

BALTIC CITIES 'CHEMICAL ACTION PLANS

CHEMICAL ACTION PLAN (CAP) SUMMARIES IN ENGLISH AND LINKS FOR THE CAPS AT THE MUNICIPALITY WEBPAGES









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1. ESTABLISHMENT OF CHEMICAL ACTION PLANS (CAPs) IN PARTNER MUNICIPALITIES.

Structured efforts described in a politically accepted CAP will serve as a blueprint for measures to reduce HS release through progressive actions taken within the municipality organisation.

The overall aim of the project "Innovative management solutions for minimizing emissions of hazardous substances from urban areas in the Baltic Sea Region" (NonHazCity) within the Interreg Baltic Sea Region category, was to decrease release of hazardous substances (HS) to the Baltic Sea by developing Chemical Action Plans (CAPs) in the partner municipalities.

Based on the experiences from the NonHazCity activities, within the municipal organisation as well as those directed at enterprises and private households, the CAP should contain long term strategies and set actions to be carried out also after the project. The individual action plans are written in the national languages of the participating

municipalities with a summary in English. The reports providing a basis for the development of the CAPs, including information about the partners and activities in the municipalities, are present on the NonHazCity webpage together with other information materials produced within the project. The background for the present report is provided in "Hazardous substance reduction potentials in Baltic Cities", Lagerqvist (2018). Please see www.nonhazcity.eu.

Concrete actions within different areas

After completing pilot activities for HS release reduction within the NonHazCity project, it was possible to design concrete activities for entities within the municipality, to include in the CAP. One important activity concerns educational events for employees responsible for purchases. The first steps might be targeted at substitution of chemical products for educational, medical and social care institutions as well as procurement procedure for entities responsible for renovation, construction and cleaning work in municipal institutions. To support these efforts, strategies regarding GPP chemical criteria should be present in the CAP.



Furthermore, the potential for HS reduction also lie outside the municipal organisation, within other professional areas such as those of enterprises active within the region. These enterprises might be small scale emitters of HS, even if each one does not use that much of HS containing products, articles and materials, they are still an important source of HS as a group. The actions can be directed at different sectors of businesses such as hair dressers, cleaning companies and retail stores, among others. Actions in the CAP including a dialogue with the market can therefore provide possibilities to reduce HS release from these emitters.

Lastly, awareness raising information to inhabitants might prove an efficient mean to reduce HS release to the wastewater from households. Information campaigns, as a part of the actions stated in the CAP, can be directed to different inhabitant groups (e.g., parents of small children, teenagers etc.) with information specific for the activities and needs for that group. It can also have different focus areas, such as out-door activities, creative activities and household cleaning supplies. The information can include strategies to reduce HS release by choosing HS free chemical and cosmetic products as well as HS free articles, this is not only effective to reduce exposure to the environment but will also have a reduction potential for the exposure of the individual inhabitant.

Each of the individual activities might not seem to yield much of a reduction of HS release on its own, but, adding up the reduction achieved for all the mentioned actions in total has the potential give a large number, up to about several hundreds of kilos or even tonnes on an annual basis. The magnitude comes through reduction at many small sources as well as from larger sources, if present, together with continuous work in the direction of HS release reduction through the actions included in the CAP.

Since Stockholm already had a CAP when the project started, this was used as inspiration and partially as a template for development of the CAPs in the other partner municipalities.



Implementation of the CAPs

The CAPs were implemented in different ways in the municipalities:

- In Gdańsk and Riga, the plan stands on its own, beside other action plans, like in Stockholm.
- In Kaunas and Šilalė, the CAP is incorporated as a part in the development plans or other similar structural documents.
- In Pärnu municipality, the CAP is be added to the Pärnu City Waste Plan, which will be updated 2019. The waste plan is part of "Pärnu City Development Plan until 2025".
- The Baltic Sea Challenge Action Plan serve as a foundation for Turku, actions on reduction of hazardous substances and chemical smart procurement are included there. It is positive to get the issue of HS and GPP chemical criteria into this Baltic Sea Challenge Action Plan, since it comprises shared work between Turku and Helsinki. In this way, Helsinki, although not a partner municipality of the NonHazCity project, can benefit from the results and experiences gained by the City of Turku within the project.
- In Stockholm and Västerås, the experiences from the project will be incorporated in updated versions of the existing CAPs:
 - Stockholm's current plan is valid from 2014-2019 and a draft for a new plan is being prepared, with the aim to be politically accepted during 2019, and implementation starting in 2020. Stockholm's work according to the existing CAP has been evaluated thoroughly within the NonHazCity project period, indicating that 51% of the actions are fulfilled and a large part of the ones stated as not fulfilled are of continuous character which do not finish within the time frame of the first CAP.
 - The Västerås CAP (2015-2020) is a part of the municipality's central development plan and is newer than Stockholm's, thus, there will not be a new plan during the project period but the development of the new plan started in early 2019.

