Business in our cities: reduction opportunities for HS and the way how it could work

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Content

- The problem with HS in municipal waters and waste waters – emitters, sources, substances
- Reduction of emissions obstacles and possibilities
- Substance substitution in products
- Public-private agreements
- Certification and environmental voluntary incentives
- Summary what can be done by municipality

The problem – use of hazardous substances

City – location of numerous sources of hazardous substances emissions to the municipal waters (inluding sewage system)

While 6 – 10 main emission sources usually can be identified for most priority HS, their use in these activities can be much more disperse

The problem – use of hazardous substances (II)

Typical businesses operating in municipalities that can be seen as emission sources of HS:

- 🖺 Car washes
- (H) Hospitals/health care centers
- Example Construction
- Hair care/beauty salons
- 🛱 Laundries
- 🔂 Cleaning services
 - □ Dry cleaners
 - ## Hotels

The problem – use of hazardous substances (III) – an example - hotels

Eng.	Floor cleaners and sealers		Spray air fresheners
	Laundry cleaners	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Dry-cleaning chemical
**************************************	Dishwashing detergents	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Surface (e.g., glass, metal) cleaners
	Toilet and bathroom cleaners		Carpet cleaning agents stain removers
	Degreasers and oven cleaners		Toilet block cleaners
	Descalers and delimers		Swimming pool chemicals
	Petrol, fuel oil and other oil products		Liquefied petroleum gas
A SUPPLY Y	Pesticides, fungicides, and herbicides		Oil based paints and varnishes

Reduction of emissions – what is hindering it?

- Lack of information on potential sources. Potential sources are numerous, often difficult to pin point, especially without specific knowledge
- Lack of legal regulation and control on products/articles used.
 Quite often small polluters are do not fall under legal scope for control and inspections. Composition of products they use also cannot be fully controlled
- Lack of motivation among those who are using the substances. This can be caused by absence of legal regulation and enforcement, low consumer demand and market pressure, misinformation about costs and competitiveness, as well as lack of public incentives that encourage use of less hazardous substances
- Lack of alternatives technically/financially feasible options not available

Successful cases of reduction of emissions

- **Substitution** many successful examples from the industry branches shown can be found, e.g.:
 - Substitution of active agents in detergents from boron- and chlorinebased to enzyme- based
 - Substitution of dry-cleaning active substance from perchloroethylene to liquid silicone or glycol ethers
 - Piping without heavy metals or phthalates
- Public schemes and agreements:
 - Municipality procurement-driven
 - Voluntary certificates and labels

Voluntary approaches

Unilateral agreements

Environmental improvement programmes set up by firms themselves and communicated to their stakeholders (employees, shareholders, clients, etc.)

Public voluntary schemes

Participants agree to standards (related to their performance, their technology or their management) which have been developed by public bodies such as environmental agencies

Negotiated agreements

Contracts between the public (national, federal or regional) authorities and industry. Usually consist of a target (i.e. a pollution abatement objective) and a time schedule to achieve it. Can be legally binding or not, depending on national legislation

Voluntary approaches and environmental incentives – what has already been done?

- A number of municipalities around the World have implemented various types of voluntary agreements or other types of incentives in efforts to reduce exposure to HS. However, these mostly focus on HS coming from hazardous waste
- Voluntary agreements between municipalities/state authorities and industry on HS reduction from products and articles exist, but they are usually quite targeted to a specific sector of concern. More common in countries where such agreements can have a legal force, i.e. in the Netherlands and Canada. Example - the Rhine contract between Municipality of Rotterdam and a number of polluters

Voluntary approaches and environmental incentives – types of activities

- If the agreements are binding to all involved parties (e.g. Dutch «Covenants»), concrete technical and management actions are undertaken by the involved parties – research form one side and implementation/enforcement of new or stricter regulations/limits from the other
- Most commonly a framework set by municipality with overall goals to be achieved (e.g. no acutely toxic or CMR substances to be used in any products in preschools or schools). However, this is not binding for the whole sector and is implemented through municipal procurement procedures

Business certification/award incentives

- Certification of businesses very rarely done by municipalities, usually state authorities are involved. HS topics are usually not included in such certification schemes, which mostly focus on energy and resource efficiency. Apparently lack of demand/public interest between the topics
- Most widely known international standards such as EMAS, various ISO standards, etc. HS component is included but usually not very specific, as a lot of issues are covered in one frame
- Type I Ecolabels stronger emphasis on HS limitation issues, typically stricter requirements than set in legislation
- Upsides from all above: attractive to businesses as they are internationally or nationally recognizable, hence offer marketing advantages. Trustworthy due to external quality control. Downside – can be costly and time consuming to adapt, especially for smaller or niche businesses – initial market disadvantage

Summary – what can be done by municipality?

- Key issue more informed businesses (information materials, events, trainings, etc.). Motivation - sales increase because of consumers' willingness to pay more for greener products, avoiding costs for possible upcoming regulations, less risk of potential unwanted effects to employees and customers
- Public procurement very strong instrument that can influence products used by companies and therefore also emissions of HS.
 Procurement according to GPP guidelines is possible in several sectors – not complicated, technically feasible but with a big positive potential in reduction to HS exposure for the public
- This also links to increased demand for companies to produce or purchase products with less HS, e.g. using Ecolabels
- Successful voluntary approaches require patience and pragmatism.
 Time (and successful examples) is needed for adaptation and dissemination of information among potential stakeholders and the public
- Municipal business agreements in this field are still new, so it gives a chance to be among the first ones who do it!

Thank you!







