



Progress in establishment the PRTR System in the Republic of Moldova

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„Global Project on the Implementation of PRTRs as a tool for POPs reporting, dissemination and awareness raising for Belarus, Cambodia, Ecuador, Kazakhstan, Moldova and Peru”

Budget: \$ 190,000

National contribution (in kind) - \$ 1,183,583

Duration of implementation – 48 months



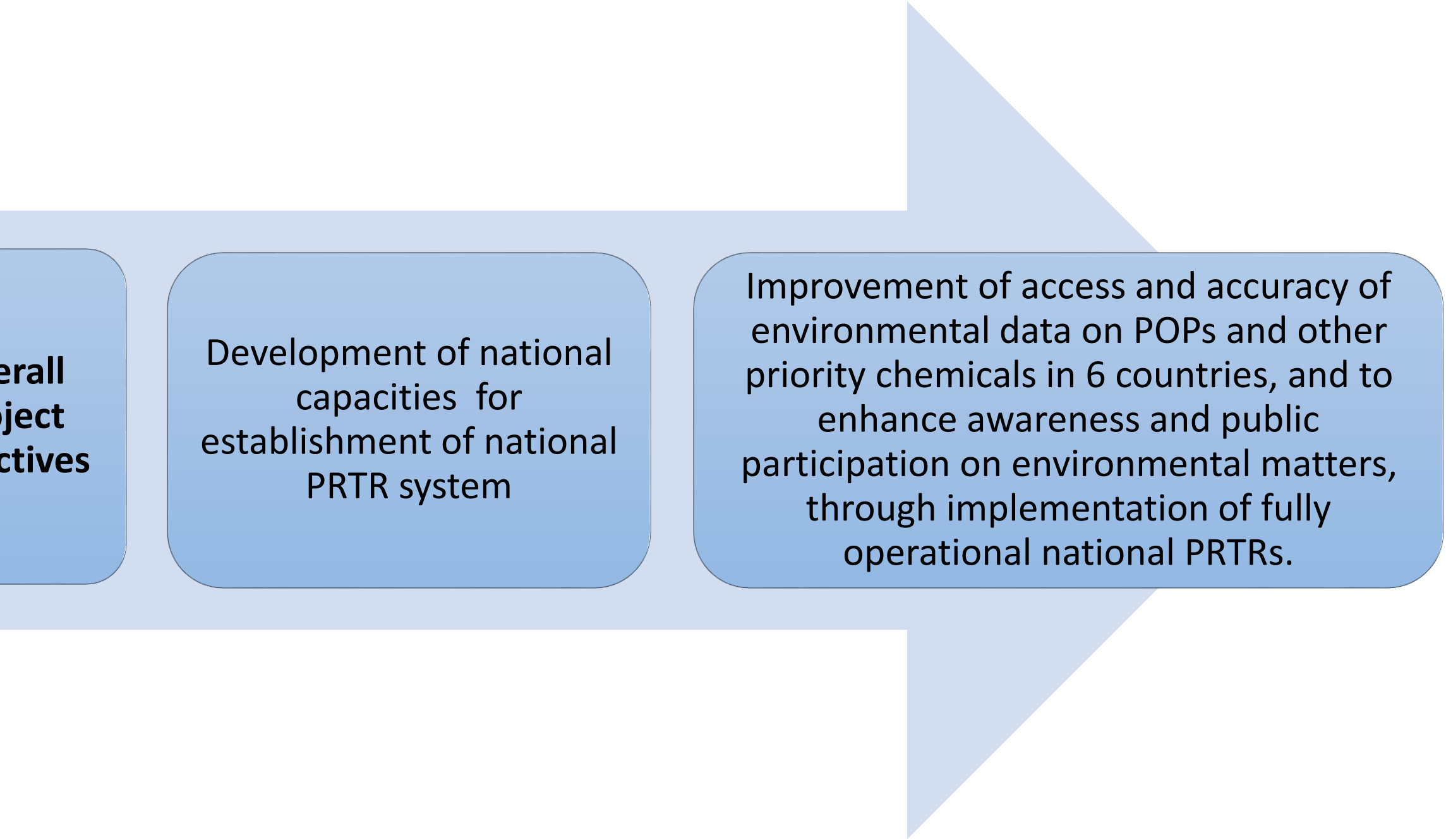
National Executing Agency - Environmental Pollution Prevention Office, Ministry of Agriculture, Regional Development and Environment of the Republic of Moldova



Implementing Agency - UNEP



Executing Agency - UNITAR



**Overall
project
objectives**

Development of national
capacities for
establishment of national
PRTR system

Improvement of access and accuracy of
environmental data on POPs and other
priority chemicals in 6 countries, and to
enhance awareness and public
participation on environmental matters,
through implementation of fully
operational national PRTRs.

Project components

1: Strengthening baseline and identification of national needs

1.1 Basic existing materials on PRTRs revised and made available for national consideration

1.2 National proposals updated and guiding PRTR implementation

1.3 Draft national regulatory framework developed and facilitating PRTR implementation

2: Capacity building activities towards the implementation of a PRTR for POPs reporting

2.1 Standard training modules and materials developed to be used by any interested country

2.2 Sector-specific training programme developed and properly documented.

2.3 National estimation techniques developed and available

2.4 POPs reporting documents developed by using PRTRs through pilots

3: Standardization and comparison of PRTR data

3.1 Reports and studies on standardization of PRTRs available for countries' use

3.2 Developed PRTR implementation guidance facilitates inclusion of POPs into the PRTR system

3.3 Comparison of PRTR data facilitates quality data and improves PRTR reporting

4: Access to PRTR data and public information

4.1 National strategies developed enable public access to PRTR data and more active participation in PRTR implementation

4.2 PRTR information accessed by civil society and other sectors

5: Lessons learned and replication

5.1: Organise a global workshop to analyse lessons learned

5.2: Organise a mid-term global meeting on lessons learned

5.3: Organise a final lessons learned workshop

5.4: Project monitoring and evaluation

„Strengthening capacities for the development of the national Pollutant Release and Transfer Registers (PRTR) and supporting SAICM implementation in two countries with economy in transition: the Republic of Moldova and the Republic of Macedonia”

