

INTERNATIONAL WORKSHOP

**INTEGRATING CHEMICALS RISK
MANAGEMENT BETTER INTO
ENVIRONMENTAL MANAGEMENT
SYSTEMS AND STANDARDS**

25 November 2020

Organised within the framework of
INTERREG NonHazCity-2 & LIFE Fit for REACH Projects

Workshop proceedings

About Projects:



The Interreg project “Capitalising key elements of NonHazCity: empowering private and professional users for better risk management and reduction in use of chemical products in their cities - NonHazCity2 (#X006)” aim to demonstrate possibilities to reduce emissions of hazardous substances to the Baltic Sea at the source.

The project is a continuation of the project “Innovative management solutions for minimizing emissions of hazardous substances from urban areas in the Baltic Sea Region” implemented in the years 2016-2019.

The activities of the project include contributing to the development of Chemicals Action Plans for cities, information campaigns and trainings for different stakeholders including raising awareness of the inhabitants of the partner cities.

LIFE / FIT FOR REACH

The Life Fit for REACH project aims at reducing emissions through the substitution of hazardous chemicals and resource efficiency.

The Life Fit for REACH supports companies in improving their knowledge and skills on chemicals risk management and, where possible, to substitute the most hazardous substances they use. It provides information, practical tools and concrete advice to companies in the Baltic States.

Contents

1. Introduction.....	4
2. The aim of the workshop.....	4
3. Workshop agenda	5
4. Summary of working groups	6
5. Workshop presentations.....	10
5.1. About the projects that motivated us to organise this meeting	11
5.2. Chemicals Risk Management	20
5.3. Environmental Management System Concept and Standard.....	27
5.4. How to use ISO 14001/ EMAS Environmental Management Systems Concept for Efficient Chemicals Risk Management	33

1. Introduction

The environmental management standards such as EMAS and ISO14001 should help organisations to minimise the negative environmental impacts of their operations. Even though the standards themselves do not prescribe what environmental impacts to address in which manner, and how to monitor progress certified/registered organisation as well as auditors/verifiers are constantly seeking for information on how to ensure continuous improvement of environmental performance.

None of the standards address chemicals risk management, and available guidance documents do not give respective information. So far the inclusion of this topic depends on awareness level and the willingness of the company and respective auditor/verifier.

Interlinking chemicals risk management and environmental management systems is a good approach to anchor chemicals risk management better in companies.

2. The aim of the workshop

The aim of the workshop was:

- a) to bring together international experts from the two fields: chemicals risk management (CRM) and environmental management systems (EMS), from different stakeholder groups,
- b) to discuss the interlinks and the differences between the CRM and EMS and if EMS could be good tool for improving CRM at companies,
- c) to present the draft guide on integrating chemicals risk management into international management systems and obtain feedback on it.

The seminar was addressed to:

- policy makers & implementing public authorities,
- industry & its roof organisations,
- ISO&EMAS certifiers/auditors and accreditation bodies,
- consultants supporting industry,
- researchers as well as environmental & health NGOs.

3. Workshop agenda

10:00	<i>Opening and Introduction</i>
	Opening of the Workshop & Intro Presentation: About the projects that motivated us to organise this meeting <i>by Heidrun Fammler, Baltic Environmental Forum</i> Participants' who is who (virtual Tour de Table – by mentimeter)
10:45	<i>Session 1: Setting the frame – chemicals risk management and environmental management systems: two systems with overlaps and differences</i>
	Presentations: catching the view point of the other group Chemicals Risk Management <i>by Antonia Reihlen, Senior Consultant, LIFE Fit for REACH project</i> Environmental Management System Concept and standards <i>by Robert Pochyluk, ISO14000 Forum Poland, NonHazCity Partner</i>
11:15	Interactive Forum of Participants – Reflections on the presentations (mentimeter) <ul style="list-style-type: none"> • Factors that connect the two sectors and factors that divide (mentimeter) • Discussion on the key points collected (moderated open discussion)
12:00	Coffee break
12:15	<i>Session 2: The proposal for integration of the two systems</i>
	Presentation: How to use ISO 14001/EMAS Environmental Management Systems concept for efficient Chemicals Risk management – a Manual developed within NonHazCity <i>by Robert Pochyluk, ISO14000 Forum Poland, NonHazCity Partner</i>
12:45	Interactive Forum of Participants – Reflections on the proposal (moderated open discussion) <ul style="list-style-type: none"> • Disputing the challenges pointed out in the presentation • How should the manual deal with the two understandings of the term “risk” • Would you expect in such a guidance specific examples how the management structure of the ISO 14 000 would be filled with regard to chemicals?
13:15	Coffee break
13:30	<i>Session 3: Recommendations from/to key-actors</i>
	Virtual Workshops
14:15	Interactive Forum of participants – Report from the groups, feedback to the ideas, discussion on further development and options for institutionalising
15:00	Conclusions and farewell

4. Summary of working groups

Workshop participants were divided into 5 groups:

1. ISO/EMS consultants
2. Policy makers & public authorities
3. Researchers
4. NGOs
5. Industry supporters

The results of the discussions in each group are presented below.

Group 1 - ISO/EMS consultants

Group facilitator: Audrone Alijosiute-Paulauskiene, BEF Lithuania

Discussion questions:

- How do you address the problem that chemicals concern environment and human health (workers and consumer) and that ISO 14 000 only deals with environment?
- Can a guidance bridge this gap? How?

Summary from the discussion:

- Chemical management is among EMS environmental aspects, however the level of importance depends on organization position, experience and knowledge of consultant, auditor, verifier.
- Chemical management is included but not from the point of view of downstream users.
- It is important to look outside facility, the impact of chemicals when product/service leaves "the gate".
- Companies tend to focus on managing chemicals to safeguard workers and to prevent environmental incidents resulting from accidental discharges. They have less awareness of wider environmental/ecological implications of the widespread use of chemicals, so perhaps do not prioritize reduction in use or substitution of less damaging alternatives.
- Intervention in audit stage is inefficient. More effect is to do things right at once during screening and initial review->identifying risks & aspects with significant aspects- So chemicals, especially hazardous chemicals shall always be significant.
- Important difference: ex-post reduction of identified pollutants versus prospective risk identification of not yet identified "pollutants".
- There is lack of awareness on chemical management.
- Risk issues for consumers (related to chemicals) needs an attention.

