia's 2020 target for non-ETS is set as 9 898 299 tonnes CO₂ eq. and Latvia's projected non-ETS GHG emissions will be 9 090 359 that is 8% less than the set target. Latvia's non-ETS GHG emissions in 2013 and 2014 were 5% and 3% less than the annual targets for these activities.

Main commitments and challenges regarding Programme area are related to EU commitments for GHG emissions reduction and increasing energy efficiency and the share of renewable energy.

3. Reporting on outputs

Open Call

During the reporting year within open call 6 out of 7 projects were completed. 5 projects' final reports were verified and accepted and all payments are made, one project's final report is in evaluation and one project final report will be submitted after project completion on 28 February 2017.

In **support area 1 "Implementation of energy efficiency measures and installation of renewable energy technologies by performing construction of low energy buildings, as well as reconstruction of existing buildings"** was planned to achieve target - 3 energy buildings, but according selection results of 2014 it was possible to approve 5 energy efficiency projects. As a result in reporting year 5 buildings were built and accepted into service and 4 projects final reports are approved, but 1 project final report was submitted at the end of 2016 and is not yet approved.

NGO "Ventspils High Technology Park" open call project objective was to expand science and technology museum "Kurzeme Demo Centre" operation by construction of a low-energy consumption building. Project was implemented in partnership with IDN Research AS from Norway. To provide project demonstration and publicity, project promoter has found a solution on how to introduce visitors with low-energy building concept in an interesting and attractive way - an interactive bicycle-stand *Journey in the world of energy efficiency* helps the visitors to better understand the advantages of energy-efficient passive houses and contribution to the society. From August, 2016 a new and unprecedented exhibition in Latvia about climate change and green technologies is available for visitors. NGO "Ventspils High Technology Park" within the small grant scheme project "Green Mission: Climate" created part of the new museum exposition and technical workshops. From 30 July after museum's opening exhibitions of museum visited 4706 visitors but museum's workshops visited 1264 visitors. Museum is mostly visited by school children.

Aloja County Council built business support center – library to demonstrate energy efficient passive house built from environmentally friendly CO₂ neutral materials as a solution for municipality buildings and improve business environment in the county. After the opening in November in business support center – library almost every week seminars, conferences and consultations by rural development specialist are being organized. Verification of project final report will be completed in I quarter 2017

3 of low energy buildings are sports halls, which are built near local schools and improve infrastructure for healthy lifestyle in Jelgava, Ādaži and Nīca. Sports halls in Ādaži and Nīca solved the problem in local schools regarding lack of appropriate premises for sports lessons as well are actively used for after school sports activities by school children and locals. After opening in July Nīca sports hall is used by Nīca secondary

school, football club “Nīca”, sports teams of the county as well as locals, already sports hall were used by 4195 visitors. Sports hall in Ādaži weekly is used by 700 school children and 200 people who want do sports. Sports hall in Jelgava Boarding-school No.2 significantly improved rehabilitation possibilities for school’s children with special needs since previously sports lessons were held in a classroom of 50 m² and a corridor of 40 m². Every week sports hall in Jelgava is used by 631 school children, 240 children's from youth sports school and 196 students of Jelgava Secondary school No.5.

It was planned to achieve that target level of energy consumption assessed for buildings will not exceed 25 kWh/m²/year, but taking into account good quality of projects the level of energy consumption assessed for previously mentioned buildings will not exceed 15 kWh/m²/year.

As was previously reported in support area 2 **“Use of renewable energy technologies for heat and electricity production”** according to the selection results in 2014 no projects were approved due to lack of interest of applicants and lack of quality in submitted project applications. Respectively output indicator on average emission savings will not be achieved.

In **support area 3 “Establishment, testing and demonstrating of innovative products and technologies for the reduction of greenhouse gas (hereinafter – GHG) emissions in non-emissions trading system”** 1 out of 2 projects is completed. The output target indicator of support area III on the 3 innovative low carbon technologies will not fully achieved in full amount since only 2 project applications on implementation of innovative low carbon technologies were approved according selection results in 2014.

As the result of Balteneko Ltd. project’s “Elaboration of innovative biomass gasification technology to obtain syngas” activities an innovative and effective low carbon biomass gasification technology solution (system) is developed and demonstrated. Experimental research results of the developed innovative biomass gasification technology suggest that technology operates effectively, and allows substituting the use of imported natural gas with local renewable resources. The performed measurements show that the developed technology operates successfully, and produces syngas with a relatively high combusting heat. It is planned to attract other funds/resources to adjust equipment and systems structural elements to ensure that the produced syngas could replace natural gas in combined heat and power generation (cogeneration) facility.

KEPP EU Ltd. project “Creating energy-efficient technology to produce polycrystalline silicon” aims to develop technology to raise energy efficiency in company’s production process, however project promoter has faced unforeseen problems related to public procurement procedures and project will be completed by 28 February, 2017.

Outcome 3: A less carbon-dependent economy					
Output 1: High energy saving building technologies implemented and demonstrated					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Energy efficiency projects implemented	0	3	0	5	5
Level of energy consumption assessed for buildings as result of implementation of energy saving technologies (kWh/m ² /year)	195	25	0	15	15
Output 2: Renewable energy projects implemented					
Output indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Average planned emission savings calculated (t/CO ₂ /year)	300	500	0	0	0
Output 3: Low carbon technologies developed and demonstrated					

Output indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Innovative low carbon technologies demonstrated within the programme	0	3	0	1	1

INVENT pre-defined project

All 5 of the planned conferences, training seminars, and other experience sharing events carried out to increase the capacity of Latvian inventory experts have taken place. The last event an experience exchange seminar on Climate Policy evaluation took place in Riga, 1 April 2016. In addition, 1 extra seminar (December 14-15, Riga) on “Agricultural GHG mitigation measures - Quantification of costs and mitigation potential” was carried out by the Ministry of Agriculture, as a result of prolongation of the project and savings of project partner. Both seminars provided a tangible value-added, as their results are to be captured in further cooperation between the countries (as in Seed Money Facility project carried out by MoEPRD – “Baltic Expert Network for Greenhouse Gas Inventory, Projections and policies and measures Reporting (BENGGI)”, as well as in a joint research paper to be developed by experts who met at the seminar for agriculture (the objective of this paper is to reflect on the last 10 years of developing marginal abatement cost curves.

An integrated database for climate change and air quality data aggregation was developed including a tool to report projections for international reporting purposes. Workshops for sectoral experts were carried out in Riga throughout the year 2016. The database and the tool will ensure enhanced availability and higher quality of data for the preparation of the national GHG inventory, thus taking into account the recommendations given by international auditors and consequently improving the system for environment monitoring.

All 4 out of 4 planned studies for inventory improvement have already been concluded. In addition, 1 extra study for inventory improvement was carried out by the Ministry of Agriculture, as a result of extension of final date of eligibility and savings of project partner. All of these studies will directly impact the quality and availability of data to be used in the integrated database, since the studies cover the sectors where improvements in data accessibility are especially needed, as well as improve the quality of existing GHG emission data for the preparation of future national GHG inventories.

All educational events for sectoral experts from institutions involved in the national system for policies and measures, and projections have taken place. Within these events, experience and awareness has been gained in order to develop a proposal for the most suitable model system for climate change mitigation policy evaluation, including guidelines for cost assessment of different policy measures, as well as ex-ante and ex-post policy assessment. Model system, which will help to improve the quality of the information for preparing national GHG projections as well as evaluating measures, will be developed in the remaining implementation time of the project until 30 April 2017.