Financial support – UNEP QSP

Budget : \$ 113689

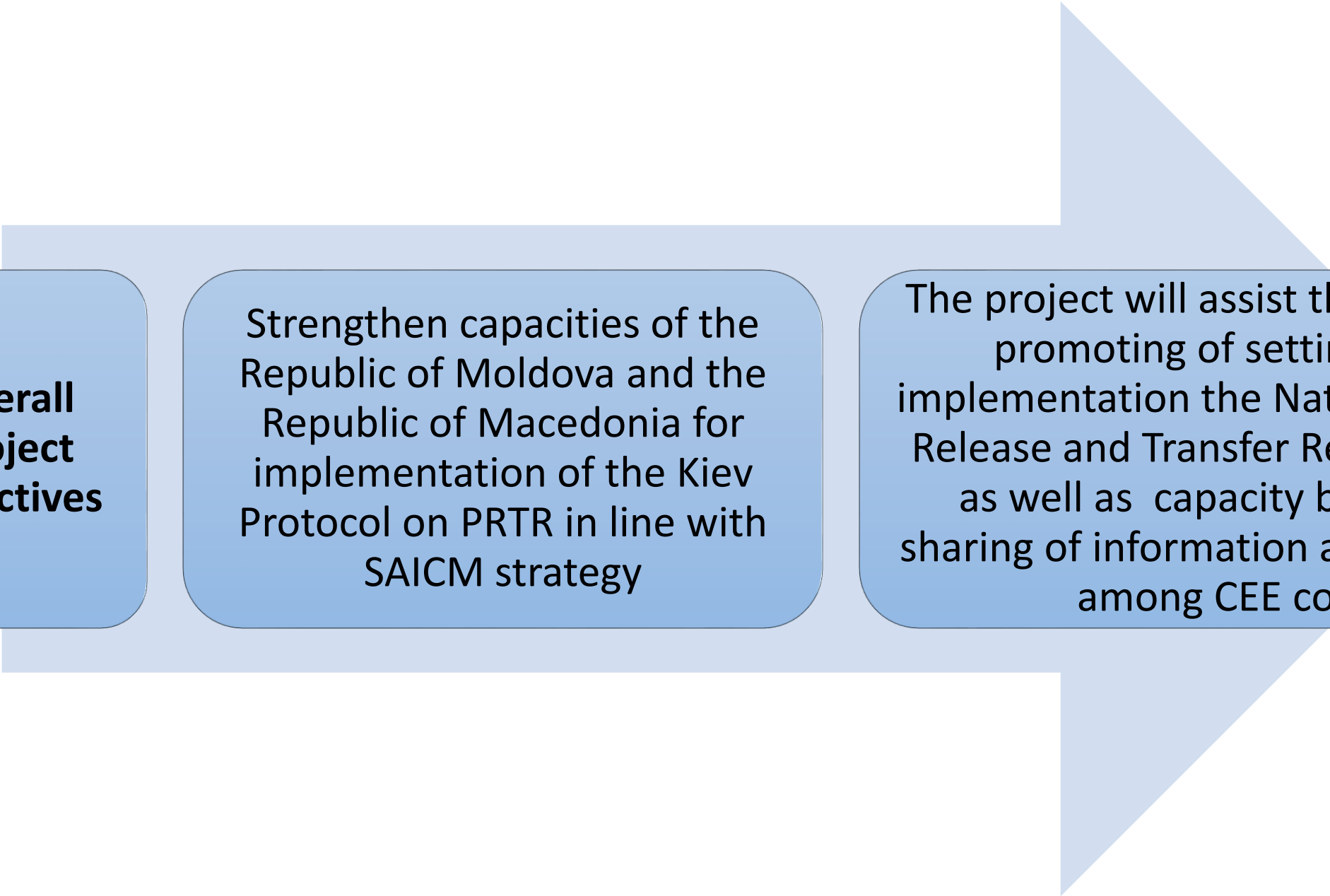
Duration – 14 months



National Executing Agency - Environmental Pollution Prevention Office, Ministry of Agriculture, Regional Development and Environment of the Republic of Moldova

Implementing Agency – UNEP





**Overall
project
objectives**

Strengthen capacities of the Republic of Moldova and the Republic of Macedonia for implementation of the Kiev Protocol on PRTR in line with SAICM strategy

The project will assist the countries in promoting of setting up and implementation the National Pollutant Release and Transfer Register System as well as capacity building and sharing of information and experience among CEE countri

Project components

1. Designing/improving national PRTR systems in Moldova and Macedonia

1.1 . Setting up the objectives and key elements of the National PRTR System

1.2 Assessing the Existing technical Infrastructure relevant to PRTR

1.3 Organizing a National PRTR Review Workshops

2. Legal and institutional capacity strengthening for PRTR implementation in Moldova and Macedonia

2.1 Developing enforcement mechanism for the application of the national regulation on PRTR based Regulation EC nr. 166/2006 concerning the establishment of a European PRTR (Ghid PRTR)

2.2 Developing legal act for the methodologies approval MoE Decree (conduct multistakeholder consultation prior the estimation techniques approval by MoARDE Decree) (MD)

2.3 Developing/updating database of facilities / business to report under PRTR system (MD/MK)

3. Awareness raising and information activities

3.1 Conducting intensive consultations/ trainings with facility managers/PRTR installations (MK/MD)

3.2 Support the PRTR national reporting pilots for relevant sectors, including intensive ecological inspectorate training (MD)

3.3 Public awareness raising campaign conducted among key stakeholders (MK/MD)

3.4 Publication of the guidebook and relevant PRTR sector estimation methodologies (MD)

4. CEE region capacity building on PRTR

4.1 Conducting CEE regional seminar in Macedonia on PRTR (MD/MK+ invited countries within the region)

4.2 Site visit to PRTR facility as best practice sharing

4.3 Study tour

Establishment of the legal and regulatory framework

- Law no. 99 of 26.04.2013 on ratification of the Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Justice and Public Participation in Environmental Decisions
- Regulation on the implementation of the National Registry for Pollutant Emissions and Transfer

Establishment of the PRTR infrastructure

- Development of the Concept of the Automatic Informational System „Pollutant Release and Transfer Registry” – AIS PRTR
- Development of the AIS PRTR software

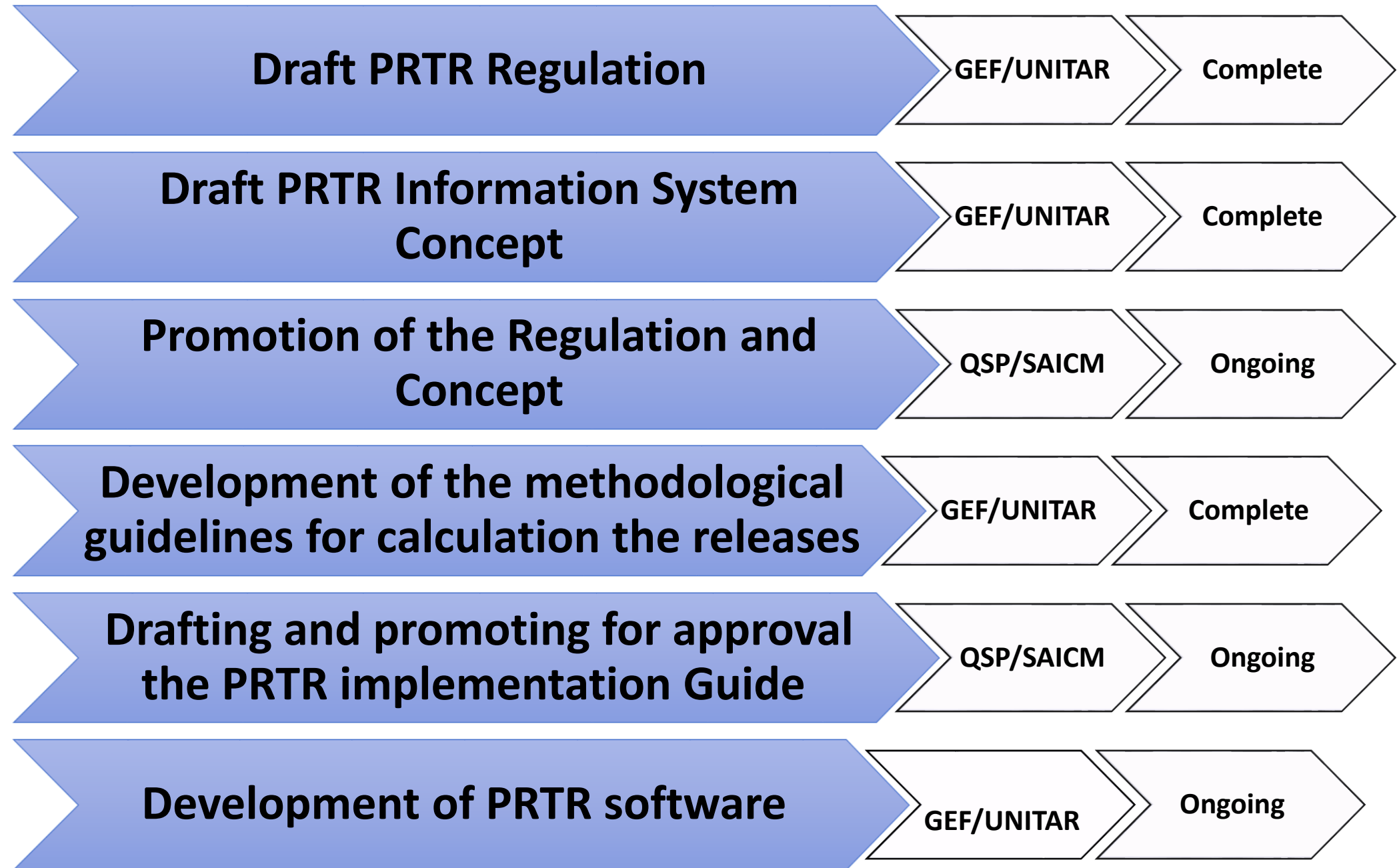
Capacity building

- Training of the business/local and central authorities/civil society
- Piloting AIS PRTR
- I stage – preparation of report for 2017
 - II stage – support MARDE in preparation of the report for 2018