- The guide will be useful tool and assist to all interested parties to integrate and improve chemical management in the company.

Group 2 - Policy makers & public authorities

Group facilitator: Heli Nõmmalu, BEF Estonia

Discussion questions:

- Could EMS be one instrument to achieve the goals of the new Chemicals Strategy? How?

Summary from the discussion:

- EMS could be one instrument to achieve the goals of the new Chemicals Strategy. The non-toxic environment is a core issue in strategy but also in EMS point of view.
- The key issue is how to assess the impact on environment. This is complicated on company level.
- The chemicals aspect needs to be in EMS as standard. Getting chemical issues as a standard into EMS will be good and chemicals should come as one key element in EMS system.
- Level of knowledge about the chemicals is an issue in companies. Downstream users need more trainings, but also auditors as they have a power to guide companies.
- We need to mobilise auditors as much as possible. We have motivated companies and reporting obligations; more people can talk with companies about chemicals management. Auditors have a power in company to make them know the issues.
- EMS is voluntary and mainly covers large companies, small companies do not apply for EMS. Formulators/producers of mixtures need EMS, small downstream users do not need EMS.
- EMS companies need to implement all relevant legislation, including the use of hazardous chemicals. Maybe therefore EMS companies could be released from certain controls because regulatory authorities need to focus also on chemicals (e.g. restricted substances). Regulated chemicals (restricted, candidate list etc.) are a complex and complicated issue to them, to perform the controls is very difficult.
- It is also difficult to cope with hazardous substances in different lists for EMS people. All environmental management has based on heavy metals or some organics so far, this is only the small amount of substances from regulated chemicals.
- EMS is something that is possible to explain to public versus chemicals which is very complicated topic.
- The knowledge for companies about the chemicals is there, but no tools. The tools for companies need to be ready. The information about the hazardous chemicals is there, but how to use it or how to find a proper data basis is missing.

Group 3 – Researchers

Group facilitator: Ingrida Bremere, BEF Latvia

Discussion questions:

- How do you think chemicals could be weighted in the environmental management system?
- How does the toxicity factor could come in, how amounts shall be handled?
- Human health and chemicals

Summary from the discussion:

The approach to chemicals in the EMS Evaluation is seen in a way that use of large amount with lower toxicity chemicals creates approximately equal concern with those chemicals used in small quantity with high toxicity factor; and thus a distinction is not made.

Both, a user perspective and a company perspective are important. However, in practice occurs differentiation between concerns to human health inside and outside the company. While within the company - inside – a lot of regulatory requirements and standards apply to the working conditions and the workers' health aspects, outside the company - customers, people living around) the site – are not so addressed and therefore this aspect shall be considered.

By the assessment of the company, sometimes it is difficult to judge about significance of the factor based on amount of the chemical used by organization. It can depend on the type and size of the organization. For example, certain (defined) amount of a chemical could be judged from different perspective. For a large company this defined amount can be of small importance as other factors/ chemical uses may appear more significant. On contrary, for a small company, the defined amount can be a significant factor to take care of. From here the uncertainty appears, because the environmental impact from this certain (defined) amount is same.

Small amounts of used chemicals and multiple sources of application are problems to get information from companies. But for certain groups of chemicals - POPs and PBT- small amounts matter. Application of EMS shall be relevant, but sometimes it is difficult to implement in practice, because of missing information.

Group 4 – NGOs

Group facilitator: Sigita Židonienė, BEF Lithuania

Discussion questions:

- Is NGO familiar with ISO 140001 and another EMS?

- Can ISO/EMS be a tool to link environmental protection, health issues and consumers protection/information ambitions?
- Where do you see the strengths and weaknesses?

Summary from the discussion:

- NGO's are familiar with ISO and EMAS through the work with companies. But if not concentrated directly – not very aware of specifics.
- ISO and EMAS is not the main tool to communicate company responsibility to consumers. Could maybe work in tandem with other labels/information but as stand-alone object – too complex.
- ISO and EMAS are recognized by small percent of consumers, but they do not know what it really means and how it is connected to environment or health. Maybe there is a need for awareness raising?
- If raising awareness is needed – not sure if we should concentrate on specifics. Raising broad general awareness should be a priority.
- There are already a lot of information to find and digest, additional one could only make things difficult.
- Where to communicate? On the product? Is it even relevant?
- Ecolabels are more understandable.

Group 5 – Industry supporters

Group facilitator: Gražvydas Jegelevičius, BEF Lithuania

Discussion questions:

- How do you like the idea of integrating chemicals issues into environmental standards and certificates?
- What do you see as advantage, what do you see as shortcomings? How to make such manual useful for industry, digestible?

Summary from the discussion:

Advantages/ disadvantages of in integrating chemical issues into environmental. standards, certificates:

- May “push” companies to think in advance regarding chemicals management.
- Might encourage organisations and management to look into chemical issues.
- Would serve as a reminder to care for chemical topics and may help to realise the benefits of environmental management.

- Would lead to more integrated management of environmental issues, lower environmental impact and risk. Thus it would lower costs for overall environmental management (and e.g. waste management).
- Companies with standards may need to assign separate competent staff to “chemical part” of environmental standards.
- Some parts of good chemical management are or will be required to be implemented by legislation anyway.

How to make such manual useful for industry, digestible?

- Standards are voluntary. Voluntary approach – driver in itself to comply.
- Good guidance – would be useful for business but also auditors/ verifiers .
- Connect with best available practice/ techniques for chemical management
- Auditors/ verifiers should be sufficiently competent
- Requirement of chemicals inventory and hazardous ingredients in articles in standards (taking into account inputs and outputs).
- Encourage supply chain communication to obtain info on hazardous substances in articles.