Outcome 2: Improved environmental information on impact, status and trends					
Output 1: Improved greenhouse gas inventory system					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Conferences, training seminars, and other experience sharing events carried out to increase the capacity of Latvian inventory experts	0	5	4	2	6
Developed integrated database for climate change and air quality data aggregation for preparing reports for different international institutions	0	1	0	1	1

Implemented studies undertaken for inventory improvement	0	4	2	3	5
Output 2: Improved quality of ex-ante and ex-post evaluation of climate change policy measures					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Developed model system for climate change mitigation policy evaluation, including guidelines for cost assessment of different policy measures, and ex-ante and ex-post policy assessment	0	1	0	0	0
Carried out educational events for sectoral experts from institution involved in the national system for policies and measures, and projections	0	3	2	1	3
Developed unified data tool for greenhouse gas projection preparation for international reporting	0	1	1	1	1

ADAPT pre-defined project

Detailed analysis of long term (1961 – 2010) climate historical data (average and extreme values of air temperature, precipitation, wind direction and speed – average and extremes values) is finished and developed climate change future scenarios for Latvia (regarding IPCC scenarios RCP4.5. and RCP8.5) for the periods 2011-2040, 2041-2070, 2071-2100. For wider public visualization a tool for climate change scenarios is also developed and available online. It will be an important contribution to many industries and business, state and municipal institutions and universities in development planning and finding the best and the most appropriate adaptation solutions.

Also draft of Maritime Spatial plan was prepared during reporting year, which will define the use of the sea, considering a terrestrial part that is functionally interlinked with the sea and coordinating interests of various sectors and local governments in use of the sea. Approval of Maritime Spatial plan by Government is planned in 2017. Also 4 of 6 planned reports about climate change risk and vulnerability assessment and cost-benefit and cost-effectiveness assessments for adaptation measures in the most vulnerable sectors as agriculture and forestry, landscape planning and tourism, biodiversity and ecosystem services, health and wellbeing are concluded. Risk assessment in 2 remaining sectors - building and infrastructure planning, civil protection and emergency planning as well as development of climate change web portal will be completed in 2017. Reports are used for development of proposal for Latvia's National Adaptation Strategy.

Small Grant Scheme

Within small grant scheme all 18 projects are completed during reporting period. 17 projects' final reports were verified and approved and payments to project promoters made but 1 project's final report will be approved in 2017.

8 project contracts were signed in support area 1.1. **“Developing educational programme modules and developing and organizing of learning courses”**, all projects are completed. In this support area it was planned to develop of 4 education modules/study courses. As a result the 5 different educational programme modules and 6 study and learning courses were developed and approbated in order to improve knowledge on climate change of pupils, students, entrepreneurs, as well as representatives of state institutions and local governments. The target was overachieved by 7 educational programme modules due to high interest and good quality project applications (selection results 2014). It is worth to mention that several universities integrated developed programme modules in their study courses thus expanding number of students who will have possibility to improve knowledge on climate change, e.g. Latvia University

of Agriculture integrated developed module in 13 existing study courses and NGO “Green Liberty” adjusted developed study modules for 4 different target groups.

As one of best practice example can be mentioned Riga Technical University’s implemented project in partnership with University of Bergen – “Development of a training course and study program module “Socio-economic aspects of the climate technology for bioeconomy sector””. Project promoter established an innovative training system where social and economic aspects of the climate change are based on the biological economics development analysis, which means that different sectors are studied and analysed together. Study course received a lot of attention and was attended by representatives of the parliament of the Republic of Latvia, ministries, state institutions, as well as by students, scientific and academic staff from several universities in Latvia and by representatives of NGOs and enterprises. Besides that, the book about sustainable development “Biotehonomika” and book of practical and laboratory works was created to increase knowledge of public and students about more sustainable development of Latvia by increasing use of local resources. In addition educational program modules were implemented in Riga Technical University and Latvia University of Agriculture, University of Latvia and Liepaja University. Additionally, professional education programmes for vocational school students, entrepreneurs, as well as representatives of state institutions and local governments were developed.

Within **support area 1.2. “Organizing of educational projects and informative campaigns”** the planned results were overachieved by 1 and in total 13 educational and informative campaigns (instead of planned 12) to enhance society’s understanding and knowledge on climate changes were organized in 4 projects (which included series of different campaigns). All 4 projects are completed, however project promoter’s NGO “Green Liberty” final report is not yet verified.

In this support area several projects can be highlighted as best practice examples. NGO “Latvian 4H club” in partnership with Norwegian Institute for Agricultural and Environmental Research “Bioforsk”, University of Latvia and Latvian Fund for Nature implemented project “The language of climate” - an information campaigns regarding climate change and adaptation. Project included elaboration of the school programmes of interdisciplinary practical works in lessons of geography and science considering climate change as well as inclusion of these materials in the professional education programmes for the teachers. Another campaign was organized for school children and included experiments (practical works) as measures of informal education with elaboration and publication of corresponding video materials on the internet, inviting young people to explore the nature processes independently. Reporting system of seasonal phenomena in the existing nature observation system (www.dabasdati.lv) and kick-starting the observations as an example of adaptation of the wildlife was done.

NGO “Homoecos” project was carried out in collaboration with Norwegian environmental organisation “GRID-Arendal”. 1 of project’s campaigns included promoting of practical methods in which people can get involved in climate change mitigation and adaptation. Another campaign was a travelling photo exhibition about impact of climate change during the years and demonstration of the documentary film in all of Latvia’s regions. Also campaign for ensuring wider publicity included environmental ads, TV and radio broadcasts, as well as printed publications. Additionally as e-campaign a digital tool <http://www.2gradi.lv/en/> was created, which is an instrument for strengthening the understanding of climate change and its effects. In the final event a popular Latvian stand-up comedian led discussions about climate change, its causes and consequences, global solutions and individual responsibility. Project attracted a lot of young people’s attention.

In **support area 2 “Capacity building through applied research on mitigation of climate change”** all 6 projects concluded during the reporting year. Researches were developed on the following issues: how climate change affects specific species and biodiversity in lakes and Baltic sea; development of bio-economy

model for sustainable use of biological resources; GHG reduction potential of household areas; building renovation impact on climate change, as well as researches that analyze impact of different anthropogenic processes on climate change.

To find out the climate change effects on lakes in Latvia, its impact on toxic algae blooming and human health, NGO "Institute for Environmental Solutions" in cooperation with Latvian Institute of Aquatic Ecology carried out a holistic survey of the Burtnieks and Alūksne Lake's food-chain. Also in order to raise the awareness and expand the local knowledge on climate change effects on lake ecology and introduce the local community with scientific research methods scientists invited local community members and school children to participate in the research. The project promoter organized extensive final event during which the message about the research conclusions was brought further to wider audience. It gathered the attention of different municipality representatives, media, environmental protection specialists, students and other interested parties. During the discussions the participants confirmed that they can actually see the indicators that show the effects of the climate change, in the same time, there are a lot of other factors that affect lake ecology. As a conclusion of the discussions, it was clear that for smart and sustainable management solutions the information based on scientific research and common action of various stakeholders is crucial.