Reporting

- Report on Pollutant Emissions and Transfer to the Secretariat of the Kiev Protocol
- Reporting to Stockholm, UNFCCC, CLATAP, Minamata Conventions

Development of the legal and regulatory framework and infrastructure



Government Decision on approval the:

Regulation on the implementation of the National Pollutant Release and Transfer Registry

establishes the necessary institutional framework for setting up, and regulating, the National Emissions and Pollutant Transfer Register

Concept of the Automatic Informational System „National Pollutant Release and Transfer Registry” – AIS PRTR

establishes the objectives, the purpose, the principles, the legal normative framework, the basic functional characteristics and the conceptual architecture of the information system

Regulation on the implementation of the National Pollutant Release and Transfer Registry

Transposes the Regulation (EC) No. No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689 / EEC and 96/61 / EC

Contains provisions related to:

Subjects of legal relations in the field of creation and use of the National Registry

Structure, Principles of Creating and Maintaining the National Registry

Collecting, presenting and validating the data in the National Register

Access to information, public participation and access to justice

Monitoring of emissions

Subject of the National Registry

a) Data suppliers:

1) Central and local public environment authorities and subordinated institutions

2) Agency "Apele Moldovei", National Agency for Food Safety, Public Services Agency, National Bureau of Statistics

3) Economic operators

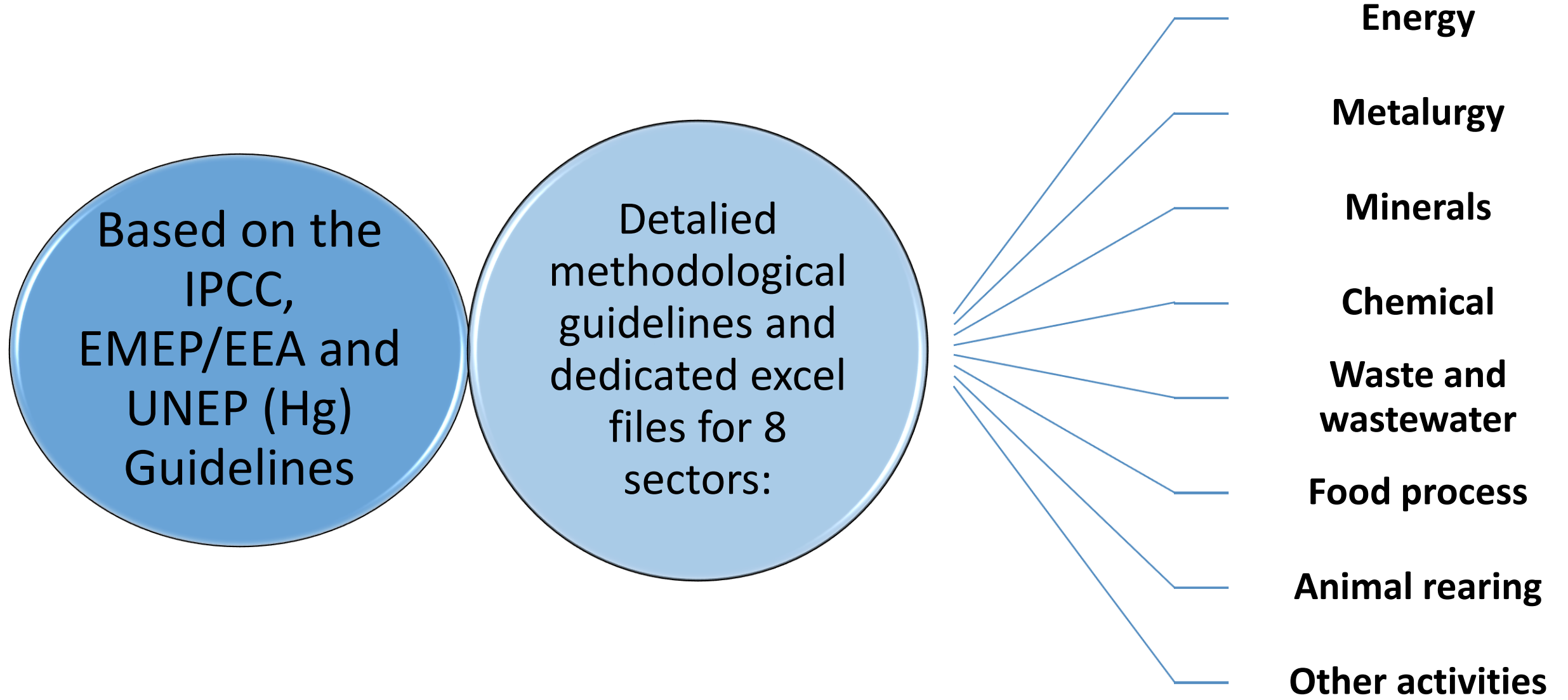
b) Data users:

1) Central and local public environment authorities and subordinated institutions

3) Economic operators

4) Civil society

Methodological guidelines for calculation the releases to air from stationary sources:



**Methodology for the calculation
of pollutants releases into the atmosphere
to be applied in the Republic of Moldova
for the PRTR reporting**

Chisinau, 2017

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**Ghid metodologic privind calculul
emisiilor de poluanți în aer pentru
raportare în RETP**

SECTORUL ENERGETIC

(a) Rafinării de petrol și gaze

(c) Centrale termice și alte instalații de ardere

(d) Cuptoare de cocs

(f) Instalații de fabricare a produselor din cărbune și a combustibilului solid nefumigen



Methodological guidelines for each sector contains the following chapters:

Overview

General description

Process description

Techniques

Emission and abatements
systems

Methods

Level 1

- Algorithm
- Emission factors
- Activity data

Level 2

- Algorithm
- Emission factors
- Abatement systems
- Activity data

References
Glossary

CALCULUL EMISIILOR DE H2O DE LA TRATAREA APELOR UZATE PENTRU RAPORTAREA ÎN CADRUL RETP

Denumirea instalației: _____
 Adresa: _____
 Anul de raportare: _____

Note: _____

EMISI ÎN AER

Categorie		Stadii de epurare a apelor uzate urbane		C		D		E		F		G		H		I	
Codul Categoriilor		S (f)		A		B		E		F		G		H		I	
Nr. poluantului RETP	Poluant	Numărul de locuitori deserviți de stația de tratare	consumul anual de proteine pe cap de locuitor	Fracția azotului în proteine	Factorul de corecție pentru proteine recomandate adăugate la apele uzate, F _{pro} -con	Factorul de corecție pentru proteinele co-deversate în canalizare din sectorul industrial și cel comercial	azotul eliminat ca nămol	Factor de emisie	Raportul stoichiometric între conținutul azotului în H ₂ O și în H ₂ O 4420	Emisii H ₂ O							
		(locuitori)	(kg/locuitor/an)	(kg N/kg protein)	(fracție)	(fracție)	(kg N/an)	(kg N/m ³ H ₂ O)	(fracție)	= ((A*B)*C)*D*(E-F)*G							
5	N ₂ O	700 000,00	26,70	0,16	1,4	1,25	0,00	0,005	1,971428571	41 118,0							
		Total															

În celula galbenă introduceți datele de activitate
 Введите данные активности в желтой ячейке

În celula verde rezultatul se va calcula automat
 В зеленой ячейке результат будет автоматически рассчитан