5. Workshop presentations

5.1. About the projects that motivated us to organise this meeting

by Heidrun Fammler, Baltic Environmental Forum



LIFE / FIT FOR REACH



NonHAZCITY

WORKSHOP

INTEGRATING CHEMICALS RISK MANAGEMENT BETTER INTO ENVIRONMENTAL MANAGEMENT SYSTEMS AND STANDARDS

*Heidrun Fammner,
Baltic Environmental Forum*

25 November, 2020

 The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

 **Interreg**
Baltic Sea Region

 EUROPEAN REGIONAL DEVELOPMENT FUND
EUROPEAN UNION

The goal of the workshop

- **Bringing together international experts from the two fields: chemicals risk management (CRM) and environmental management systems (EMS) from different stakeholder groups:**
 - policy makers & implementing public authorities,
 - industry & its roof organisations,
 - ISO&EMAS certifiers/auditors and accreditation bodies,
 - consultants supporting industry,
 - researchers as well as environmental & health NGOs
- **Discussing the interlinks and the differences between the two approaches and thinking if EMS could be good tools for improving CRM at companies**
- **Feedbacking a draft guidance document based on the frame of the ISO 14002 series, which we would like to contribute to the current work of the ISO 14002 group**
- **And, finally, to discuss on the EMS&CRM interlink further development**

 The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH 

How it came to this event

- In our projects LIFE Fit for REACH, LIFE AskREACH and INTERREG NonHazCity we came to the conclusion that interlinking Chemicals Risk Management and Environmental Management Systems & Standards is a good approach to anchor chemicals risk management better in companies.
 - International seminar of the 3 projects in October 2018, Riga
 - LIFE chemicals platform meeting in November 2019, Vilnius
- It would address the need of companies to have a “frame” for chemicals management improvements and use approaches that they are familiar with (EMS standards, certification and auditing)
 - We added some related tasks to an open proposal at INTERREG for the extension stage of the NonHazCity project
 - We invited as partner the Polish ISO14000 Forum to the consortium to lead these activities
 - The funding was approved! Voila: one action: this event!



The Project “Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency” (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH



www.nonhazcity.eu

NonHazCity 1+2

*Innovative management solutions for
minimizing emissions of hazardous
substances from urban areas in the Baltic Sea
Region*

Stage 1: March 2016– February 2019

Stage 2: August 2019– July 2021



NonHazCity



The Project “Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency” (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

www.nonhazcity.eu

Why NonHazCity?

- Hazardous substances are in many everyday products such as cosmetics/body care, cleaning agents, toys, plastics, furniture...
- Our target substances can harm nature and human health and accumulate in our environment and are not effectively removed by wastewater treatment plants.
- NonHazCity is focusing on municipalities (municipal entities), and on **businesses** and private households in those municipalities.
- We demonstrate how they can make an informed choice and reduce their use of products containing hazardous substances.



The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH



Key actions of NonHazCity 1+2

- Develop source maps of chemicals
- Develop and monitor municipal Chemicals Action Plans or Strategies
- Develop a comprehensive online Training programme for municipalities
- Educate SMEs how to substitute critical substances at their operations
- Run campaigns for private households how to avoid critical substances
- Plastic as focus 2019-2021
- Add-up: business tool EMS & chemicals
- Implemented in: Stockholm, Västerås, Pärnu, Turku, Riga, Gdańsk, Kaunas District, Šilalė and Hamburg


www.nonhazcity.eu




The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH






LIFE / FIT FOR REACH



Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency



The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.



LIFE / FIT FOR REACH



- Protection of the environment and human health by making REACH implementation more effective.
- Increasing the knowledge and capacities of downstream SMEs in the Baltic States.
- Demonstration of effective substitution and resource efficiency cases in phasing out hazardous substances.
- Engaging industry beyond legal requirement: greening procurement and identity



The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.



LIFE • ASK
REACH

LIFE ASKREACH

Enabling REACH consumer information rights on chemicals in articles by IT-tools

2017/11/28
No. LIFE16 GIE/DE/000738

www.askreach.eu

The project "LIFE ASKREACH" (No. LIFE16 GIE/DE/000738) is funded by the LIFE Programme of the European Union.



About LIFE AskREACH

www.askreach.eu

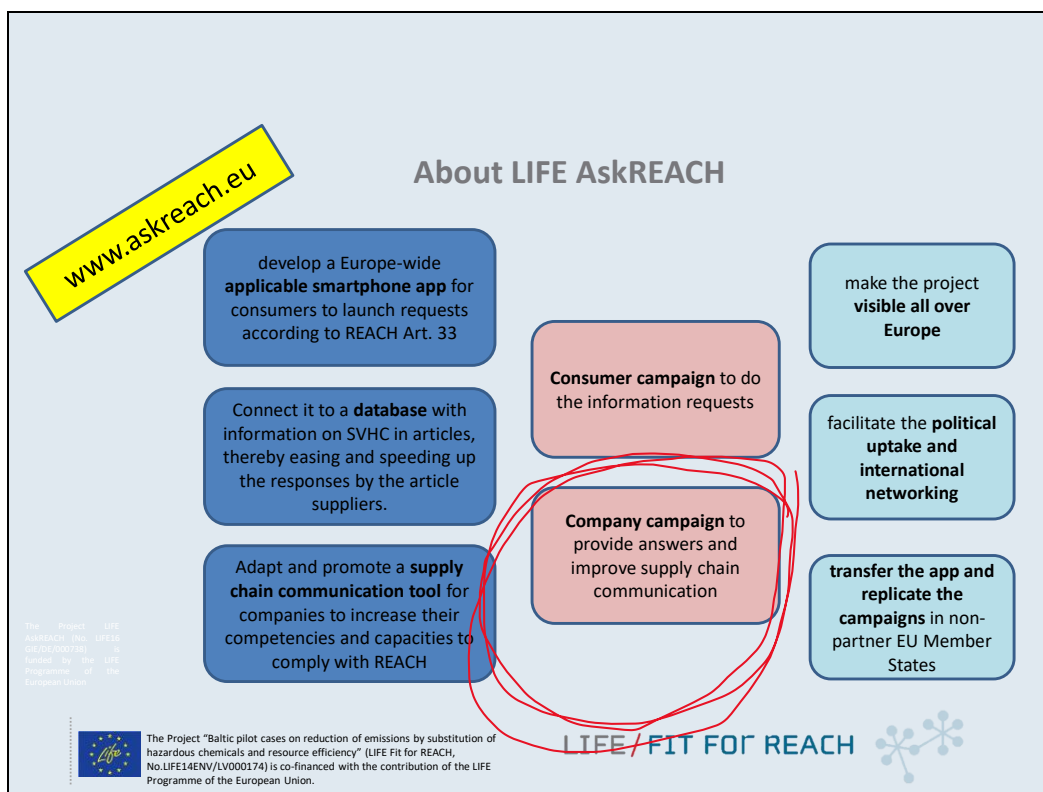
- LIFE AskREACH has the **overall goal** to enhance substitution of SVHC in articles by increasing the market demand for SVHC free articles and supporting industrial actors to identify SVHC in their articles.
- The proposal does not target industrial processing, particular articles or substances directly, but contributes to exposure reduction by raising awareness and changing the purchasing behaviour of consumers.