As a joint project to NonHazCity is BEL-NonHazCity which is a collaboration between the NonHazCity project and a belarussian NGO called IPO ecopartnership. While CAPs have not been developed in Belarus, there has still been activities similar to those performed as part of the CAP pilot activities in the other municipalities. In their efforts of awareness raising work social networks have been utilized. Both local authorities, housing and utility companies and IPO "Ecopartnership" are involved in the networks devoted to the issues of housing and utilities. Examples of this from the two participating Belarussian municipalities, Vileyka and Iŭje can be found here:

Vileyka: https://vk.com/kommunalka_vileyka?w=wall-134380580_455%2Fall

lŭje: https://vk.com/kommunalka ivye?w=wall-135880474 363

Necessity of political acceptance

Political acceptance of the CAP, whether incorporated in another municipal plan or as a stand-alone document, is vital for effective implementation. Moreover, a framework surrounding the efforts needs to be in place in order to ensure maximum efficiency of the actions to reduce HS release from the municipality as well as reducing HS content in new products, articles and materials purchased. The municipality need back up from legislation but can also take measures ahead of the legislation, when needed, in order to protect the environment and inhabitants from HS exposure and effects. A success story is achieved when there is political acceptance, resources allocated to the work and efficient communication within the municipality.

2. SUMMARIES OF THE CAPS FROM THE NONHAZCITY PARTICIPANTS

2.1 Summary of the Gdańsk CAP

Gdańsk is a Polish city on the Baltic Sea coast which has around 465.000 inhabitants and an area of 260 km², equalling close to 1800 inhabitants per km² (data for 2017). It is the capital of the Pomeranian Voivodship and Poland's principal seaport. The first CAP period will be 2019-2025.

The participation of Gdańsk Municipality in the NonHazCity project resulted in actions intentded to reduce hazardous substance prescence and realease within the city. The analysis of wastewater and storm water samples, that were conducted in the range of the NonHazCity project gave the additional information about hazardous substances occurrence in the city of Gdańsk and confirmed the need of actions aimed at their reduction. Many of these HS were not monitored before.

Based on the results from regular monitoring and the analysis performed in the range of NonHazCity project, the substance groups below have been selected as local focus substances for the City of Gdańsk:

- Cadmium
- Mercury
- PAHs
- Bisphenol A and its substitutes (BPS, BPF)
- Alkylphenols

Actions planned to be undertaken during the CAP period:

- 1. Support for the implementation of the Chemical Action Plan
- 2. Education

The educational actions will be mainly focused on the inhabitants and will be realized by the continuation and development of the "City on Detox" campaign coordinated by Gdańsk Water Utilities. The aim of the actions is that all inhabitants in the City of Gdańsk are aware of the hazardous substances occurring in their everyday life and that they try to reduce them by using safer alternatives of products and articles.

3. Support in hazardous substances reduction for SMEs.

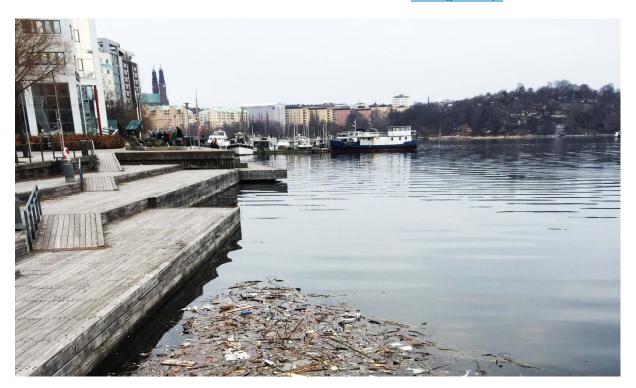
The businesses in Gdańsk will be encouraged to provide safe and ecologically friendly services.