Outcome 1: Developed strategies and measures for adapting to a changing climate					
Output 1: Developed proposal for national adaptation strategy					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Developed climate change and impact scenario for 2050 - 2100	0	1	0	1	1
Developed reports on indicators, risks and adaptation measures	1	13	3	5	8
Output 2: Improved capacity on climate change research					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Implemented researches on climate research methodologies, indicator systems and horizontal issues	0	7	0	6	6
Output 3: Enhanced society's knowledge about climate change					
Output indicators	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Developed professional education programme modules on climate change and adaptation.	0	4	0	11	11
Information and planning events (seminars and campaigns) carried out	0	12	0	13	13

Conclusions

By the PO's opinion the overall progress achieved in projects can be described as satisfying. Most of the Programme level outputs targets were achieved and several outputs targets were overachieved by the end of 2016. Taking into account that not all projects are completed several Programme output targets will be achieved in remaining time of projects implementation by 30 April 2017. However according to project selection results in 2014 few output targets could not be achieved.

4. Reporting on Programme outcome(s)

Outcome 1

Economic losses from natural disasters, such as floods and droughts, which amounted to around 100 billion Euros in the period 2002-2014 in the EU and caused over 80,000 deaths, are likely to increase due to more frequent and severe impacts of climate change. In many occasions healthy wetland and forest ecosystems can provide effective and cost-efficient protection against extreme weather events. Latvia fully agrees with necessity to adapt to the changing climate and is ready to implement these principles effectively not only in environmental or climate policy agenda but also in other policies, like Common Agricultural Policy (CAP), Fisheries Policy, etc. Several adaptation activities (flood prevention and protection of coastal areas) will be supported by European Regional and Development Fund and strengthen and supplement activities of the ADAPT pre-defined project.

Research results of ADAPT pre-defined project and prepared scenario and reports contributed towards development of proposal for National Long-term Climate Change Adaptation Strategy up to the 2030. The creating of adaptation policy is necessary to ensure a systematic climate change risk-benefit assessment and management. For the first time this kind of adaptation policy document is being developed in Latvia. National adaptation strategy is expected to be approved at the middle of the year 2017. In 2017 the European Commission will report to the European Parliament and the Council on the state of implementation of the EU adaptation strategy and propose a review if needed, and by 2017 all the EU member states need to adopt their national adaptation strategies.

Strategy includes main objectives – climate change impacts' and risk minimization and maximization of climate change benefits or opportunities, and coverage of a detailed information (analysis). The main chapters are analyzing: 1) historical climate change impacts from the year 1961 and future scenarios until 2100, 2) risk and vulnerability assessment in the 6 most vulnerable sectors in Latvia, 3) adaptation measures in sectors and calculations of cost – benefit analysis, 4) adaptation monitoring, reporting and evaluation (MRE) system, incl. climate and adaptation indicators, 5) engagement of stakeholders, determination of their responsibilities, 6) research, education, data collection and providing, information dissemination, public involvement, etc. respective needs.

Another Outcome indicator which is planned to be achieved within Outcome 1 - increased state institution, local municipality and public awareness on climate change and adaptation issues by 30%. The Outcome 1 should be achieved by successfully implementing the ADAPT pre-defined project activities and reaching planned targets of output indicators within small grant scheme.

To measure small grant scheme contribution towards increasing society's awareness on climate change and adaptation issues, Agency carried out survey. Taking into account that results of several projects related to researches, development of study modules in universities and trainings for school children will provide results in long term and the fact that each project was targeted towards specific audience (limited number of participants) PO assessed that more appropriately was to measure impact of project activities on awareness raising of participants of project activities - trainings, studies and seminars. Such methodology provided possibility to get more useful results and assess exact impact of Programme's projects.

An online survey was sent to all project promoters and participants of developed educational programme modules, seminars and campaigns. Survey included several questions to assess knowledge and increase of awareness of participants. 153 responses were received. In total 58 % acknowledge that their awareness on climate change and adaptation issues increased noticeably after taking part in the activities of the small grant scheme. In addition, the question whether the information related to climate change is sufficient 57% of respondents have pointed out that there is a lack of publicly

available information which means that awareness raising activities are useful and should be implemented in future.

However these results are considered to be preliminary results on achievement of outcome indicator targets and PO will not report these achieved results in system DoRIS, taking into account that in 2017 after completion of all projects, an independent external ex-post Programme evaluation will be carried out in accordance with evaluation guidelines. Independent evaluators may choose different methodology and interpret results in a different manner therefore to avoid misinterpretation and mismatch of results the achievement of outcome indicators will be reported in DoRIS in the final report after results of evaluation will be harmonized with the FMO.

Outcome 1: Developed strategies and measures for adapting to a changing climate					
Outcome Standard Indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Number of adaptation strategies developed at national level	0	1	0	0	0
Outcome Custom Indicator	Baseline	Target		Preliminary assessment 2016	Achieved in total
Increased state institution, local municipality's and public awareness on climate change and adaptation issues (%)	0	30	0	58	0

Outcome 2

Within Outcome 2 it is planned to achieve outcome indicators – Improved system for environment monitoring by increasing amount of national GHG inventory improvements (%) and Increased quality and sufficient amount of information of the national GHG projections, measures and the policy evaluation reports (%). The Outcome 2 should be achieved by successfully implementing the INVENT pre-defined project activities.

In 2016 substantial progress has been made in several activities of the INVENT pre-defined project, thus moving towards achievement of outcome indicators. Work has been finished on most of the planned Project activities. Namely, following a number of training seminars throughout the year, work has ended on the Integrated database for climate change and air quality data aggregation for preparing reports for different international institutions, as well as on the Unified data tool for GHG projection preparation for international reporting. The database will ensure enhanced availability and higher quality of data for the preparation of the national GHG inventory, thus taking into account the recommendations given by international auditors and consequently improving the system for environment monitoring.

To measure INVENT pre-defined project contribution towards achieving Outcome 2 indicators, PO decided to choose qualitative assessment methodology taking into account qualitative nature of the recommendations and the fact that reporting formats has changed over the years. Agency in cooperation with PO carried survey of Latvia's GHG inventory experts. The survey was sent to 39 experts, who are involved in GHG inventory in Latvia, 13 responses were received.

To measure impact on increasing amount of national GHG inventory improvements (%) respondents were asked to provide an opinion about the extent to which the Latvian authorities have increased the amount of the outcome of the recommendations of the UNFCCC international auditors of the annual report of the Working Group, compared to the situation in 2013. 57 % of respondents believe that the amount of the outcome of the recommendations ranged from 21% to 30%. To assess the extent to

which the quality and sufficient amount of information of the national GHG projections, measures and the policy evaluation reports increased, it was asked to experts to estimate the amount of quality and sufficient information in comparison with the situation on year 2013. Half or 50% of the surveyed respondents believes that the detection of the amount of information is ranging from 20% to 29%. While the other half, or 50% of the experts, considers that the detection of the amount of information has increased by more than 30%. The situation varies among different sectors.

The INVENT pre-defined project is in implementation phase, after the end of the project and the implementation of all planned activities it will be possible to receive more accurate information about the achieved indicators. Similarly as with measurement of outcome 1 also these results are considered as preliminary results and will be reported in DoRIS only after results of external evaluation will be harmonized with the FMO.