CALCULUL EMISIILOR DE CH4 DE LA TRATAREA APELOR UZATE PENTRU RAPORTAREA ÎN CADRUL RETP

Denumirea instalației: _____
 Adresa: _____
 Anul de raportare: _____

Note: _____

EMISI ÎN AER

Categorie		Stadii de epurare a apelor uzate urbane		C		D		E		F		G			
Codul Categoriilor		S (f)		A		B		E		F		G			
Nr. poluantului RETP	Poluant	Tipul sistemelor	Sistem de tratare și evacuare a apelor reziduale	Bo	MCF	Numărul de locuitori deserviți de stația de tratare	CBO	Năm oi îndepărtat	Emisie de metan recuperate de la tratarea apelor	Emisii CH ₄					
				(kg CH ₄ /kg CBO)	(fracție)	(locuitori)	(kg CBO/locuitor/an)	(kg CBO/an)	(kg CH ₄ /an)	= (A*B)*C*(D-E)*F					
1	CH ₄	Sisteme fără tratare a apelor reziduale	Tratarea apelor reziduale în rețea în scopul de a preveni a apelor reziduale	0,4	0,1	0,00	27,38	0	0	0,0		0,0			
			Tratarea apelor reziduale în funcționarea deosebită	0,4	0,2	0,00	27,38	0	0	0,0		0,0			
		Sisteme cu tratare a apelor reziduale	Tratarea apelor reziduale în funcționarea normală	0,4	0,1	700 000,00	27,38	0	0	1 149 750,0		0,0		0,0	
			Sistem de epurare centralizat cu tratare a apelor reziduale și nămolului	0,4	0,3		27,38	0	0	0,0		0,0		0,0	
			Tratarea apelor reziduale pentru nămolurile reziduale	0,4	0,1		27,38	0	0	0,0		0,0		0,0	
			Tratarea apelor reziduale pentru nămolurile reziduale	0,4	0,2		27,38	0	0	0,0		0,0		0,0	
		Total				700 000	110	0	0	1 149 750,0					

Alegeți tipul sistemului de tratare a apelor reziduale
 Выберите тип системы очистки сточных вод

În celula galbenă introduceți datele de activitate
 Введите данные активности в желтой ячейке

În celula verde rezultatul se va calcula automat
 В зеленой ячейке результат будет автоматически рассчитан

CALCULATION OF EMISSIONS FROM 1A1a (Public electricity and heat production) FOR REPORTING UNDER THE EUROPEAN PRTR

Facility Name: _____
 Address: _____
 Reporting year: _____

Note: _____

RELEASE S TO AIR

Category **1A1a Public electricity and heat production**
 Category Code NFR **1A1a**
 Methodology **Tier 1 emission factors for source category 1A.1.a using gaseous fuels**

Fuel Consumption
 A3
Gaseous fuels
 (GJ)
 Enter fuel consumption in GJ per year(GJ/yr) **50** enter figure

Not estimated (NE) NH₃, PCBs, HCB

Guide	PRTR Pollutant Number	Pollutant	Emission Factor	Unit	Pollutant Emissions	Unit
			B3		C3	
			Gaseous fuels			
Table 3-4 Tier 1 emission factors for source category 1A.1.a using gaseous fuels						
EMEP-2016, 1/	8	NO _x	89	g/GJ	4450	g
section 1A.1.a	2	CO	39	g/GJ	1950	g
	7	NM/VO	2,6	g/GJ	130	g
	11	SO _x	0,281	g/GJ	14,05	g
	102	TSP	0,89	g/GJ	44,5	g
	86	PM10	0,89	g/GJ	44,5	g
	100	PM2,5	0,89	g/GJ	44,5	g

C3 = (A3 * B3)

Category Installations for the manufacture of glass, including glass fibre (with a melting capacity of 20 tons per day)
Category Code 3(e)
Methodology Tier 1 (process emissions)

PRTR Pollutant Number	Pollutant	A	B	C
		Mass of Glass Produced (tonne)	Emission Factor for Glass Manufacturing (g/tonne glass)	Pollutant Emissions (kg)
C = (A * B) / 10³				
17	As		0,19	0,0
18	Cd		0,13	0,0
19	Cr		0,23	0,0
20	Cu		0,007	0,0
21	Hg		0,003	0,0
22	Ni		0,49	0,0
23	Pb		1,7	0,0
24	Zn		0,37	0,0
NA	Se		0,8	0,0
86	PM10		270	0,0
100	PM2,5		240	0,0
101	BC		0.062% of PM2,5	0,0
102	TSP		300	0,0

În celula galbenă introduceți datele de activitate
 Введите данные активности в желтой ячейке

În celula verde rezultatul se va calcula automat
 В зеленой ячейке результат будет автоматически рассчитан

unauthorized landfills

emissions from transport
means

Diffuse sources:

(proposed to be calculated on the basis of IPCC
and EMEP/EEA guidelines, basing on statistical
data/regional profile)

agricultural activities (use of
pesticides and fertilizers)

livestock farms with non-
organized wastewater
discharges on their surface

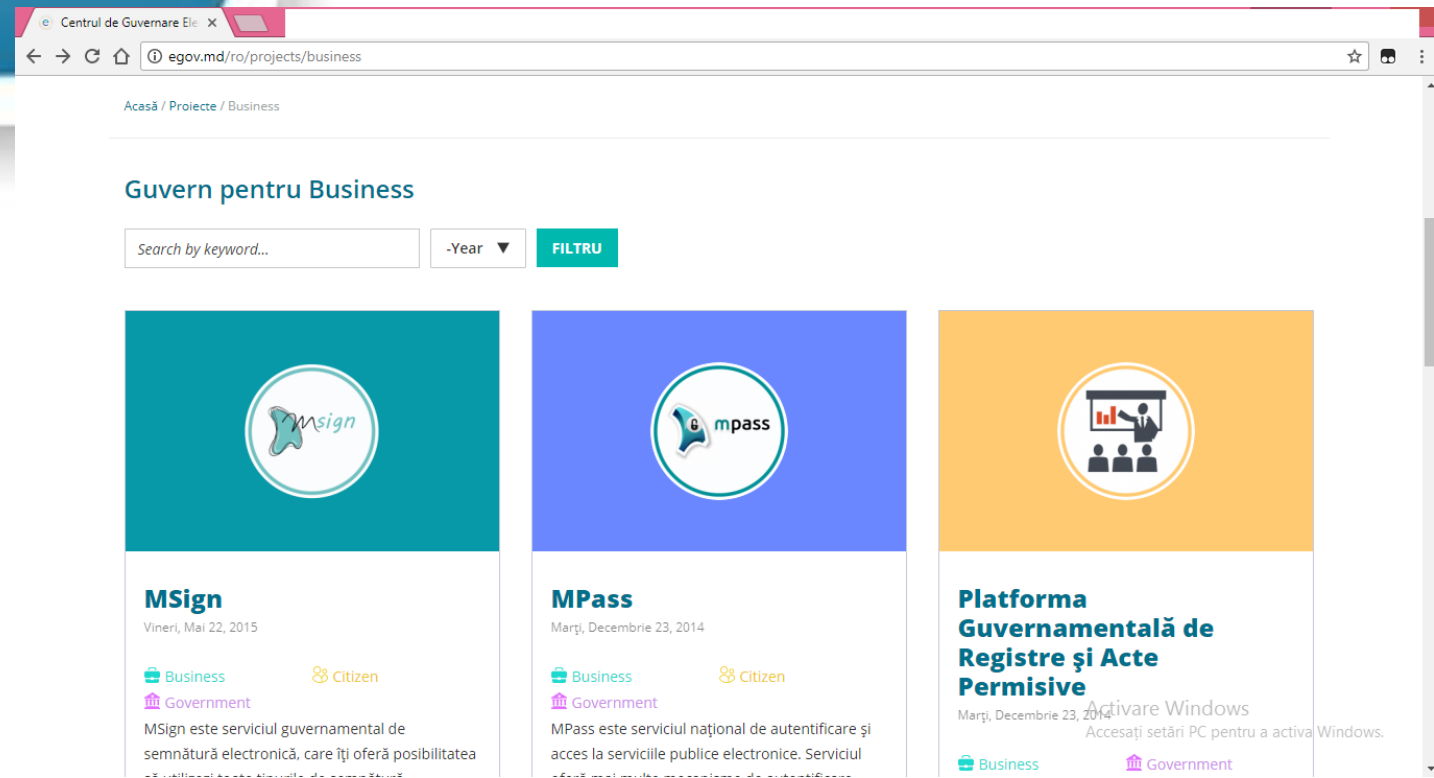
Within one month of the entry into force of the Regulation, the **Guide to facilitating the Implementation of the National Emissions and Pollutant Transfer Registry** shall be approved.

The Guide will include:

- reporting procedures;
- the reporting forms for pollutant release data and off-site transfers;
- procedures for assessing and assuring the quality of collected and reported data;
- indications of the type of data not provided and the reasons why they were not provided in the case of confidential data;
- methods for determining and analyzing emissions and methods of sampling, approved at international and national levels;
- the coding of activities according to Annex no. 1 and the legislation on full environmental control.