- 4. Green Procurement
 - In order to reduce hazardous substances, the City of Gdańsk plans to apply good practices in public procurement. The aim is to reduce the chemical products and articles used in the City of Gdańsk that contain hazardous substances which could pose risks to humans and the environment.
- 5. Future projects e.g. FanPLessTic-sea project that focuses on initiatives to reduce the amount of microplastics which enter the Baltic Sea.
- 6. Cooperation

Cooperation with NGOs, researchers from University of Gdańsk and Detoxed home, Gdańsk Water Utilities – the owner of water and wastewater system as well as Gdańsk Waters – the owner and operator of storm water system is needed for effective implementation of the actions in the CAP.

In the full version of the Chemical Action Plan for Gdańsk, previous activities to provide the residents with a clean environment are listed as a background. A lot of actions have already been undertaken to reduce the amount of hazardous substances in the city. However, the NonHazCity project indicated a challenge realted to substances which, so far, have not been monitored in storm- and wastewater samples. Future actions aimed to reduce these substances are described in the CAP. The most important issue of the planned initiatives is to improve the protection of human health and the environment from the hazardous substances.

More information and contact details in Polish will be found here: www.gdansk.pl



2.2 Summary of the Kaunas CAP

Kaunas district is a Lithuanian municipality with 95.000 inhabitants and an area of close to 1500 km², equalling about 60 inhabitants per km². The first CAP period will be 2018-2020.

Chemicals are an integral part of our lives. Everything that is around us, what we see, touch, use in our daily life at home or at work, is made up of chemicals. Therefore, it is very important to know how to use chemical products and articles in a safe way.

Municipalities use a lot of hazardous substances in their every day operations in all of their premises (offices, schools, day care centres, sport centres, hospitals, construction sites etc.): i.e. cleaning agents, office materials, furniture, IT products, body care and cosmetic products, medical products etc. They also have the possibility to influence other actors like SMEs and consumers.

Kaunas district is an integral part of Kaunas county. The area of Kaunas district is 1496 km². Today, Kaunas district is one of the largest districts in the country with a population close to 95.000 inhabitants (information of 2016). The municipality comprises 25 neighborhoods, 371 villages, 9 townships, 3

towns. The countryside of Kaunas district is strongly influenced by the longest Lithuanian rivers, one of which is the Nemunas, which is flowing to the Baltic Sea.

The CAP is a completely new document in Kaunas district municipality and, therefore, aims to initiate very practical and easy-to-implement hazardous substance emission reduction actions. This will be accomplished by working with entities that are connected to the municipality, either institutions that are directly controlled by the municipality (municipal agencies, offices etc.) or those, which have indirect ties to the municipal level (e.g. educational, sport and health facilities). The CAP presents a set of actions that will be undertaken by the municipality to reduce emissions of hazardous substances in the period of 2019–2021. The actions were selected based on the experience of the NonHazCity project.

After the long discussions in municipality it was decided to focus on educational activities for municipal staff and local residents:

- To educate municipal employees on how to use the municipality's purchase guide and how to find and choose products and articles without HS.
- To initiate activities in order to spread knowledge to residents about chemicals in products and articles.

After the implementation of these actions, in the next planning period of 2022–2024, Kaunas district municipality is planning to take on more challenging actions, i.e. inventory and replacement of materials containing hazardous substances.

More information and contact details in Lithuanian will be found here: www.krs.lt



2.3 Summary of the Pärnu CAP

Pärnu is an Estonian municipality with 51.500 inhabitants and an area of 860 km², equaling about 60 inhabitants per km². The first CAP period will be 2019-2025.

The City of Pärnu aims to be a city promoting a healthy lifestyle and ensuring good health both for its residents and visitors. The Pärnu CAP has been developed within the NonHazCity project where Pärnu municipality participated as project partner.

The aim of the CAP is to reduce the use of everyday-life products and articles containing HS and in that way reduce the emissions of hazardous substances from the City of Pärnu. The plan contains very practical and easy-to-implement hazardous substance emission reduction actions at the municipality. The actions are focused on 2 main groups: municipal institutions and private households.

The activities in the CAP are predominantly informational and related to communication, for example campaigns and awareness raising events, trainings. The work will mainly focus on inhabitants (consumers), but municipality staff will also be influenced, potentially together with small micro-office businesses.

Pärnu municipality will implement different campaigns, including info days and activities in the frame of the annual event "Pärnu Day", to make its inhabitants aware of their daily chemical use and help them in making informed choices which will lead to a reduction of emissions of HS from households. The suggestions for inhabitants are either related to changing consumption patterns or motivating to consume less.