Outcome 2: Improved environmental information on impact, status and trends					
Outcome Custom Indicators	Baseline	Target	Achieved by 31.12.2015	Preliminary assessment 2016	Preliminary Achievement*
Improved system for environment monitoring by increasing amount of national GHG inventory improvements (%)	50	85	0	30	80
Increased quality and sufficient amount of information of the national GHG projections, measures and the policy evaluation reports (%)	30	70	0	30	60

**Including baseline*

Outcome 3

One of the ways to improve energy efficiency is to build low energy buildings and tap the huge potential for efficiency gains in building sector which is the largest single energy consumer in Latvia, absorbing 40% of final energy. Unfortunately energy efficiency measures in buildings occur in slow pace, only small part of all buildings are reconstructed each year. Also construction of low energy buildings is not sufficient. Therefore projects which increase energy efficiency measures in buildings and reducing total energy consumption in Latvia are setting example and promote energy efficiency, thus contributing to reaching energy efficiency and climate targets set by EU.

To achieve outcome indicator of outcome 3 energy efficiency projects were supported. During the reporting year within open call 5 buildings were built and accepted into service. Inspection of building envelopes in the construction stage was made for all buildings, results of air permeability tests shows that the planned thermal energy consumption is less or equal to 15 kWh/m² per year. Project Promoters will submit monitoring reports about the first service year of the building in year 2018, and the actual energy consumption for heating (kWh/m₂ per year) will be measured.

According to baseline level of energy consumption, average heat consumption in Latvia was 195 kWh/m² per year. If heat supply and hot water is ensured to the building by using central heating system, the national CO₂ emission from average educational institution building is 51,48 kgCO₂/m² per year, whereas low energy building with average heat consumption 15 kWh/m² per year - only 3.96 kgCO₂/m² per year. Emissions factor (kgCO₂/kWh) was determined in accordance with the regulatory enactment on energy efficiency calculation method of the building. Total heating space of 5 open call buildings is 5860 m². It was calculated that a typical (or average) CO₂ emission from such buildings' space is 301,67 t/CO₂/year, but from low energy building with average heat consumption 15 kWh/m²

per year, CO₂ emission is 23.21 t/CO₂/year. Additionally, “Balteneko” Ltd. project developed innovative and effective biomass gasification technology system to replace imported natural gas in the existing natural gas boilers with local renewable energy source – biomass with potential 848,40 tons CO₂ emissions reduction per year. This technology is fully functional and project promoter is looking for additional investment possibilities to promote replacement of natural gas boilers with this technology, thus in the future developed technology has large potential to save GHG emissions in the energy production by using biomass. Additionally it is planned to achieve savings of 133,53 tons CO₂ emissions reduction per year as a result of KEPP EU Ltd. project completion in 2017.

Outcome 3: A less carbon-dependent economy					
Outcome Custom Indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Expected annual decrease of greenhouse gas emissions (t/CO ₂ /year)	0	4300	0	1126	1126

As previously reported, the outcome indicator on expected annual decrease of GHG emissions will not be fully achieved in full amount since only 2 out of planned 3 project applications on innovative low carbon technologies were approved and no projects related to the renewable energy technologies were selected where initially PO planned the largest GHG emission savings.

Progress on horizontal concerns

The Programme is contributing towards developing a comprehensive national climate policy and improved adaptation and mitigation measures. Climate Change is issue which affects whole society therefore Programme activities does not exclude any social groups and will positively affect all society. However Programme activities does not directly contribute towards Roma inclusion and/or any of the other horizontal concerns related to fundamental values such as promoting tolerance, multicultural understanding, respect for the rights of minorities including combatting hate speech, extremism, racism, xenophobia, homophobia, anti-semitism, sexual harassment, violence against women and trafficking. Programme and projects activities are being implemented in a way that does not exclude any member of society. It is worth to mention that open call’s low energy sport hall and rehabilitation facilities in Jelgava is built for children with special needs, thus promoting sports accessibility for children with physical and mental development derangements.

5. Project selection

n/a

6. Progress of bilateral relations

Strengthened bilateral relations

In several projects the strengthened bilateral relations and contribution of Donor States partners was especially visible. As continuation of previous cooperation, Riga Technical University (RTU) Institute of Energy Systems and Environment implemented 2 projects within small grant scheme with University of Bergen. Project partner provided knowledge and experience exchange during the project implementation and tool development for policy analysis. Project partner helped with creation of a system dynamic model and result analysis. Project promoter in close collaboration with System dynamic group of University of Bergen developed system dynamic model and representatives of RTU institute went to mission to University of Bergen to discuss main project guidelines and operational principles. Partner also took part in project conferences in Latvia as guest speakers. Partner assisted

in integration of the planned program theme in study modules, teaching methods, preparation of methodological and training materials.

NGO “Latvian 4H Club” small grant scheme Project partner was Norwegian Institute for Agricultural and Environmental Research “Bioforsk”. Partner experts visited Latvia twice; as a result of visits a popular science publication about climate variability “What does climate change mean to me?” was developed. Main topics of 1st visit were environmental research and climate change. Project partners discussed the nature observation methodology in Norway and potential experience exchange in Latvia. Experiments for workshops about climate variability were made to develop practical materials for work at secondary schools. As well Norwegian professor participated in seminar “Environment. Responsibility. Creativity.” by reading a lecture on environmental studies in Norway - how to motivate and involve children and young people in wildlife watching. During 2nd visit partner participated in educational seminar for teachers and organized field research on climate change with more than 70 natural sciences teachers from Latvia.

The bilateral fund

On 16-17 of February 2016, within bilateral fund experience exchange event was organized in Oslo, Norway. Event was organized by the MERPRD as ADAPT pre-defined project promoter in cooperation with Norwegian Directorate for Civil Protection (DSB). The aim of the event was to share knowledge and exchange views between Latvian and Norwegian experts on climate change risks management and practical solutions for reducing them. In seminar participated 5 representatives from Latvia, representing MoEPRD and LEGMC and 9 participants from Norway, who represented the DSB, the Norwegian Environment Agency, Oslo municipality, the Norwegian Water Resources and Energy Directorate, the Norwegian insurance companies. During the event Norwegian experts shared their experience and knowledge on adaptation policies and measures system in specific and most important areas such as construction, transport, infrastructure and water resource management (related to the floods and precipitation). Examples of risks and vulnerabilities in the scientific and practical aspects of the national and local levels were presented and linked to research, information and solutions. Experience exchange between Latvian and Norwegian specialists led to fruitful discussions and established contacts for future cooperation.

Jelgava City Council within open call project “Energy Efficient Measures for Sustainable Buildings in Jelgava” invited project partner - Norway Inland Energy Agency (INEA) to inspect the construction object and prepare recommendations about use of technologies of renewable energy resources in low energy buildings as well as for maintenance of the new-built low energy building (gymnasium) in Jelgava Boarding-school No.2. As a result experts of INEA developed package of recommendations for achieving higher energy efficiency indicators, maintenance of necessary indoor climate conditions and further exploitation and monitoring of building. The Norwegian experts had opportunity to get new experience on construction and energy efficiency improvement process in Latvia – its weaknesses and strengths. This event of bilateral fund is an evident example on how experience exchange can be used to improve results of particular project.

Aloja municipality as open call project’s “Business support centre – library “SALA” of Aloja County” promoter from 21 to 23 September, 2016 organized an experience exchange visit to project partner in Voller municipality, Norway. The main objective of this event was to take over Norwegian experience in construction of energy-efficient buildings. During the visit parties also searched for similarities and differences in promoting entrepreneurship for developing energy efficient products. Also, delegation tried to find out how local community is motivated to support energy efficiency and use of eco-friendly materials and heating technologies in the building construction, and the impact of these activities on

the municipal budget. Special attention was focused on Norwegian good practice examples. Delegation visited several municipality and local companies' buildings, which are built as low-energy buildings. This visit provided broad insight to Vole municipality's experience in promoting energy efficiency and strengthened belief of Aloja municipality to continue improving energy efficiency in municipality.