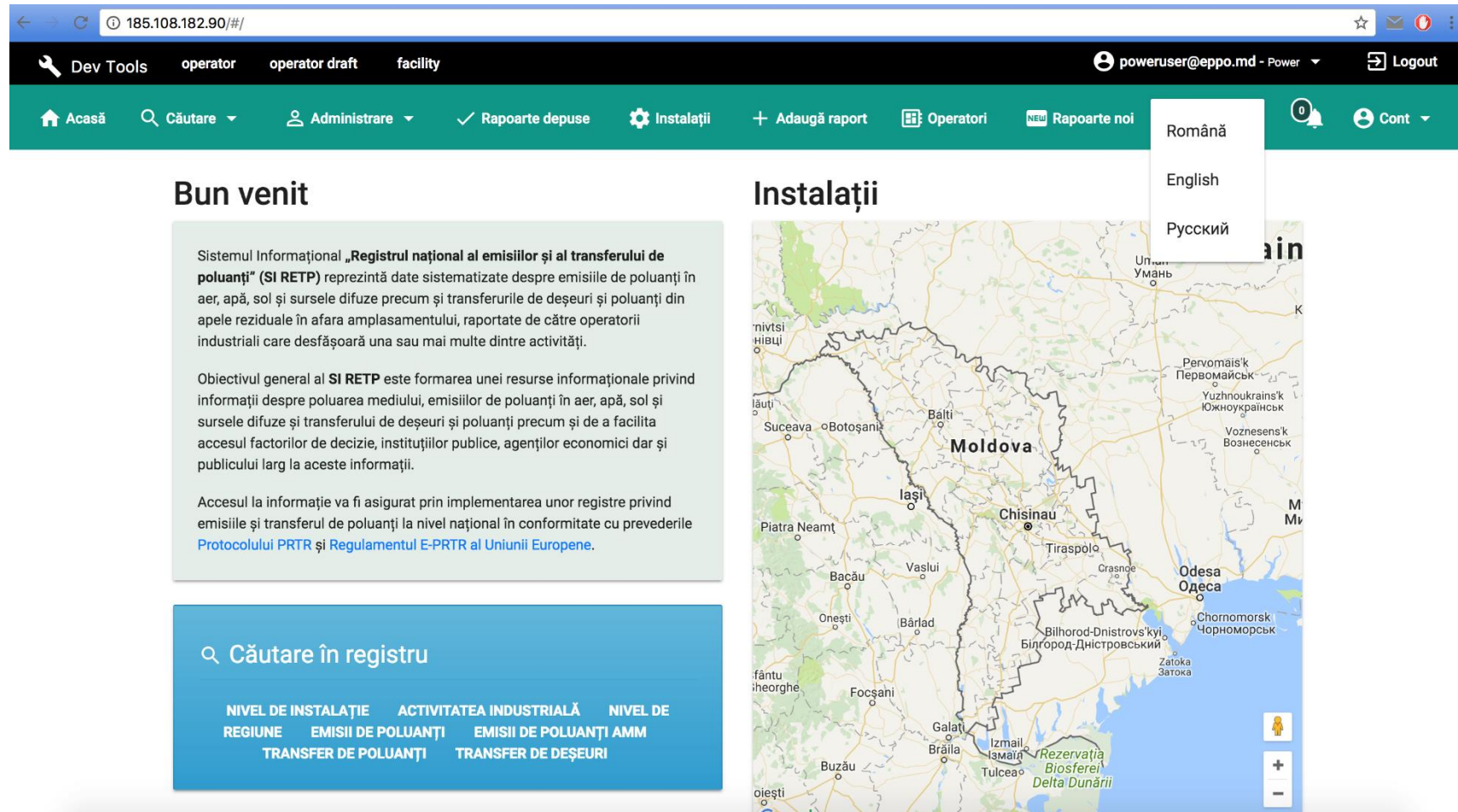


AIS PRTR will be hosted by the governmental technological platform Mcloud



Will be interconnected with other governmental services (MPass, MSign, MLog)

Main Page of the App



The screenshot shows the main page of the application. At the top, there is a browser address bar with the URL "185.108.182.90/##". Below it is a navigation bar with the following items: "Dev Tools", "operator", "operator draft", "facility", "poweruser@epo.md - Power", and "Logout". A secondary navigation bar contains: "Acasă", "Căutare", "Administrare", "Rapoarte depuse", "Instalații", "Adaugă raport", "Operatori", "Rapoarte noi", and "Cont".

Bun venit

Sistemul Informațional „Registrul național al emisiilor și al transferului de poluanți” (SI RETP) reprezintă date sistematizate despre emisiile de poluanți în aer, apă, sol și sursele difuze precum și transferurile de deșeuri și poluanți din apele reziduale în afara amplasamentului, raportate de către operatorii industriali care desfășoară una sau mai multe dintre activități.

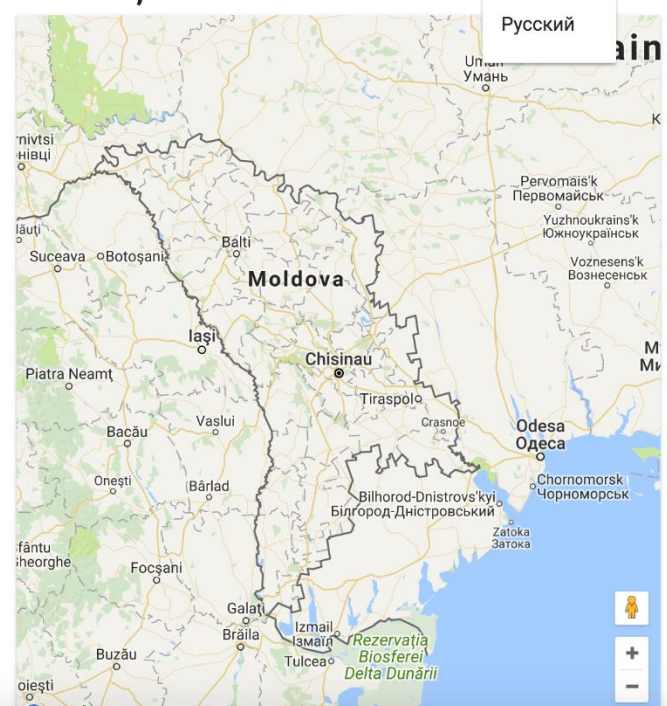
Obiectivul general al SI RETP este formarea unei resurse informaționale privind informații despre poluarea mediului, emisiilor de poluanți în aer, apă, sol și sursele difuze și transferului de deșeuri și poluanți precum și de a facilita accesul factorilor de decizie, instituțiilor publice, agenților economici dar și publicului larg la aceste informații.

Accesul la informație va fi asigurat prin implementarea unor registre privind emisiile și transferul de poluanți la nivel național în conformitate cu prevederile [Protocolului PRTR](#) și [Regulamentul E-PRTR al Uniunii Europene](#).

Instalații

Căutare în registru

NIVEL DE INSTALAȚIE	ACTIVITATEA INDUSTRIALĂ	NIVEL DE
REGIUNE	EMISII DE POLUANȚI	EMISII DE POLUANȚI AMM
TRANSFER DE POLUANȚI	TRANSFER DE DEȘEURI	



The map displays the geographical outline of Moldova, with major cities labeled: Iași, Chișinău, Tiraspol, Bălți, Suceava, Botoșani, Bacău, Vaslui, Onești, Bârlad, Focșani, Galati, Brăila, Tulcea, Izmail, Buzău, and Oiești. Neighboring countries and cities are also visible: Ukraine (Uman, Pervomaisk, Yuzhnoukrainsk, Voznesensk, Odessa, Chornomorsk) and Romania (Iasi, Piatra Neamt, Craiova, Bilhorod-Dnistrovskiy, Zatocha). A legend in the bottom right corner includes a person icon, a plus sign, and a minus sign.