Specific objectives:

- Raising consumer awareness on SVHC in articles,
- Raising awareness and compliance of article suppliers on SVHC in articles and communication obligations under REACH,
- Facilitating communication on SVHC between consumers and companies,
- Initiating and guiding supply chain communication processes that finally aim at substituting SVHC in articles.

The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No. LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH



Turning back to the event - Agenda

10:45	Session 1: Setting the frame – chemicals risk management and environmental management systems: two systems with overlaps and differences Presentations: catching the view point of the other group "Chemicals Risk Management" by Antonia Reihlen, Senior Consultant, LIFE Fit for REACH project "Environmental Management System Concept and standards" by Robert Pochyluk, ISO14000 Forum Poland, NonHazCity Partner
11:15	Interactive Forum of Participants – Reflections on the presentations (mentimeter) 1. Factors that connect the two sectors and factors that divide (mentimeter) 2. Discussion on the key points collected (moderated open discussion)
12:00	Coffee break



No. LIFE14 ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

Session 2

12:15	Session 2: The proposal for integration of the two systems
	Presentation: “How to use ISO 14001/EMAS Environmental Management Systems concept for efficient Chemicals Risk management” – a Manual developed within NonHazCity by Robert Pochyluk, ISO14000 Forum Poland, NonHazCity Partner
12:45	Interactive Forum of Participants – Reflections on the proposal <ul style="list-style-type: none"> • Disputing the challenges pointed out in the presentation • How should the manual deal with the two understandings of the term “risk” • Would you expect in such a guidance specific examples how the management structure of the ISO 14 000 would be filled with regard to chemicals?
13:15	Coffee break



The Project “Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency” (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH


Session 3

13:30	Session 3: Recommendations from/to key-actors
	Virtual Workshops Set of tasks and discussion in 7 groups <ol style="list-style-type: none"> 1. ISO experts 2. Policy makers & advisors: 3. Industries 4. Researchers 5. Environment & health NGOs 6. Public authorities (mixed) 7. Industry supporters/consultants
14:15	Interactive Forum of participants – Report from the groups, feedback to the ideas, discussion on further development and options for institutionalising
15:00	Conclusions and farewell



The Project “Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency” (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH




LIFE / FIT FOR REACH

Let's dive into the 1st session!



The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

Tasks for the working groups

1. ISO people: how do you address the problem that chemicals concern environment and human health (workers and consumer) and that ISO 14 000 only deals with environment? Can a guidance bridge this gap? (How?)
2. Policy makers & advisors: Could EMS be one instrument to achieve the goals of the new Chemicals Strategy? How?
3. Industries: how do you like the idea of integrating chemicals issues into environmental standards and certificates? What do you see as advantage, what do you see as shortcomings? On which issues do you think specific information is needed?
4. Researchers: how do you think chemicals could be weighted in the environmental management system, how does the toxicity factor could come in, how amounts shall be handled? Human health and chemicals.
5. NGOs: can ISO/EMS be a tool to link environmental protection, health issues and consumers protection/information ambitions? Where do you see the strengths and weaknesses?
6. Public authorities (mixed): Could EMS be one instrument to achieve the goals of national chemicals policy? What would it help you in your work with companies?
7. Industry supporters: how do you like the idea of integrating chemicals issues into environmental standards and certificates? What do you see as advantage, what do you see as shortcomings? How to make such manual useful for industry, digestible?



The Project "Baltic pilot cases on reduction of emissions by substitution of hazardous chemicals and resource efficiency" (LIFE Fit for REACH, No.LIFE14ENV/LV000174) is co-financed with the contribution of the LIFE Programme of the European Union.

LIFE / FIT FOR REACH

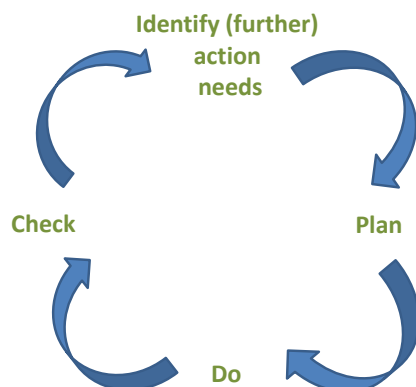


5.2. Chemicals Risk Management

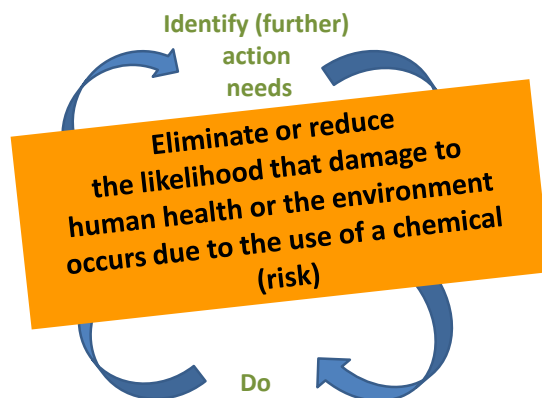
by Antonia Reihlen



(Chemicals Risk) Management



Chemicals Risk (Management)