Despite the fact that organized bilateral funds events provided valuable experience of donor states the overall interest of project promoters is not that high as expected therefore to facilitate achievement of Programme bilateral output indicators and strengthen bilateral relations between Latvia and Donor States PO provided possibility to all 119 Latvian municipalities organize experience exchange events with Donor States' institutions about implementation of local climate change adaptation measures and development of local climate change adaptation strategies as well as reallocated additional funding to bilateral fund from savings of open call projects and leftovers of complementary actions.

1. Extent of cooperation

Programme is being implemented in cooperation with 2 Norwegian institutions – NEA which provides expertise regarding GHG emissions inventory and energy efficiency improvement and DSB which provides expertise regarding adaptation to climate change. The cooperation with DPP has also been fostered by organising Cooperation Committee (hereinafter – CC) meeting on 23-24 May 2016 in Latvia. The meeting in Latvia was combined with study visit to recently built energy efficient sports hall in Ādaži as well as meeting with Ādaži municipality representatives. The excellent cooperation with DPP will be continued through organising the Programme final conference where DPP assistance with ideas and consultations on conference content will be especially valuable.

Assessing the extent of cooperation it is seen that most of the Programme's projects are implemented in cooperation with institutions from Donor States. Both pre-defined projects have Norwegian partners, 4 of 7 open call projects are implemented in cooperation with project partner from Donor States (Norway) and 14 of 18 small grant scheme projects have partners from Donor States (Norway).

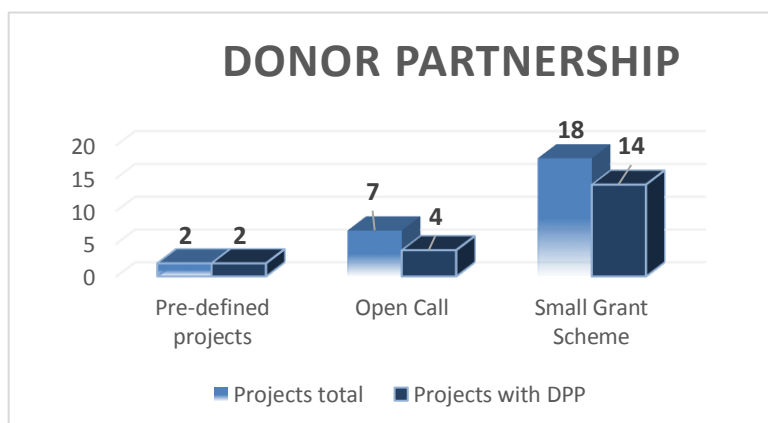


Chart. 1. Donor partnership

The cooperation between Latvian partners MoEPRD and Norwegian partners (NEA) has been further strengthened during the project implementation period, especially as a result of successfully organized knowledge and experience sharing seminars, which provided the possibility not only to compare and share knowledge on a country/partner level, but also, importantly, exchange useful information and practical know-how at a GHG inventory expert level.

Within the framework of the ADAPT project cooperation between MoEPRD and DSB has been further strengthened by organizing organized expert experience exchange seminars. This cooperation is very important for development process of the Latvia's National Adaptation Strategy.

Additionally, 14 articles were published in Project Promoters' and partners' websites, where 6 articles were about Norwegian partners contribution, 2 articles were about the projects promoters working visits to Norway, 3 articles about project partners visit to Latvia, 2 articles were about bilateral fund events with Norwegian institutions and 2 articles were about Norwegian partner and its contribution in project implementation. In 2016 additional professional networks between Latvian and Donor States' institutions were established between Aloja and Voler municipalities, since both institutions organized experience exchange event where cooperation goes beyond project activities and both institutions discussed possibilities to expand cooperation also in business promotion. However to facilitate achievement of this bilateral indicator PO expanded eligible applicants for bilateral cooperation.

Bilateral indicators					
Indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Number of project partnership agreements in beneficiary civil society	0	4	13	0	13
Number of project partnership agreements in beneficiary public sector	0	9	7	0	7
Number of professional networks between institutions in beneficiary and Donor States established and operational	0	11	0	1	1
Number of articles published in one country about the other partner country	0	15	7	14	21

2. Shared results

One of the activities within the INVENT pre-defined project envisages the development of a climate policy evaluation model - climate change decreasing policy evaluation modelling system including guideline elaboration/development, expense evaluation for different climate change policy event implementation and ex-ante (predictable) and ex-post (current) policy evaluation. In this regard, a special seminar on modelling systems has been organized, wherein the Norwegian experts presented the technical solutions and possibilities of the model used by Norway. The Norwegian example and the discussions dedicated to this topic helped to develop an idea of the most suitable model for Latvia's situation.

As part of the experience exchange seminars, both partners had the possibility to learn more about each country' specifics in preparing GHG inventories, as well as their efforts in reaching the 2030 emissions reduction target. In this regard, the Norwegian colleagues could also gain insight in the architecture of climate policy of the EU, since Latvia is meeting its emission reduction targets as a member state of the EU.

"Demarsch" Ltd. small grant scheme project partner was Ostfold University College, Faculty of Engineering. Aim of the partnership was to provide best practice examples of environmental policy implementation in organizations and small and medium enterprises. Partner presented Norwegian experience in motivating enterprises to think environmentally friendly and promote energy

efficiency activities as well as provided consultations and advice on training module content development and participated in publicity events providing Norwegian best practice examples.

3. Improved knowledge and mutual understanding

20 out of 27 projects are Donor partnership projects. The partnership provided possibility to different institutions from Latvia to visit Norway and the other way round. Thus both countries had the possibility to learn from each other and improve mutual understanding. In most projects experience of Donor States partners were used to learn about best practice examples, gain new ideas, and improve projects results e.g. improve energy efficiency of constructed buildings, improve research and study modules. Norwegian experts had possibility to expand their knowledge and gain knowledge about situation in Latvia in different fields related to climate change, e.g. bioeconomy potential, energy efficiency and trainings for children.

The INVENT project has ensured the building of capacity of Latvian GHG inventory experts, thus contributing to a successful implementation of GHG inventory system requirements of the EU and the United Nations. The knowledge and experience sharing events have contributed to discovering new viewpoints and possibilities to approaching GHG inventory system related issues, and these events have ensured an enduring collaboration between Latvian and Norwegian experts.

Strengthening professional cooperation with Estonian colleagues, Donor States' experts and Latvian experts from MEPRD attended seminar organized in Tallinn "Climate-adapting Estonia 2030: Why and how?" (April 2016). This was seminar about Estonia's experience in the development of Adaptation Strategy, similar to ADAPT pre-defined project, funded through the EEA Grants programme of Estonia "Integrated Marine and Inland Water Management" project "Elaboration of Estonia's Draft National Climate Change Adaptation Strategy and Action Plan".

4. Wider effect

Implementation of partnership projects led to wider effects of cooperation. An experience exchange seminar on Climate Policy evaluation took place in Riga in April 2016, where experts from Latvia and Norway shared their knowledge and experience on current practice of Climate change policy evaluation – case studies of Norway and Latvia, Low carbon development strategy for future climate policy, as well as opportunities for future cooperation in developing and evaluating climate policies. During their discussions, the participants identified several topical issues which could benefit from a further international cooperation. Amongst those were the development of agriculture measures and the quantification of emission reduction potential for policies and measures. The Norwegian expert's experience and suggestions have also been taken into account in order to set up and implement a new Seed Money Facility project carried out by MoEPRD – BENGGI.