Facilities Page, Search, Interactive Map

The screenshot displays a web application interface for searching facilities. The browser address bar shows the URL `185.108.182.90/#/search/by-facility`. The application header includes navigation links for 'Acasă', 'Căutare', 'Operatori', 'Rapoarte noi', 'Limbă', and 'Cont'. The main content area is titled 'Nivel de instalație' and features a search filter panel on the left with buttons for 'Caută' and 'Curață'. The filter panel includes options for 'Regiune' (with radio buttons for 'Regiune' and 'Regiunea bazinului hidrografic') and dropdown menus for 'Regiune', 'An', and 'Nume instalație'. Below these are three filter categories: 'Activitate', 'Emisii și transferuri de poluanți', and 'Transferuri de deșeuri'. The central part of the page shows a table titled 'Instalații' with columns for 'Nume', 'Address', 'Localitate', 'Cod activitate', and 'Regiune'. The table is currently empty, and the pagination indicates 'Items per page: 10' and '0 of 0'. To the right of the table is an interactive map of Moldova, showing major cities like Iași, Chisinau, and Tiraspol, and geographical features like the Danube Delta and the Bilhorod-Dnistrovskiy Biosphere Reserve.

Facility Table

The screenshot displays a web application interface for managing installations. The page title is "Instalații". The interface includes a navigation bar with "Acasă", "Căutare", "Operatori", "Rapoarte noi", "Limbă", and "Cont". A user is logged in as "funtionar@localhost.com". The main content area shows a table with the following columns: "Nume", "Amplasament", "Address", "Regim de lucru", and "Producția anuală". The table is currently empty. A message at the bottom of the page states "Acesta este subsolul paginii dumneavoastră".

Nume	Amplasament	Address	Regim de lucru	Producția anuală
------	-------------	---------	----------------	------------------

Items per page: 10 0 of 0

Acesta este subsolul paginii dumneavoastră

Adding a Report

The screenshot shows a web browser window with the URL `185.108.182.90/#/report/add`. The browser's address bar and tabs are visible. The application's header is dark green and contains navigation links: "Acasă", "Căutare", "Rapoarte depuse", "Instalații", "Adaugă raport", "Limbă", and "Cont". The user is logged in as "operator@localhost.com - Operator".

The main content area is titled "Adaugă raport" and features a search filter on the left with dropdowns for "Sector" (Sectorul energetic), "Activități", and "Sub-activități", along with "Caută" and "Curață" buttons. The main form includes dropdowns for "Operatori" (Operatori), "Instalație" (Instalație), and "Anul de raportare *" (2017). A progress bar shows five steps: "1 Emisii în aer", "2 Emisii în apă", "3 Emisii în sol", "4 Transferuri de deșeuri", and "5 Depune". Below the progress bar, a list of reports is shown under the heading "Rapoarte", including "CALCULUL EMISIILOR DIN CENTRALE TERMICE ȘI ALTE INSTALAȚII DE ARDERE PENTRU RAPORTARE ÎN RETP" and "ANOTHER DEMO CONTENT". A "Next" button is located at the bottom of the form.

At the bottom of the page, a grey footer contains the text: "Acesta este subsolul paginii dumneavoastră".

Advanced Search by Activity

The screenshot shows a web browser window with the URL `185.108.182.90/#/search/by-activity`. The browser's address bar and navigation tabs are visible at the top. The application's header includes a dark green navigation bar with a home icon labeled "Acasă", a search icon labeled "Căutare", and several menu items: "Operatori", "Rapoarte noi", "Limba", and "Cont".

The main content area is titled "Nivel de instalație" (Installation Level). It features a search interface with two buttons: "Caută" (Search) and "Curață" (Clear). Below these are several filters:

- Regiune** (Region): A radio button is selected for "Regiune", and another option is "Regiunea bazinului hidrografic".
- Regiune**: A dropdown menu currently showing "Regiune".
- An**: A dropdown menu currently showing "An".
- Activitate**: A dropdown menu currently showing "Activitate".

To the right of the filters is a tabbed interface with three tabs: "Emisii de poluanți" (Pollutant emissions), "Transfer de poluanți" (Pollutant transfer), and "Transfer de deșuri" (Waste transfer). The "Emisii de poluanți" tab is active, and the text "rezultate aici" (results here) is displayed below it.

On the far right is a map of Moldova and surrounding areas, showing major cities like Iași, Chisinau, Tiraspol, and Bilhorod-Dnistrovskiy. The map includes a scale bar and navigation controls.

User Management based on Roles

The screenshot shows a web application interface for user management. The browser address bar displays '185.108.182.90/#/user-management'. The navigation bar includes 'Dev Tools', 'operator', 'operator draft', and 'facility' tabs, and a user profile 'admin@localhost - Administrator'. The main content area is titled 'Utilizatori' and features a table of users. The table has columns for Prenom, Nume, IDNP, Email, Activat, Limbă, and Profil. The table contains six rows of user data. The interface also includes a search bar, a 'Creați utilizator nou' button, and a footer message.

Prenom	Nume	IDNP	Email	Activat	Limbă	Profil	
Denis	Chiosa	1111111111111	denchiosa@gmail.com	Activat	en	ROLE_OFFICER	...
Power	User	2005020081394	poweruser@eppo.md	Activat	ro	ROLE_USER ROLE_OFFICER ROLE_ADMIN	...
Operator	Operator	4444444444	operator@localhost.com	Activat	ro	ROLE_USER	...
Administrator	Administrator	3333333333	admin@localhost	Activat	ro	ROLE_ADMIN	...
Funtionar	Funtionar	1111111111	funtionar@localhost.com	Activat	ro	ROLE_OFFICER	...

Items per page: 10 1 - 5 of 5

Acesta este subsolul paginii dumneavoastră

CMS

The screenshot displays a web browser window with the address bar showing `185.108.182.90/#/content-editor/legal`. The browser's top navigation bar includes a 'Dev Tools' button, user roles ('operator', 'operator draft', 'facility'), a user profile for 'admin@localhost - Administrator', and a 'Logout' button. Below this is a green header with a home icon and 'Acasă', a search bar with 'Căutare', and navigation links for 'Administrare', 'Limbă', and 'Cont'. The main content area features a horizontal menu with 'Faq', 'About', 'Downloads', 'Legal' (highlighted), and 'Library'. The page content is in Romanian and includes a rich text editor with a menu (File, Edit, View, Insert, Format, Table) and a toolbar (Save, undo, redo, bulleted list, numbered list, link, unlink, image, text color, background color). The text below the editor is as follows:

Română

Cadrul legal

Sistemul Informațional „**Registrul național al emisiilor și al transferului de poluanți**” (**SI RETP**) reprezintă date sistematizate despre emisiile de poluanți în aer, apă, sol și sursele difuze precum și transferurile de deșeuri și poluanți din apele reziduale în afara amplasamentului, raportate de către operatorii industriali care desfășoară una sau mai multe dintre activități.

Obiectivul general al **SI RETP** este formarea unei resurse informaționale privind informații despre poluarea mediului, emisiilor de poluanți în aer, apă, sol și sursele difuze și transferului de deșeuri și poluanți precum și de a facilita accesul factorilor de decizie, instituțiilor publice, agenților economici dar și publicului larg la aceste informații.

Accesul la informație va fi asigurat prin implementarea unor registre privind emisiile și transferul de poluanți la nivel național în conformitate cu prevederile [Protocolului PRTR](#) și [Regulamentul E-PRTR al Uniunii Europene](#).

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NATIONAL STRATEGY FOR PUBLIC ACCESS TO ENVIRONMENTAL INFORMATION AND PRTR

National Strategy for Public Access to Environmental Information and PRTR sets



target audiences



tools



timeline



legal and institutional arrangements



financial arrangements

needed for securing the better access of public to environmental data and identifies major steps that the Republic of Moldova must take implement the PRTR.

The major objectives of the Strategy:

To improve the accuracy and volume of environmental information in the field connected to pollution

To propose actions to improve the country's obligations related to PRTR reporting by applying the best international experience with the support of UNITAR

To identify major gaps and inconsistencies on environmental data reporting and presentation

The establishment of the PRTR shall allow Moldova to answer to the following questions:




Who is generating potentially harmful releases or transfers to various environmental media?



What pollutants are being released or transferred?



How much is being released or transferred over a specific time period?



To what media are these pollutants being released or transferred and, how much of each is going to air, water or soil?