Physical-chemical hazards
and safety issues not addressed

Identify (further) action needs

Gather information on:

- Hazardous properties of all used chemicals

*Safety data sheets,
supplier communication
databases*

- Uses in the company
- Uses in the product

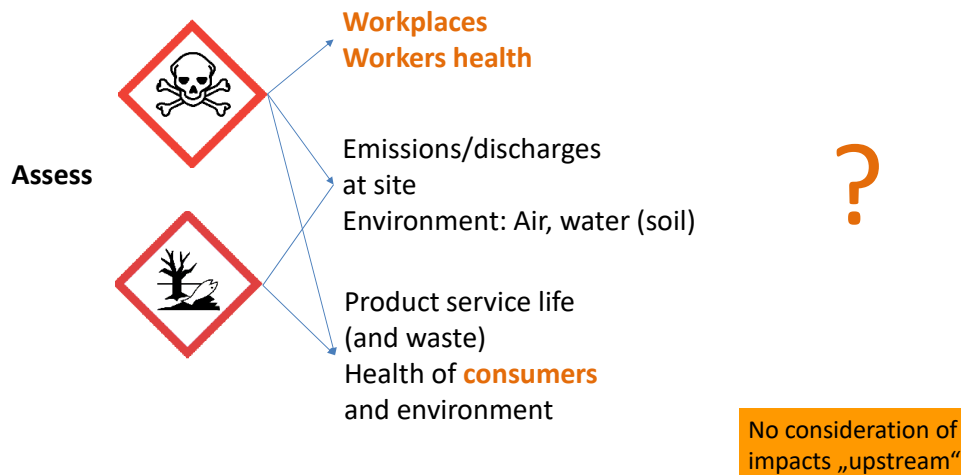
*Material flows
Technical information
Product information*

- Compile

*Chemicals inventory
Chemicals-specific
parts in material
management systems*

Assess

Identify hazards (and risks)



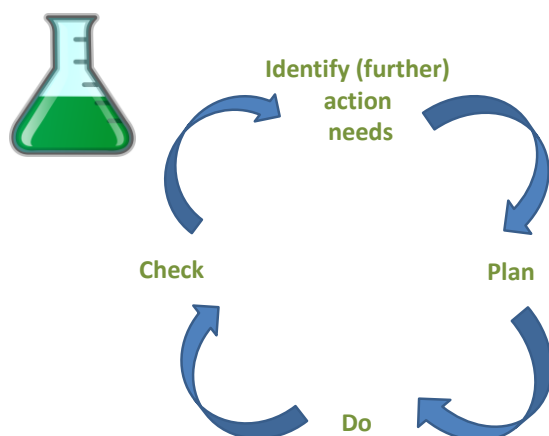
Prioritise, plan

- Prioritisation criteria
 - (eco-)toxicity is **crucial**
 - impacts from end-products chemicals are contained in frequently dominate considerations
 - Amounts only relevant in combination with hazards
 - Feasibility, costs, impacts on quality etc. as for any other company decision
- Comparing options may be (more) complex
 - substitute (various alternatives at different levels)
 - minimise emissions / exposures

Do and check

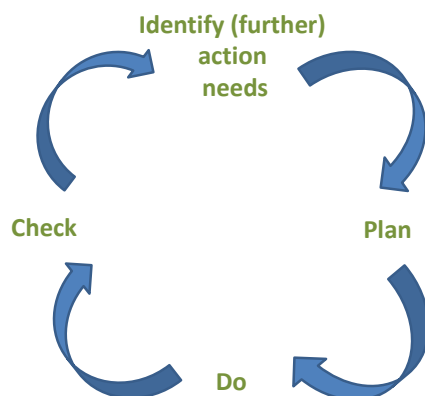
- Implementation
 - Substitution – may require involvement of (many) actors inside and outside the company
 - Emission/exposure reduction may be limited to activities in the company
- Monitoring of results
 - Review over time, as situation may change (information on hazards, inclusion in product, waste processing...)
 - Measuring “real” impacts hardly possible, except for workers health