Following the successful cooperation in the framework of the bilateral fund event "Providing sea and coastal connection, climate change risks and adaptation strategy determination" it is planned to continue successful cooperation between MoEPRD and Norwegian Ministry of Climate and Environment. In 2017 it is planned further cooperation with expert from Norwegian Ministry of Climate and Environment on consultations and peer-review about Latvia's Maritime Spatial plan.

As a result of development of climate change adaptation strategies in Latvia and Estonia professional cooperation with Estonian Environmental Research Centre were strengthened which was involved and coordinated elaboration of the Estonia's National Adaptation Strategy. Estonian Environmental Research Centre was invited to share experience in development and management of monitoring system for adaptation in Estonia at the expert seminar "Development of monitoring

system for adaptation". Taking into account that both neighbouring countries have similar climate change challenges experience exchange between Latvia and Estonia was especially valuable.

Complementary action

In 2016 PO participated in 9 complementary actions in Poland, Estonia, Greece, Hungary, Bulgaria and Lithuania. Events in Greece (June) and Bulgaria (October) provided possibility to meet with several EEA Grants POs and to share experience in environmental and climate change programme implementation and provide best practice examples in publicity, communication and experience on managing EEA Grants environment programmes. Events provided possibility to share contacts between POs from Beneficiary States - Greece, Bulgaria, Latvia, Estonia, Lithuania, Portugal, Czech Republic, Slovakia, Poland and Donor State – Norway.

Three events were organized in Hungary in autumn 2016 under the EEA Grants programme HU04 "Adaptation to climate Change in Hungary" (hereinafter – HU04) with the aim to present the achievements of the HU04 programme and its projects. Events also provided a platform for possible future cooperation for the donor countries, beneficiaries and other relevant stakeholders. Participation in experience exchange events in Hungary is continuation of successful cooperation between MEPRD and Regional Environment Centre which started in 2014 as complementary action of both POs.

In Poland (March) international conference and study visit of EEA Grants programme PL04 "Saving Energy and Promoting Renewable Energy Source" was organized. Conference and the site visit gave a wide insight in the implemented projects in Poland and Norway and latest experience in the use of new and innovative renewable energy technologies for implementation of energy efficient measures for climate change mitigation. It was concluded that the support for renewable energy resources and energy efficiency has grown in the past years in Poland and issues regarding these sectors are being monitored more carefully. Another international conference and study visit in Poland (November) was organized under programme PL02 " Biodiversity and Ecosystem Services " on protection of marine areas. During the event experience of Poland and Norway in management and protection of marine areas, prevention of erosion and disappearance of beaches and cliffs degradation and monitoring of the sea coast and zones of coastal waters was presented. Taking into account that Latvia faces similar problems in protection of Baltic sea coastal areas, this experience exchange event was valuable as it provided possibility to learn from Poland's best practice examples as well as negative experience.

Event in Estonia (April) introduced with Estonia's experience in developing a strategy for adapting to climate change under EEA Grants programme EE02 "Integrated marine and inland water management". The participation in conference was especially valuable for experts involved in development of climate change adaptation strategy within ADAPT pre-defined project and gave the opportunity to compare the development of strategies for adapting to climate change in Latvia and Estonia by evaluating theoretical and practical solutions, working on the climate change influence and risk (as well as benefit) evaluation in the main economic sectors, as well as the future projections and their potential expenses. In the framework of the programme LT10 "Capacity-building and institutional cooperation between beneficiary state and Norwegian public institutions, local and regional authorities" In Lithuania (December) PO participated in project's "The partnership project on greenhouse gas inventory" closing conference where results of capacity building in GHG emissions inventory were presented. This event was especially valuable for experts involved in INVENT pre-defined project implementation with the similar aim.

It can be concluded that in year 2016 in lot of EEA and Norway Grants programmes significant progress was achieved which provided platform for POs from different Beneficiary States to present achievements in projects, share best practice examples and share experience in programme implementation.

7. Monitoring

The project monitoring and control functions are carried out by the Agency. To provide monitoring of Programme the project contract has requirement that Project Promoters shall submit a progress report on project implementation each four months and one final report following project completion. In year 2016 6 pre-defined projects, 46 small grant scheme and 16 open call projects reports were verified and approved.

The Agency made risk analysis of each project and according to Programme agreement Agency shall foresee to monitor each year all high risk projects, not less than 30% of medium risk projects and 5% of low risk projects of open calls. However, to be entirely sure that all project promoters were implementing the projects according to the requirements of normative acts regarding the Programme implementation and project contract Agency decided to carry out on-site monitoring visits to all completed projects before approval of project final report. In total during 2016 Agency carried out 26 on-site monitoring visits to verify projects interim and final reports.

Agency verified compliance of supplies and services, as well as supporting documents and payment requests. Conclusion for all monitoring visits were positive – the activities were implemented in accordance with the project application and regulations, no shortages were identified, or were eliminated during final report approval. Most of the shortages were related to project publicity and record keeping, none of them had influence on project results. Additionally, in order to verify whether pre-defined Project Promoters are implementing the projects according to the requirements of normative acts regarding the Programme implementation and project contract, the Agency carried out monitoring visit at project partner LEGMC on 30 November 2016. Conclusion for both monitoring visits was positive – the activities were implemented in accordance with the project application and regulations.

Additionally from 11 to 20 January 2016 programme control and management system 's FMO's contracted external audit was performed by audit company «Moore Stephens». «Moore Stephens» had a conclusion that PO's Management and Control Systems is designed in compliance with all the regulatory / contractual requirements, it is proportionate and operates effectively.

8. Need for adjustments

On 31 October 2016 the FMO approved proposed amendments to Programme Agreement related to reallocation of financing from leftovers of complementary actions and savings from open call and small grant scheme projects to bilateral fund (in total 181 568 euro). As a result PO provided possibility to all 119 Latvian municipalities organize experience exchange events with Donor States' institutions about implementation of local climate change adaptation measures and development of local climate change adaptation strategies to facilitate achievement of Programme bilateral output indicators and strengthen bilateral relations between Latvia and Donor States. In case of high interest PO will consider additional reallocations to bilateral fund.

9. Risk management

During year 2016 the PO ensured monitoring for the 6 risks that were identified by the Programme risk management work group – cohesion risks: (1) non-fulfilment of Programme outputs and outcomes and (2) political and legislative changes; bilateral risk (3) low participation of target groups in implementation of activities of bilateral fund; risks related to operational issues (4) insufficient financial flow, (5) personnel changes, (6) delay of implementation of Programme measures.

In June 2016 risk management group assessed the likelihood and consequence of the risks and updated Programme risk list and risk management plan. Highest risks were related to possible non-fulfilment of Programme outputs and outcomes as well as low participation of target groups in Bilateral activities. To mitigate risk related to achievement of project results Agency in cooperation with PO provided monitoring of projects and provided consultations for Project Promoters. To promote organisation of activities within Bilateral Fund PO made amendments in national regulations regarding Programme implementation and provided possibility to all 119 Latvian municipalities to organize experience exchange events between Latvian and Donor States institutions about implementation of local adaptation measures and development of local adaptation strategies.