A couple of specific campaigns are planned for the coming year:

- A campaign on plastics which will focus on HS in plastic materials such as food contact materials and household appliances, targeting inhabitants and small businesses.
- Environmentally friendly campaign focused on different event organisers in Pärnu municipality and its institutions and how to organise environmentally friendly events.

Pärnu city will also start working with green public procurement. They will start with awareness raising of the procurers via different events such as a focused seminar and participation in a national training program covering green procurement criteria set by EU and Estonian legislation. The aim is that the procurement staff will get to know relevant green procurement criteria to use in order to avoid hazardous substances.

More information and contact details in Estonian can be found here: www.parnu.ee and the CAP at https://parnu.ee/failid/projektid/Kemikaalide tegevuskava P2rnu2019-2020.pdf



2.4 Summary of the Riga CAP

Riga is the capital of Latvia with 705.000 inhabitants and an area of 310 km², equalling about 2300 inhabitants per km². The first CAP period will be 2019-2024.

Priorities of the CAP

To prioritize which actions to take in the next few years during the implementation of the Riga CAP is important in order to start activities which are feasible, straightforward to implement and have large effects. The basic principle is to prevent the harm done by HS to humans and the environment. Particularly important is the effort to reduce the risk of exposure to hazardous substances among children and adolescents. Children and adolescents are more sensitive for exposure to HS than adults, one of the reasons is the complicated hormonal system regulation needed in order to grow and develop. If we take particular care to protect our children and adolescents, adults be less exposed to HS in their daily environment.

Priority products and product groups

The CAP identifies priority products and articles as they are available to consumers and can be easily bought in stores. Other products and articles are prioritized because they are used in Riga and are often purchased in Riga city procurement procedures:

- Chemical products
- Hygiene products (cosmetic products)
- Building materials
- Textiles
- Electrical and electronic products
- Toys and other products for children
- Pesticides
- Pharmaceutical preparations
- Interior fittings and equipment

Some examples of the areas of planned CAP activities:

- Use of chemical products in Riga municipality units;
- Determination of procurement criteria for chemical content when purchasing goods and services;
- Monitoring of HS prescence and enforcement of legislation;
- Providing citizens and local businesses with information about HS,
- Promoting cooperation between involved institutions.

Objectives of the Action Plan:

The main objective of the Action Plan is "The concentration of chemicals that cause harmful effects on human health and the environment in the air, land and water must be reduced". The objectives and activities of the CAP are based on the environmental programs related to hazardous substances and includes:

- 1. The total number of particularly hazardous substances must be reduced
- 2. Reduce the exposure of HS on humans and the environment
- 3. Improve consumer knowledge about chemicals
- 4. Increase the information and monitoring activities concerning chemicals
- 5. Focus on chemical content in products and articles

- 6. Riga city cooperation with other public institutions should be improved
- 7. Optimization of cooperation between Riga city administration and Riga enterprises

More information and contact details in Latvian and Russian can be found here: www.riga.lv and more specific information concerning the NonHazCity activities in Latvian, here: https://mvd.riga.lv/parmums/projekts-nonhazcity/ and https://mvd.riga.lv/par-mums/projekts-nonhazcity/projekta-aktualitates/



2.5 Summary of the Šilalė CAP

Šilalė is a Lithuanian municipality with 23.000 inhabitants and an area of 1200km², equalling about 20 inhabitants per km². The first CAP period will be 2019-2022.

No summary supplied.

More information and contact details in Lithuanian will be found here: http://www.silale.lt/

2.6 Summary of the draft CAP for Stockholm's next CAP period

Stockholm is the capital of Sweden with close to a million inhabitants and an area of 188 km², equalling about 5000 inhabitants per km². The first CAP period in Stockholm lasted from 2014 to 2019 and a new CAP is currently in process, due to this, only the changes in the draft of the new plan (2020-2024) are briefly described here:

One main difference in the new plan is that children between 0-20 years of age will have a separate chapter instead of only being prioritized in all chapters, as in the first plan. Furthermore, the chapter concerning the implementation of the CAP will be merged into the introduction. The other chapters will be updated since actions from the previous plan are already fulfilled and other actions might differ due to changes in legislation, society and from experiences gained during the work with the current plan.