Conclusions regarding EMS



„Sliding-in chemicals“ is possible

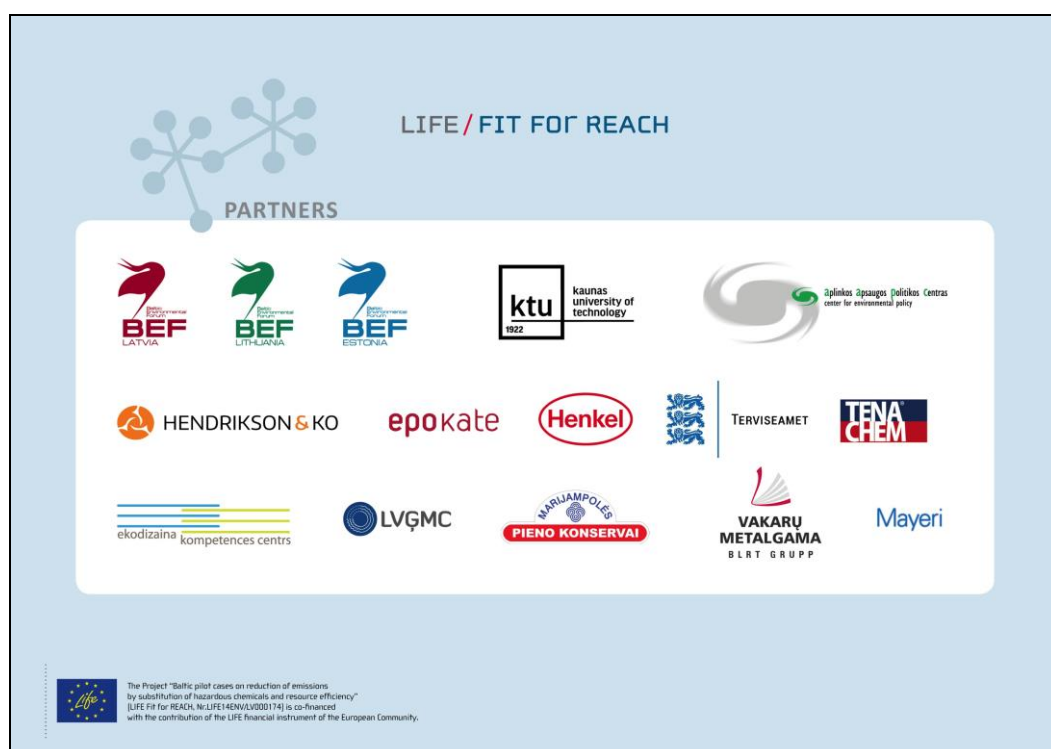
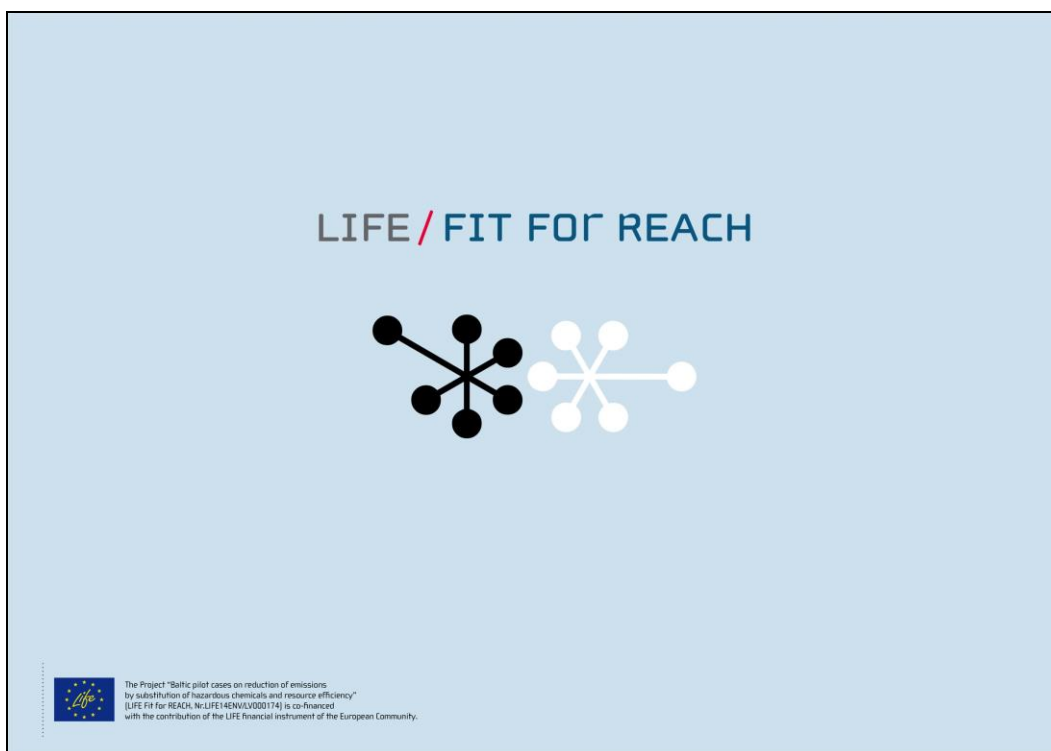
Conclusions regarding EMS 2



Main changes at the early steps

Conclusions regarding EMS 3

- (Eco-) toxicity adds another dimension to the evaluation of environmental aspects and may shift focus to other lifecycle stages
- Human health is an important impact requiring consideration (or not)
- Awareness, guidance and tools may be needed to raise the issue and move some focus to chemicals



5.3. Environmental Management System Concept and Standard

by Robert Pochyluk, Polish Association ISO 14000




EUROPEAN REGIONAL DEVELOPMENT FUND




NonHAZCITY

Environmental Management System Concept and Standards

INTEGRATING CHEMICALS RISK MANAGEMENT BETTER INTO ENVIRONMENTAL MANAGEMENT SYSTEMS AND STANDARDS

25th November 2020

Robert Pochyluk
Polish Association ISO 14000
www.pfiso14000.org.pl



Polskie Forum ISO 14000

2

POLISH FORUM ISO 14000

- independent, non-profit organization of individuals and legal entities involved in environmental management issues,
- established in 1996,
- financed from the member fees, paid training activities, projects.

Our objectives:

- to promote environmental management as effective way of protecting environment and improve competitiveness,
- to improve the quality of environmental management systems (esp. These certified to ISO 14001 and registered in EMAS)




EUROPEAN REGIONAL DEVELOPMENT FUND




NonHAZCITY

3

BASICS OF ISO 14001 AND EMAS

ISO 14001

- Title: Environmental management systems - Requirements with guidance for use
- 1st publication – 1996
- voluntary, international standard
- latest version - 2015

EMAS

- Title: REGULATION on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS),
- 1st publication – 1993
- EU Regulation – applicable in all member states
- latest version – 2009 (amended in 2017, 2019)
- Annex II of EMAS „consumes” requirements of ISO 14001

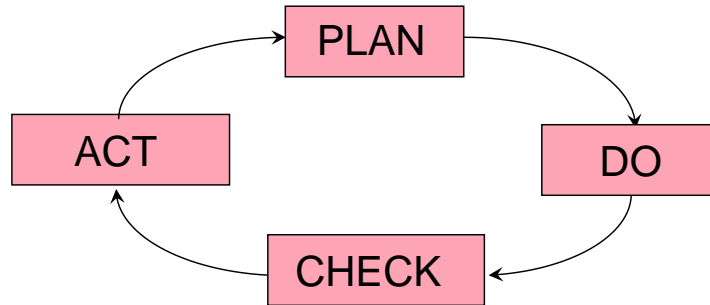
4

EMS CONCEPT

- voluntary use by organizations
- applicability to any sector
- required continual improvement (of environmental performance)
- required legal compliance
- required involvement on all levels of the organizational structure incl. top management
- focus on internal controls