Evaluating the likelihood of the risks was identified that risks - non-fulfilment of Programme outputs and outcomes, low participation of target groups in implementation of activities of bilateral fund are with likely likelihood. Risks - delay of implementation of Programme measures, insufficient financial flow and political, personnel changes are with possible likelihood. Risk - legislative changes is unlikely. Evaluating consequence of the risks was identified that risks - non-fulfilment of Programme outputs and outcomes, insufficient financial flow and delay of implementation of Programme measures are with major consequence. Risks - low participation of target groups in implementation of activities of bilateral fund, political and legislative changes and personnel changes are with moderate consequence.

10. Information and publicity

By the end of 2016 6 out of 7 open call projects and all 18 small grant scheme projects held projects' final conferences. During the April when concluded most of the small grant scheme projects conferences climate change topic was widely discussed. And according to Latvian Information Agency data by the end of June Programme was mentioned 102 times in printed, electronic and TV media and by the end of year 2016 in total Programme was mentioned 138 times ranking the Programme No.2 among all EEA/Norway Grants programmes in Latvia.

During first half of year 2016 were developed and broadcasted remaining 3 TV stories about Programme implementation and pre-defined projects, open call projects and small grant scheme projects emphasizing Programme achievements. TV stories were prepared to inform society about Programme and its benefits as well as to present results of projects. In TV stories project best project examples were presented e.g. project in Ādaži contributes greatly to sports accessibility for local students and inhabitants of county.

Both pre-defined projects carried out several publicity events in 2016. On 22 April a public discussion "The future of Latvia in the new climate reality" was organized. The main goal of the discussion was to attract a maximally broad public attention to the topicality of climate change issues, and to incite a need for a change in our lifestyle. The broader context to this event was to echo the signing ceremony of the Paris agreement on the same day (April 22, 2016) in New York. The discussion was broadcasted live to the PO's webpage where it attracted almost 3000 viewers, and it was also broadcasted online on one of the most popular news portal in Latvia - www.delfi.lv. To incite the discussion, Dr Simon Buckle, Head of Climate, Biodiversity and Water Division, Environment Directorate at OECD shared his views on the global tendencies for Low Carbon Development. Additionally, an article and online publication in one of the most

popular business newspapers in Latvia “*Dienas Bizness*” (statistically – audience of readers around 21 000 per day) was published in December 2016, focusing on the topic of Low carbon development, its benefits and potential in the Latvian situation. The article linked the narrative of the regional seminars (Latvia is currently working on the preparations of its Low carbon development strategy for 2050) to the actual business and economic situation in the country.

As communication and best practice examples can be mentioned several projects and ideas. Project promoter – Aloja Municipality has provided good example for reporting project progress where anyone was able to follow construction progress of energy efficient Business support center – library by live streaming. This is a very transparent and efficient way how to communicate project progress, especially in construction projects. Not widely used but interesting communication example provided also one NGO in Latvia «Homo ecos». To attract younger audience to the closing conference they invited popular comedian in Latvia to be as moderator and discuss climate change issue by adding jokes and humour as well. It showed that good way to reach public is also by adding humour when talking about serious and difficult topics. And another great example which was used in several projects - to educate children about climate change experiments and workshops were provided to show what is climate change or energy efficiency. It is best way to have children attention and introduce science as practical tasks and games.

It is worth to mention that MoEPRD yearly is participating in an international exhibition “Environment and Energy” in Riga. Exhibition took place on 13-16 October, 2016 and in the exhibition participated 84 enterprises and organizations from Latvia, Lithuania, Estonia, Belarus and Czech Republic. MoEPRD goal in the exhibition was to inform about climate policy, climate change mitigation and adaptation as well as support opportunities for climate change initiatives. Within ADAPT pre-defined created tool for climate change analysis was proposed as an interactive activity. On the big screen the graphs were shown and visitors were able to choose parameters and see the future projections of changes in temperature, wind and precipitation. In total 22 432 visitors attended exhibition.

11. Cross-cutting issues

In order to ensure an efficient Programme management PO has been carrying out good governance, sustainable development and gender equality principles in accordance with internal and external regulations.

As public institution the PO takes into account good governance principles in implementation of activities of the Programme and monitoring the projects. The activities are targeted towards development of comprehensive national climate policy including society’s awareness raising activities and promoting sustainable development in the long term. Availability has been addressed by providing assistance and consultations to the PPs to PPs ensure achievement of project results and proper reporting. Additionally PO ensured availability of all the relevant information on the web-page of PO in Latvian and in English.

PO has ensured transparent Programme implementation by inviting representatives of the NFP, FMO and the Royal Norwegian Embassy in Latvia to CC meeting of the Programme. Discussions and most important decisions were documented in CC meeting’s minutes and made available to all parties involved ensuring that representatives who did not have possibility to participate would be informed about Programme implementation progress. Transparency and availability have also been ensured by providing free access and all the necessary information to the Certifying Authority as well as external auditors contracted by the FMO.

Sustainable development was an important requirement that has been addressed by implementing projects, which provide introduction of the principles of social, economic and environmental

sustainability, including environmental protection. The Agency is monitoring fulfillment of sustainability requirements, in accordance to information provided in project application. Gender equality principle must be respected in all Programme implementation stages – Programme management, participation in decision making and project activities. It can be concluded, that during the year 2016 there were no indications about situations where men or women would not be treated equally

12. Reporting on sustainability

n/a

13. Attachments to the Annual Programme Report

Annex1: Risk assessment of the Programme.

Annex2: Monitoring Plan 2016-2017

Annex3: List of projects – best practise examples

Annex 1: Risk assessment of the programme

Type of objective ¹	Description of risk	Likelihood ²	Consequence ³	Mitigation planned/done
<i>Cohesion (Programme) outcomes:</i>				
	<p>Non-fulfillment of Programme outputs and outcomes Programme outputs and outcomes could not be fulfilled if Project Promoters would not be able to achieve results set in project contract or there will not be sufficient financing to support planned number of projects in all support areas.</p>	Likely	Major	<p>PO and Agency ensure monitoring of the projects and progress of outcomes and outputs. PO informs CC on Project implementation progress.</p> <p>Agency provides consultations to Project Promoters and assists in solving problems within their competence. In 2016 Agency developed methodology for evaluation of fulfillment of programme outcome indicators as well as in IV quarter performed first evaluation of progress towards achievement of programme outcomes.</p>
	<p>Political, administrative and legislative changes Political decisions affecting structure of PO and other institutions involved in Programme implementation, legislation or planned activities are adopted in a way that has influence on implementation of Programme.</p>	Unlikely	Moderate	<p>PO is monitoring possible legislation changes affecting the Programme implementation. PO has elaborated and updated a Programme Management Control System, for cases of unexpected changes in internal structure of the PO, which foresees change of responsibilities and competences.</p> <p>If the changes in internal structure of PO will be made, all commitments will be secured, by transferring the</p>

¹ The risks should be categorised in one of 3 ways, depending on whether it poses a risk to the cohesion objective, the bilateral objective, or is more of an operational issue.