What is the geographic distribution of pollutant releases or transfers?



Strategy structure and approach

Section 1: Problem analysis

Section 2: Scoping of the document

Section 3: Rationale

Section 4: Structure and approach

Section 5: Capacity building to implement the PRTR

Section 6: Target audiences

Section 7: Activities

Section 8: Software and media

Section 9: Educational materials

Section 10: sustainability

Section 11: Dissemination outputs and impact

Section 12: Action plan

Grouping of activities under the strategy

Group 1 of activities shall be targeted towards Improving data quality

- training of industries on **techniques used to estimate releases from various sources**.
- Option 1: Based on 9 PRTR sectors
- *Option 2: Based on types of sources* (Point sources, Diffuse sources, Off-site transfers)

Group 2 of activities shall be targeted on PRTR data applications

- Presentation and dissemination of PRTR data - sharing best practices (EU members and non- EU).
- Uses of PRTR data and Tools for their Presentations – includes presentation of various examples of the use of PRTR data as well as tools for presenting and illustrating them by population, IGs and other groups in various countries.
- Networking and partnership - the role and examples of regional networking

Type of activities

**Documentary visits for
the enterprises on
assessment of the
current status**

**National coordination
team /Steering
Committee meetings:**

**Thematic trainings and
workshops for industry**

2 day ToT for NGOs

***Briefing for Mass media
combined with visit to
the enterprise for
checking the emission
control equipment***

Indicators

DISSEMINATION TOOL	INDICATOR	TARGET VALUE	INFORMATION PROVIDED	IMPACT	FEEDBACK POSSIBILITY
Dissemination events/ Trainings	Nr of participants/ evaluation forms	2	- Clear information about the PRTR: -	Clear understanding of the PRTR importance, access to information, Information exchange with stakeholders, interested parties	Direct
PRTR Website	Average No of hits per month on project website	25	- Clear information about the PRTR - contact details	Clear understanding of the PRTR importance, access to information, Information exchange with stakeholders, interested parties - regular update of interested parties (continuous information flow)	Indirect/Direct
PRTR brochure	Nr of copies	100	- Clear information about the PRTR - contact details	Clear understanding of the PRTR importance, access to information, Information exchange with stakeholders,	Indirect/Direct
PRTR techniques and methodologies guidebook	Nr of copies	TBC	-guidebook/s use of estimation techniques by each sector relevant to the country	Relevant knowledge and practical skills on reporting	Direct

ACTION PLAN

Name of event	Sem 2/2016	Sem 1/2017	Sem 2/2017	Sem 1/2018	Sem 2/2018	Sem 1/2019
Steering Committee meetings:	X		X		X	X
Documentary visits for the enterprises on assessment of the current status	X					
10 days - Training of Ministry of Environment and ecological inspection staff	X	X	X		X	X
1-2 days cycles of by-sector trainings per 9 PRTR sectors for industry			X	X		
2 day ToT for NGOs				X		
1 day briefing for Mass media combined with visit to the enterprise for checking the emission control equipment					X	

Training
activities
concept

1st cycle

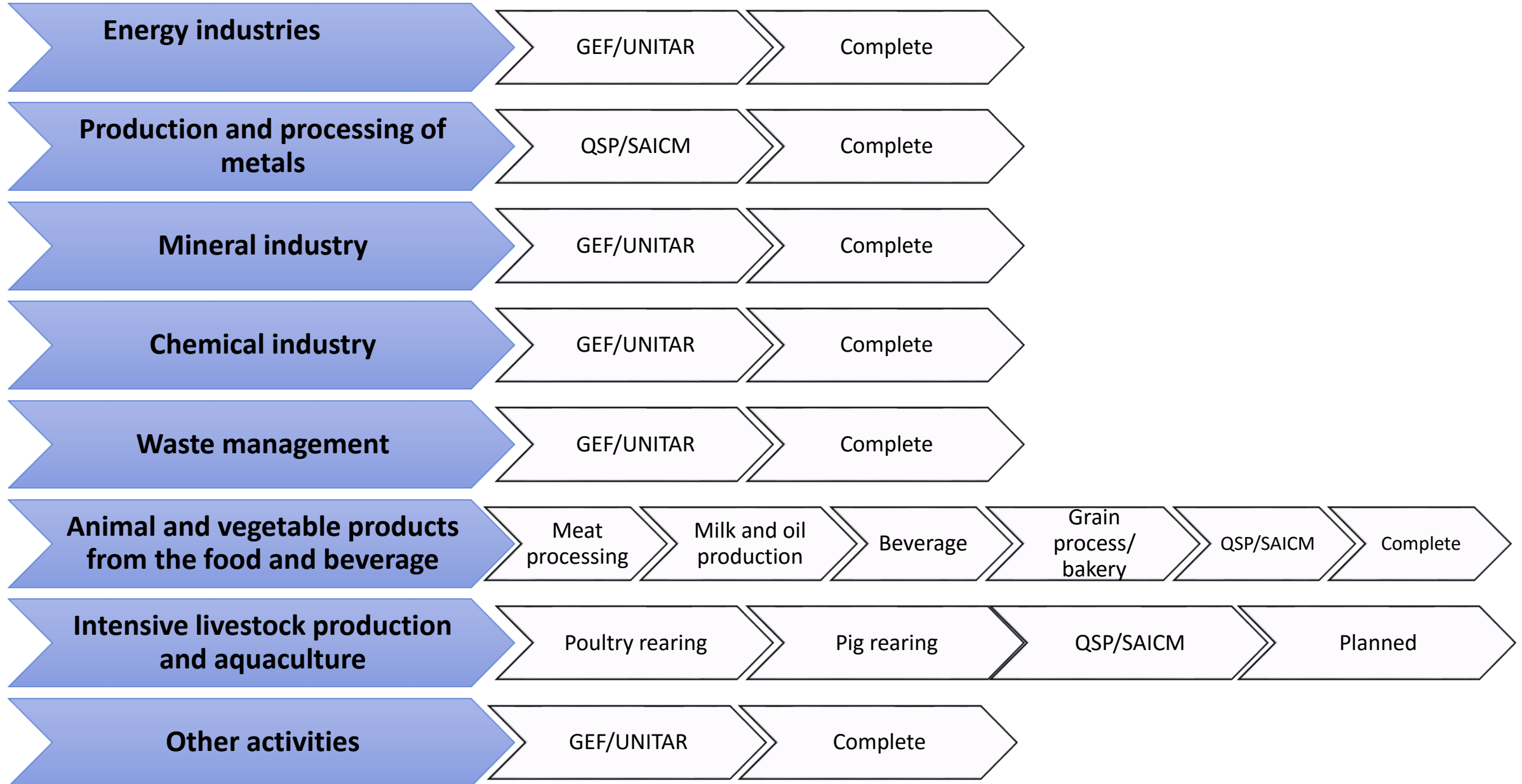
- methodology and excel
files among economic
operators and inspectors
presented and tested

out of 600 selected
economic operators cca
350 attended the
workshops

2nd cycle

- Testing and piloting the
PRTR software among
economic operators,
inspectors, authorities
and civil society

Training of stakeholders – 1st cycle



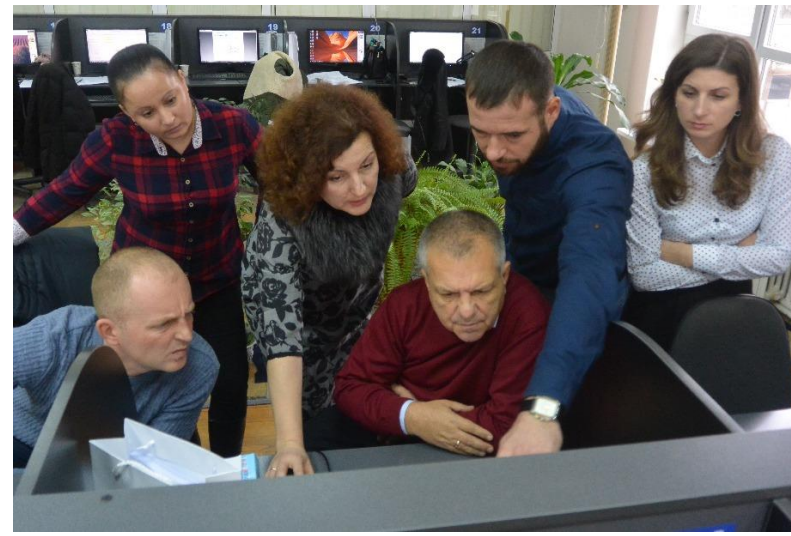
1 December 2017

- Workshop for launching the series of trainings with the representatives of the Environmental Inspectorate