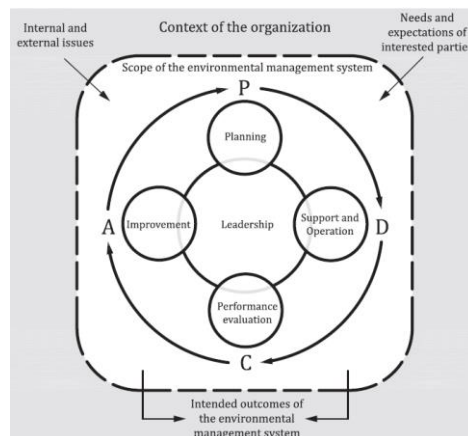
5

EMS CONCEPT



6

EMS ELEMENTS



(source ISO14001:2015)

7



-Official statistics of the European EMAS Helpdesk- Organisations and Sites per Country (April 2020)

	Organisations	Sites		Organisations	Sites
Austria	264	1177	Ireland	1*	1*
Belgium	61	739	Italy	991	4918
Bulgaria	13	32	Lithuania	4	6
Croatia	2	3	Luxembourg	6	9
Cyprus	67	0	Latvia	0	0
Czech Republic	19*	45*	Malta	1	1
Germany	1134	2214	Netherlands	0	0
Denmark	16*	160*	Norway	4	14
Estonia	4	30	Poland	64	574
Spain	809	950	Portugal	51	98
Finland	4	22	Romania	8	12
France	30*	41*	Sweden	12	22
Greece	35	1332	Slovenia	7	7
Hungary	28	53	Slovak Republic	11	49
			United Kingdom	6	6

Total: 3652 organisations & 12,515 sites

Source: Official responses from national Competent Bodies
*Numbers from EU EMAS Register



EUROPEAN
REGIONAL
DEVELOPMENT
FUND



NonHAZCITY

8

	Total valid certificates	Total number of sites
ISO 14001	312 580	487 950

country	certificates	sites
China	134 926	135 384
Japan	18 026	74 443
Italy	17 386	28 409
Spain	12 871	26 356
United Kingdom	11 420	21 913
France	6 402	18 991
Germany	8 465	14 388
India	8 486	11 302
Sweden	2 989	7 920
United States of America	3 671	7 552
Brazil	2 969	6 807
Denmark	1 031	6 657
Korea (Republic of)	5 698	6 131
Romania	4 658	6 125
Australia	2 298	5 924
Poland	3 766	5 485



EUROPEAN
REGIONAL
DEVELOPMENT
FUND



NonHAZCITY

ISO 14002 Environmental management systems — Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area —Part 1: General

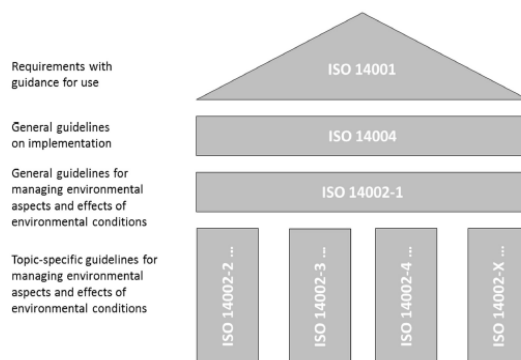


Figure 1 — ISO 14002 series and its relationship to ISO 14001 and ISO 14004



NonHAZCity

Contact

Robert Pochyluk
Vice President
Polish Association ISO14000
E-mail: sekretariat@pfiso14000.org.pl
www.pfiso14000.org.pl



5.4. How to use ISO 14001/ EMAS Environmental Management Systems Concept for Efficient Chemicals Risk Management

by Robert Pochyluk, Polish Association ISO 14000




EUROPEAN
REGIONAL
DEVELOPMENT
FUND




NonHAZCITY

How to use ISO 14001/EMAS Environmental Management Systems Concept for Efficient Chemicals Risk Management

Manual

Robert Pochyluk
Polish Association ISO 14000
www.pfiso14000.org.pl





Polskie Forum ISO 14000



2

THE TASK OF PF ISO 14000 IN THE NONHAZCITY2 PROJECT

- developing the manual for chemicals risk management based on ISO 14001 model
- including testing by certified organisations and certifiers,
- presenting the manual to the fora working with EMS standardization

EUROPEAN
REGIONAL
DEVELOPMENT
FUND

NonHAZCITY

3

THE TASK OF PF ISO 14000 IN THE NONHAZCITY2 PROJECT

The task concept is quite similar to ISO 14002:

- to assist ISO 14001 users (organisations and auditors) on how to approach chemicals management taking into account legal requirements and best management practices

4

ENVIRONMENTAL TOPIC

An **environmental topic** area is an area of interest or concern for environmental management in an organization, in relation to its surroundings. This can include, for example, air, water, land, natural resources, flora and fauna, consistent with the definition of environment in ISO 14001.

[ISO 14002-1]

5







**CHEMICAL MANAGEMENT
AS PART OF THE ENVIRONMENTAL
MANAGEMENT SYSTEM**

Guide

Robert Pochyluk
Małgorzata Macniak

November, 2020

Comments on the form and content of this guide should be sent to robert.pochyluk@eko-net.pl








6



TARGET GROUP

The manual has been prepared for organisations that use chemicals in their activities, in particular:

- a) industrial users, i.e. entities using chemicals as auxiliaries (e.g. users of coolants, cleaning agents, reagents),
- b) product producers, i.e. entities using chemicals that remain in the product during operations (including producers of mixtures),
- c) non-industrial users, i.e. those using chemicals in professional activities other than industrial processes, e.g. craftsmen, professional service providers.