² Each risk should be described as to whether it poses a risk to the cohesion outcomes (programme outcomes), the bilateral outcome or crucial operational issues 4 = Almost certain (75 – 99% likelihood); 3 = Likely (50 – 74%); 2 = Possible (25 – 49%); 1 = Unlikely (1 – 24%)

³ Assess the consequence(s) in the event that the outcomes and/or crucial operations are not delivered, where 4 = severe; 3 = major; 2 = moderate; 1 = minor; n/a = not relevant or insignificant.

				functions to counterparts in accordance with competencies to ensure successful and continuous implementation of Programme. If legislation changes will be made an amendments in Management Control System will be provided.
<i>Bilateral outcome(s):</i>				
	<p>Low participation of target groups in implementation of measures of bilateral fund</p> <p>Project Promoters' and partners' lack of interest in implementation of activities of bilateral fund will have negative impact on the achievement of bilateral target indicators.</p>	Likely	Moderate	PO periodically provides consultations to Project Promoters, to promote submission of applications for implementation of measures of bilateral fund. Additionally, were made amendments in regulations to allow municipalities to organize measures of bilateral fund as well as conditions for implementation of measures of bilateral fund were eased.
<i>Operational issues:</i>				
	<p>Insufficient financial flow</p> <p>Interim payments are not ensured as planned. Lack of financial resources will endanger that implementation of Programme and projects is not ensured in planned time frame and quality.</p>	Possible	Major	PO and Agency timely ensures planning of financing in State budget and submits interim financial reports. Financing plans are regularly updated to ensure appropriate financial flows. Agency ensures monitoring for timely submission of projects reports and verifies eligibility of project expenditures. Conclusion on eligibility of project implementation are being submitted to Certifying Authority.
	<p>Personnel changes</p> <p>Frequent changes of personnel involved in Programme</p>	Possible	Moderate	PO ensures substitutability of employees and ensures that in the implementation of Programme

	implementation could impede effective Programme implementation and will decrease ability to ensure successive planning of Programme activities and acquisition of financing			activities there are more than one employee involved - to avoid situation when change or absence of responsible employee would affect implementation of the Programme. Additionally, personnel is being provided with good work conditions.
	<p>Delay of implementation of Programme measures</p> <p>Delays and unforeseen difficulties in the implementation of programme measures (including implementation of remaining projects) and PO's procurement procedures which result in unsatisfactory funding acquisition</p>	Possible	Major	<p>PO and Agency ensures monitoring of the projects implementation to ensure that project activities are implemented within prescribed deadlines. Agency twice a year analyses projects risk level and verifies projects' implementation according project contract and project procurement plans.</p> <p>Agency advises Project Promoters and assists in solving problems within their competence.</p> <p>To ensure increased monitoring of the projects and make certain that all activities are performed according projects contracts Agency carried out on-the-spot-verifications for all completed projects.</p>

Annex 2: Programme's Monitoring plan

Programme's Monitoring plan 2016-2017

Activity	2016				2017			
	IQ	IIQ	IIIQ	IVQ	IQ	IIQ	IIIQ	IVQ
1. Pre-defined project promoters submit the progress reports and payment requests to the State Regional Development Agency (Agency)								
2. Agency evaluates and approves received progress reports of pre-defined project promoters and if necessary requests for additional information								
3. Agency carries out on-the-spot-verifications of the pre-defined projects								
4. Open call and small grant scheme Project Promoters submit the progress reports and payment requests to the Agency								
5. Agency evaluates and approves received progress reports of open call and small grant scheme Project Promoters and if necessary requests for additional information								
6. Agency carries out on-the-spot-verifications of the open call and small grant scheme projects								
7. Collection and measurement of Programme outcomes								
8. Programme ex-post evaluation								
9. Programme CC meetings								

According to Programme Agreement, the Agency foresees to monitor each year not less than 5% of low risk projects and 30% of medium risk projects. In addition, the Agency will carry out on-the-spot-verifications of compliance of supplies and services, as well as supporting documents and payment requests at least twice during the implementation of pre-defined projects.

Agency carried out on-the-spot-verifications of each open call and small grant scheme project before approving project final report to verify Project Promoter's expenditures following project completion.

Monitoring visits plan 2017

Institution that will carry out monitoring visit	Time of monitoring visit in 2017	Risk assessment	Project promoter, title of project	Objective of monitoring visit
Agency	January	Low	NGO "Green Liberty" small grant scheme project "Climate education for all"	Monitoring of final project report and documents to verify Project Promoter expenditures
Agency	February	Medium	Aloja County Council open call project "Business support centre – library "SALA" of Aloja county"	Monitoring of final project report and documents to verify Project Promoter expenditures
Agency	March	Low	Kepp EU Ltd., open call project "Create the energy-efficient technology to produce polycrystalline silicon"	Monitoring of final project report and documents to verify Project Promoter expenditures

Annex 3: Best practice examples

Project Promoter	Project title	Project Aim
Pre-defined projects		
MoEPRD	Development of Proposal for National Adaptation Strategy, Including Identification of Scientific Data, and Measures for Adapting to Changing Climate, Impact and Cost Evaluation	To prepare a proposal for National Adaptation Strategy
MoEPRD	Development of the National System for GHG Inventory and Reporting on Policies, Measures and Projections	To strengthen Latvia's institutional capacity to improve the national system for preparing, analyzing and reporting high quality information to ensure continuous improvements of GHG emission inventory, policies, measures and projections and to comply with the relevant international reporting requirements.
Open call		
The organization "Private Secondary School ĀBVS"	Adazi Free Waldorf School Gyms Construction	To build low energy sports hall for Adazi Free Waldorf School. The project demonstrates low energy consumption advantages, and educate the society, especially children about climate change, sustainability of energy passive buildings.
Foundation "Ventspils High Technology Park"	New Building of Science and Technology Museum "Kurzeme Demo Centre"	To expand operation of the Museum of Science and Technology "Kurzemes Democentrs" by constructing low energy building.
Balteneko Ltd.	Innovative and Effective Biomass Gasification Technology Solutions (systems)	To develop and demonstrate innovative and effective biomass gasification technology solutions (systems) that will replace imported natural gas use by local renewable energy sources (biomass) in the existing natural gas boilers without their replacement.
Small grant scheme		
Demarsch Ltd.	Promoting Sustainable Environmental Management Policies for the Small and Medium Enterprises (SME) Sector	To create an e-training to implement an environmental policy in SME and to raise awareness of Climate and Environmental issues and educate the target audience.
NGO Waste Management Association of Latvia	The Promotion of the Knowledge and Insight of the Climate Change Caused by such Anthropogenic Processes as Waste and Wastewater Management	To develop education programme for representatives of the municipalities, experts of the environment, waste and water and Regional Environmental Boards about reduction of the GHG from waste management.
NGO "Homo ecos:"	Climate Change in Latvia – an Opportunity and a Challenge?	To implement a creative informative campaign and interdisciplinary educational activities, thus promoting active engagement in reducing climate

		change, and active participation in climate adaption policy implementation.
NGO “Ventspils High Technology Park”	Green Mission: Climate	To educate, inform and promote Latvian pupils’ and educational staff’s awareness and knowledge on climate change by using and integrating alternative educational approaches and methods and by organizing interdisciplinary technical and practical workshops in schools.
Riga Technical University Institute of Energy Systems and Environment	Development of Bioeconomical Model for Sustainable Use of Biological Resources in order to Reduce Climate Changes and Improve Adaptation Capacity (BIO- CLIMATE)	To develop scientifically-based tool for the modelling, medium / long term simulation, and policy assessment of Latvian bioeconomy and climate. The project will focus on a sustainable utilization of renewable natural resources, specifically the biological ones, aiming at the greatest added value and the least impact on the environment, including climate change.