The chapters will be:

- 1. Introduction
- 2. Communication
- 3. Procurement
- 4. Buillding and construction
- 5. Inspection
- 6. Chemical products management
- 7. Environmental monitoring
- 8. Children and sensitive persons

More information concerning the Stockholm CAP and related work, in Swedish, can be found here: http://www.stockholm.se/ByggBo/Giftfri-stad/Kemikaliecentrum/ och www.stockholm.se/kemikaliesmartforskola

2.7 Summary of the Turku CAP

Turku is a Finnish municipality with 190.000 inhabitants and an area of 250 km², equaling about 770 inh./km². The City of Turku included their actions to reduce and manage HS into the Baltic Sea Action Plan which is developed together with the City of Helsinki. The current CAP period is 2019-2023.

The Baltic Sea Challenge (BSC) is a network initiative that invites organisations to commit to protect the Baltic Sea and their local waters, to build their own Baltic Sea Action Plan and to implement it. In 2018 there are already 270 member organisations in the BSC Network from the countries in the Baltic Sea Region.

The preparation for the Baltic Sea Challenge started in 2006 by the initiative of the Mayors of Helsinki and Turku. They wanted their cities to commit to work for the Baltic Sea and to be pioneers in strategic water protection. The joint Baltic Sea Action Plan of the cities was published in 2007, and the Baltic Sea Challenge was initiated. In the first Action Plan there was almost 40 actions under nine themes.

Following the NonHazCity activities concerning management of hazardous substances, this aspect has been included into the new Baltic Sea Action Plan (2019-2023) for the two cities, in the part denotated "Healthy marine habitat" which includes the following:

- 1. To promote circular economy and to manage environmental chemicals in the environment:
 - The list of priority substances will be instructed to be taken into use for example in procurements
 - The guidelines for chemical smart procurers will be promoted
 - Implementation of further education on HS for eco-supporters
 - Sources for HS as well as substance flow into waters and occurrence in water bodies will be studied. E.g. residence, industry, traffic, trash, micro trash, construction
 - Sources for high nonylphenol concentrations entering the wastewater treatment plant will be mapped
- 2. The industry's risk control related to water use and extraction of HS before entering into the sewer network will be developed. This will be done by use of industrial wastewater contracts and by developing collaboration practices between the sewage treatment plants, industry and the environmental authorities.

- 3. Participation in research projects on HS in wastewater and sludge including means to decrease HS in these matrices.
- 4. The use of herbicides and pesticides in green areas will be limited and natural pest control implemented. Best practice alternative methods will be studied and applied.
- 5. Concerning deposition of dredged soils of City of Turku and the Port of Turku, latest in 2024, alternative deposition solutions will be deployed to replace the current method of deposition of the dredged soils at sea.
- 6. When dredging the marinas for small boats, sediment quality will be analysed
- 7. Storm water quality
 - Storm water quality will be studied and results will be disseminated
 - The treatment needs for storm waters will be defined, more detailed specifications of the purification regulations will be considered and included in e.g. environmental protection regulations or construction regulations.
 - Mapping of the activities that reduce storm water quality will be initiated
 - The city's guidelines for management of storm waters in construction sites will be implemented at all construction sites.

More information concerning the Baltic Sea Action Plan (Turku CAP) in Finnish can be found here: http://www.itamerihaaste.net/tietoa_meista

2.8 The Västerås CAP

The Västerås CAP (2015-2020) is a part of the municipality's central development plan. Since the plan period reaches until 2020, a new plan was not developed during the NonHazCity project period, but has just started when this report was compiled, in early 2019.

The current CAP in Swedish can be found here: https://www.vasteras.se/bygga-bo-och-miljo/kemikalier.html



ABOUT THE PROJECT

The project "Innovative Management Solutions for Minimizing emissions of hazardous substances from urban areas in the Baltic Sea Region" (NonHazCity) is financed by the European regional development fund within the Interreg Baltic Sea Region program, from March 2016 to February 2019. The project involves 18 partners from Sweden, Finland, Estonia, Latvia, Lithuania, Poland and Germany and 23 associated partners.

NonHazCity wants to demonstrate possibilities of municipalities and WWTPs to reduce emissions of priority hazardous substances (HS) from small scale emitters in urban areas that cannot be reached by traditional enforcement techniques. Substances of concern will be identified and prioritised, sources tracked and ranked, individual HS Source Maps and Chemicals Action Plans developed by each partner municipality.

Municipal entities will implement own substance reduction measures at their premises. Private small scale businesses will pilot substitution actions and improve their assortment. Inhabitants will be shown their HS emission share and test the use of less HS in every-days household management to help to protect the Baltic Sea environment but also their own health.



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