It is NOT intended to be used by chemical sector i.e. organisations producing substances




7

TARGET GROUP

The manual has been prepared for organisations that:

1. maintain an EMS (based on the requirements of ISO 14001 or the EMAS Regulation), but so far have had little coverage of chemical management,
2. see no need to maintain a formal EMS but seek inspiration for better chemical management

and also for:

3. auditors acting on behalf of certification bodies (including EMAS verifiers) who seek knowledge of good practices applied in various areas related to environmental management.

8

STRUCTURE OF THE GUIDE

- The structure of the guide is based on the structure of the requirements of ISO 14001
- There is a reference to each ISO 14001 requirement (paraphrase) followed by explanations
 - on general level
 - addressing chemicals management in particular
 - followed by examples (if appropriate)
 - for some requirements references to legislation is provided

The requirements of the ISO 14001 standard and their compliance with chemical management

Context of the organisation (4)

Understanding the organisation and its context (4.1)	<p>The ISO 14001 standard requires organisations to define the context in which they operate. In defining this context, organisations should consider internal and external factors influencing the purpose of the organisation, in particular the expected results of implementing and maintaining an EMS. Understanding the context is the basis for identifying the risks i.e. Threats and opportunities for the organisation, and to further include them in the EMS.</p>
---	---

The purpose of this requirement of the standard is to make the management of the organisation aware of the relationship between the environment and the activities carried out. In many cases, these relationships are stronger than you might think. Being aware of these relationships helps to avoid mistakes that could result in unforeseen costs, loss of image or a decrease in sales. To meet this requirement, it is useful to clearly establish the reasons why the organisation decided to implement and maintain an EMS.

In relation to the chemical management, external factors can be:

- trends in changes in the law - introducing restrictions and bans of the use of chemicals,
- growing consumer awareness and pressure to eliminate hazardous chemicals from the production process and products - impact on sales and revenues,
- resource scarcity, including availability of substitutes and price volatility - impact on the supply chain, production, sales, and revenues,
- the emergence of new technologies,
- competition - introducing new solutions by competing organisations.

Information on examples of the trends of changes in the law can be found:

- in the register of substances for which they are planned to be classified as substances of very high concern (so-called SVHC substances) - This register contains information about the substances with plans to submit documentation, with a view to being recognised as a SVHC; the register is available on the website of the European Chemicals Agency: <https://echa.europa.eu/en/registry-of-svhc-intentions/>
- in the register of intentions to change the classification and labelling - the register contains proposals for new or updates of the existing harmonised classification and labelling of substances; the register is available on the website of the European Chemicals Agency: <https://echa.europa.eu/en/registry-of-clh-intentions-until-outcome/>

- on the list of substances proposed as POPs¹⁰ - lists and provides information on all chemicals prepared for the potential acquisition of the Stockholm Convention

Internal factors can be:

- conditions (including limitations) of the technologies used (e.g. no possibility to change the chemicals used without significant changes in the equipment),
- conditions (including limitations) resulting from the characteristics of the buildings used and the location (e.g. no possibility of installation on larger tanks).

¹⁰ POPs - persistent organic pollutants are organic substances that remain permanently in the environment, accumulate in living organisms, and pose a threat to human health and the environment. They can be transported via air, water or migratory species across national borders, reaching regions where they have never been produced or used. POPs are regulated by the Stockholm Convention and Regulation (EU) 2019/1021 of the European Parliament and of the Council of June 20, 2019 on persistent organic pollutants.

CONCERNS – PROPER TERM FOR EMS USERS¹²

Chemicals management

vs.

Chemical management

vs.

Chemical risk management

CONCERNS – UNDERSTANDING OF „RISK”¹³

In ISO international standards on management systems (incl. ISO 14001, the term "risk" is defined as:

"effect of uncertainty"

Note 1 : An effect is a deviation from the expected — positive or negative.

ISO 14001 defines also the phrase „risks and opportunities”

„potential adverse effects (threats) and potential beneficial effects (opportunities)”

This allows for concluding that In ISO 14001 the risk relates to the organisation, i.e. for the purpose of its existence and the intended results of implementing and maintaining an EMS.

While in chemical management, „risk” rather relates to the human health and environment. When it comes to chemical management, the term 'risk' generally has negative connotations.



CONCERNS – WHAT IS THE SCOPE OF „CHEMICAL(S)¹⁴ (RISK) MANAGEMENT” FOR EMS USERS?

- REACH Regulation
- CLP Regulation
- Seveso (COMAH) Directive
- Water Framework Directive
- ADR Agreement/RID Regulation
- Other?



CONCERNS – WHAT IS THE SCOPE OF „CHEMICAL(S)¹⁵ (RISK) MANAGEMENT” FOR EMS USERS?

Current status:

1. Included process chemicals which are purchased intentionally for production or service
2. Emissions excluded (as not intended side effects)
3. Influence on workers excluded

CONCERNS: WHAT IS THE POTENTIAL FOR¹⁶ THE MANUAL:

- a. to become the important input to the separate ISO 14002-x standard regarding chemicals management,
- b. to be used as input to the environment elements specific standards (water, air, soil) in case it is decided that chemical management should not be treated separately
- c. to be officially distributed as a support for EMAS registered organisation or these that are interested in EMAS registration

17

THANK YOU FOR YOUR ATTENTION!

**THE PARTICIPANTS ARE WELCOME TO
ADDRESS THESE CONCERNS IN THE
FOLLOWING DISCUSSION AND VIRTUAL
WORKSHOP**

EUROPEAN
REGIONAL
DEVELOPMENT
FUND

NonHAZCITY



NonHAZCITY

Contact

Robert Pochyluk
Vice President
Polish Association ISO14000
E-mail: sekretariat@pfiso14000.org.pl
www.pfiso14000.org.pl

EUROPEAN UNION
EUROPEAN
REGIONAL
DEVELOPMENT
FUND

NonHazCity2