

The NonHazCity approach

Cut back chemical pollution – municipalities taking action

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NonHazCity and its Connection to the HELCOM Baltic Sea Action Plan (BSAP)

Segment

Hazardous substances and litter



BSAP Actions

- HL5 Decrease the emissions of hazardous substances from small scale emitters in urban areas (municipal entities, businesses and private households) by chemical-smart purchasing strategies, substitution and awareness raising campaigns.
- HL7 Launch educational and information campaigns by 2025 to raise public awareness regarding responsible handling of hazardous substances in household chemicals and articles to prevent their release into the environment.
- HL8 Introduce requirements regarding content of chemicals of high regional environmental concern in public procurement procedures by 2025 and provide support for follow-up.

We take
them all!!!

Why NonHazCity, what is it about?

- Earlier projects pointed out **municipal sewers** as important pathway for Hazardous substances (HS) into the Baltic Sea.
- Sources: HS are in many **everyday products** such as cosmetics/body care, cleaning agents, toys, plastics, textiles, furniture, electronics – everything!
- HS can harm nature and human health, accumulate in the environment & body.
- **Knowledge** about HS in products, their impacts and alternatives is insufficient.
- **Small scale emitters in town** cannot be efficiently regulated and controlled.

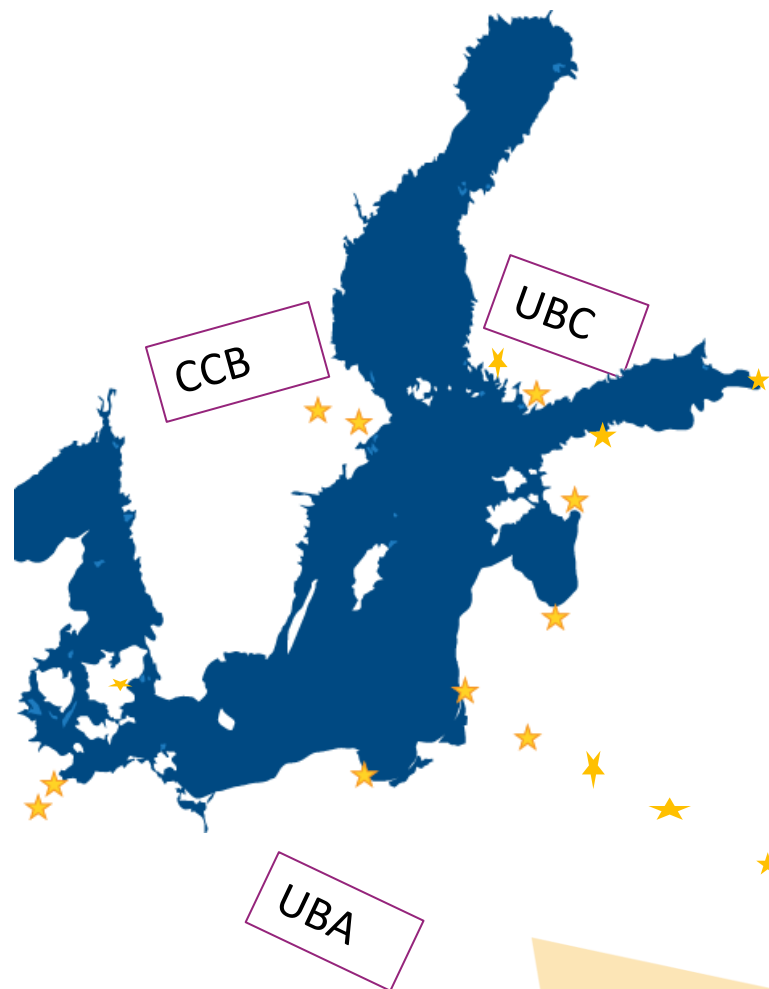
Therefore,

- NonHazCity wants to de-toxify urban water cycles and demonstrate possibilities for **low-cost upstream source management by all urban actors** instead of high technology investments into wastewater treatment plants.
- NonHazCity makes municipalities (municipal entities), (small) businesses and private households being **key actors to doing a change**.
- We demonstrate how they can make an **informed choice** and reduce their use of products containing hazardous substances.

Acting in NonHazCity

30+ partners from 15 cities:

- Stockholm, Västeras - Sweden
- Turku, Helsinki - Finland
- Pärnu, Tallinn - Estonia
- Riga - Latvia
- Gdansk – Poland
- Kaunas District, Silale, Vilnius – Lithuania
- Hamburg - Germany
- Holbaek - Denmark
- (Ivye & Vilejka – Belarus)
- (St. Petersburg – Russia)



Our basis of evidence at NonHazCity:
Hazardous Substance Screening 2016 – 2018

**Conclusions: substances of concern are
everywhere in town**

Water screening in several municipalities
Article tests (in laboratory) in Sweden
Urine & dust tests of volunteers/flats in Gdansk

NonHazCity – coupling of human health with environment quality (pollution)

Target hazardous substances:

- Bisphenol A (BPA)
- Pharmaceuticals
- Phthalates
- Metals
- Alkylphenols
- Perfluoralkyl Substances (PFAS)

Samples taken:

- Residential wastewater
- Industrial wastewaters
- Surface water
- Storm water
- Ground water
- Articles and materials in kindergartens (Stockholm)
- Urine of volunteers and dust sampled in their houses ("City on detox", GIWK)

Samples types

- Environmental samples
- Biological samples
- Article samples
- Technological samples



CHALLENGES TO OVERCOME – Detection Summary

Class	Substance	Industrial	Residential	Service	Stormwater	WWTP
Metals	Cadmium	59%	59%	85%	58%	73%
	Lead	9%	6%	15%	17%	0%
Organics	Bisphenol	100%	94%	100%	90%	92%
	Phthalates	94%	100%	86%	100%	100%
	Alkylphenols	28%	59%	64%	40%	75%
Per-fluorinated	PFOA	67%	67%	58%	50%	96%
	PFBA	33%	0%	33%	6%	22%

CHALLENGES TO OVERCOME – Snapshot Summary

Contaminant Type	Age of the problem	Detection Frequency	Level of Concern
Metals	Yesterday	Everywhere	Moderate
Organics	Today	Everywhere	High
Perfluorinated Substances	Tomorrow	WWTP	High

INSPIRING OTHERS: What cities & citizens can do?

Our proposals:
**Change Consumption – then you reduce
emissions and exposure**

What cities & citizens can do?

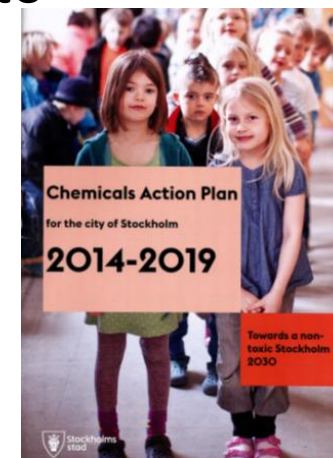
Chemicals Action Plans
Chemical Smart Procurement
Change consumption pattern at home

INSPIRING OTHERS: What cities can do?

Join the NonHazCity initiative

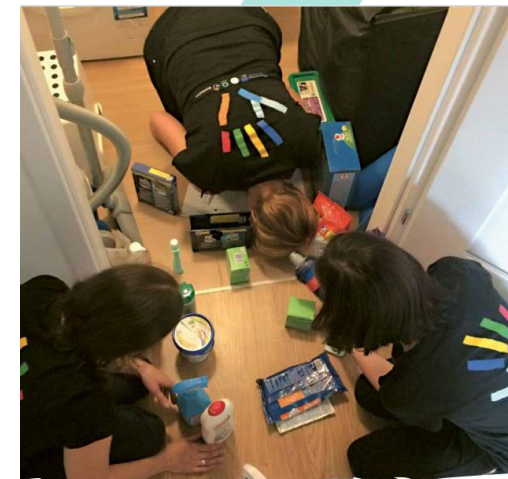
„Cities can do more than nations to reduce exposure of people to HS”
(G.Söderholm, Stockholm 2016)

- **Prioritise Substances of Concern** of the municipality: by HS screening, source tracking
- **Set goals** for the municipality, its entities, businesses in town and information to residents
- **Key tasks for the municipality**
 - Chemical-Smart procurement is an excellent tool!
 - Set **chemical criteria in procurement** and **make them MANDATORY for all entities**
 - **Substitute** chemical products, articles and materials bought/used in any entity of the municipality with toxfree alternatives
 - **Make HS an explicit issue** in environmental standards, certificates, incentives and investments
 - Calculate the benefit of substitution - tonnes of HS can be phased out by targeted actions!



Citizens (consumers) can make substantial impact on the market by consumption pattern & lifestyle change

- Practice our chemicals household checks, inventories materials & products and **detox your home**: phase-out materials, products and articles with HS
 - Check your exposure: <https://checked.detoxed.eu/>
- Purchase less but better products/materials with help of **Scan4Chem app** (app store, www.askreach.eu)
- **Be aware of greenwashing** and **read labels!** Choose products with official Ecolabels.



DIY GUIDEBOOK:
DETOX YOUR HOME





ALWAYS ROOM FOR further work – our new projects

- INTERREG Core project: **NonHazCity 3**: Reducing hazardous substances in construction to safeguard the aquatic environment, protect human health and achieve more sustainable buildings
 - Strategic and technical solutions, catalogue of construction materials vs harmful substances, building standards, procurement, pilot case studies on “living objects” (ongoing building activities in partner towns)
- INTERREG Small Grant: **ChemClimCircle** - Integrating criteria for chemicals, climate and circularity in procurement processes
 - Defining the interlinks and clashes of objectives between chemicals, circularity and climate aspects in GPP, guidebook and training modules, case study for implementation in guinea-pig municipalities from BSR (Mondays monthly: our municipalities present themselves online – next: Stockholm, 13th March 11-13:00 CET)
- LIFE **ChemBee**: Chemicals Ambassadors go to Europe:
 - household checks by volunteers trained on the NHC household check method in: Greece, Portugal, France, Austria, Czech Republic, Poland, Sweden, Germany Turkish/Arabic communities in Germany, Austria, France and Sweden

NonHazCity will be presented at a Symposium at the European Parliament on 20th April in Strassbourg – with Stockholm, Helsinki, Riga (tbc), Hamburg:

- Prevention and Protection against Endocrine Disrupting Chemicals (EDCs): What Roles for an Alliance of Cities and Local Authorities in Europe?

Thank you! Join us!

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All projects will be integrated here soon!



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