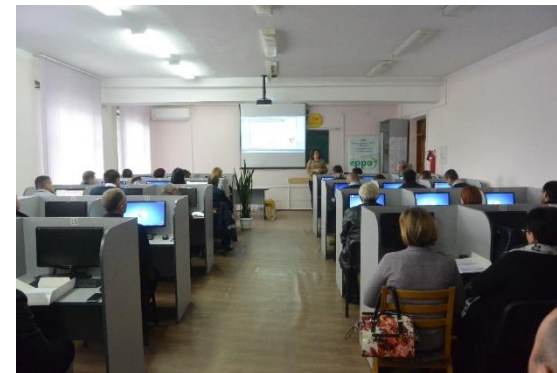
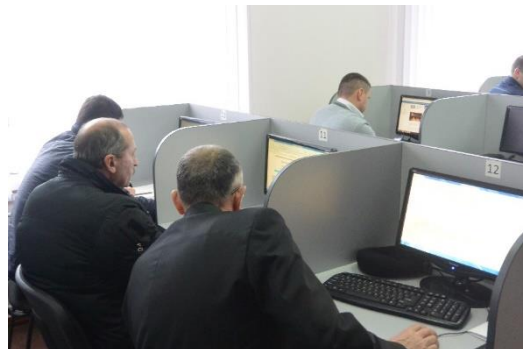
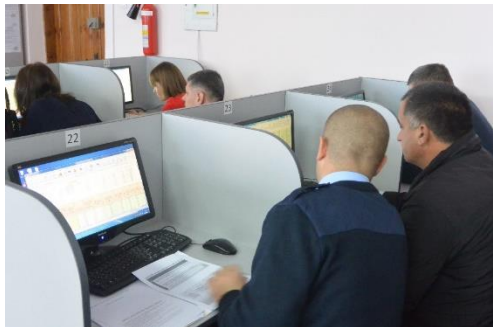
29 November 2017

- Training workshop with representatives of sector 1 – energy sector



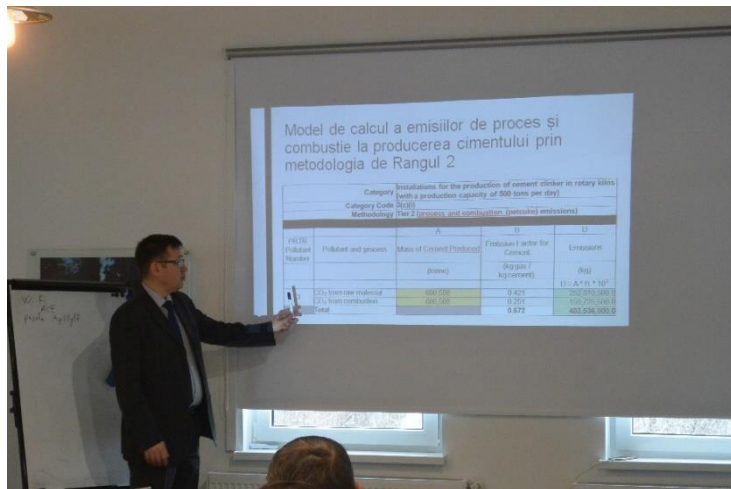
5,6,8 December 2017

- Training workshop with representatives of sanitation and water supply services for North, South and Central part – sector 5



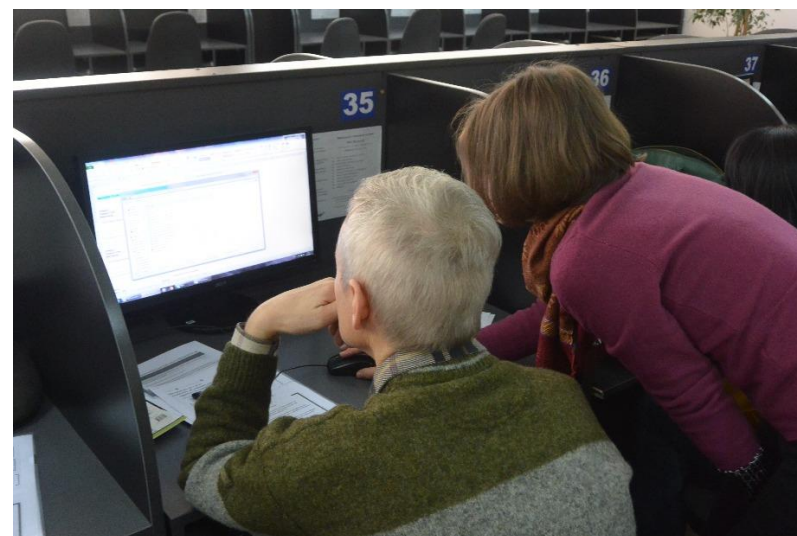
19 December 2017

- Training workshop with representatives of mineral extraction and process industry – sector 3



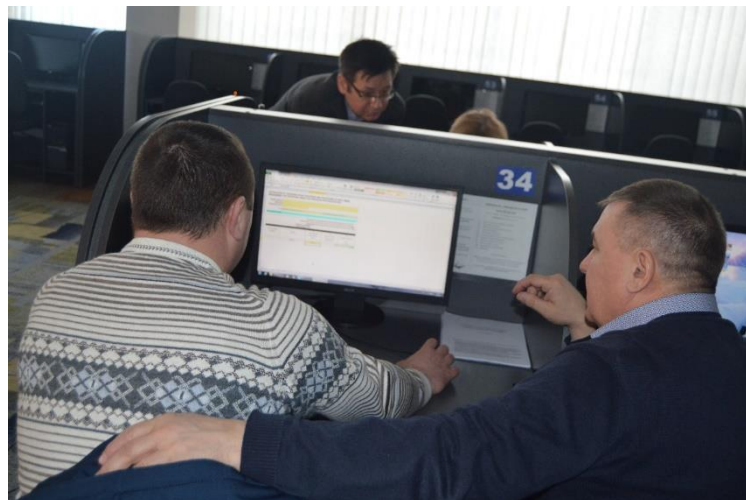
22 December 2017

- Training workshop with representatives of sector 4 and 9



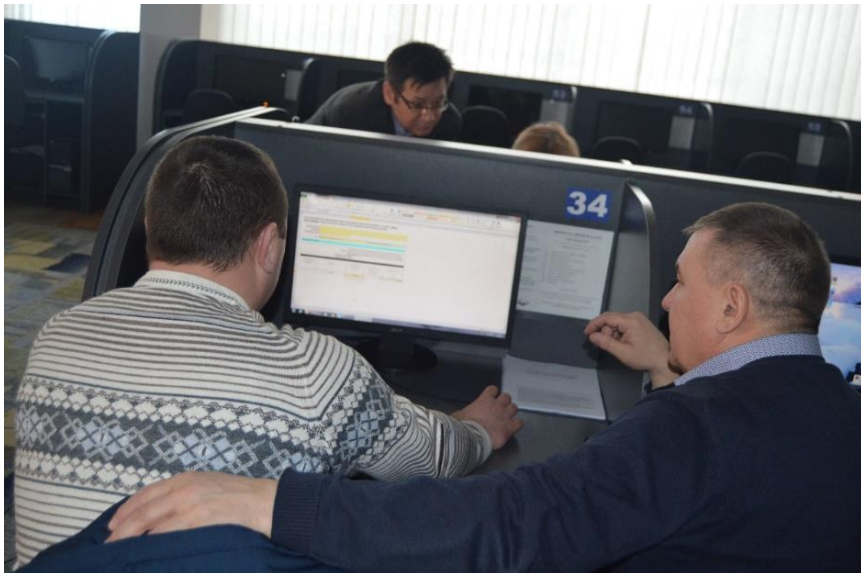
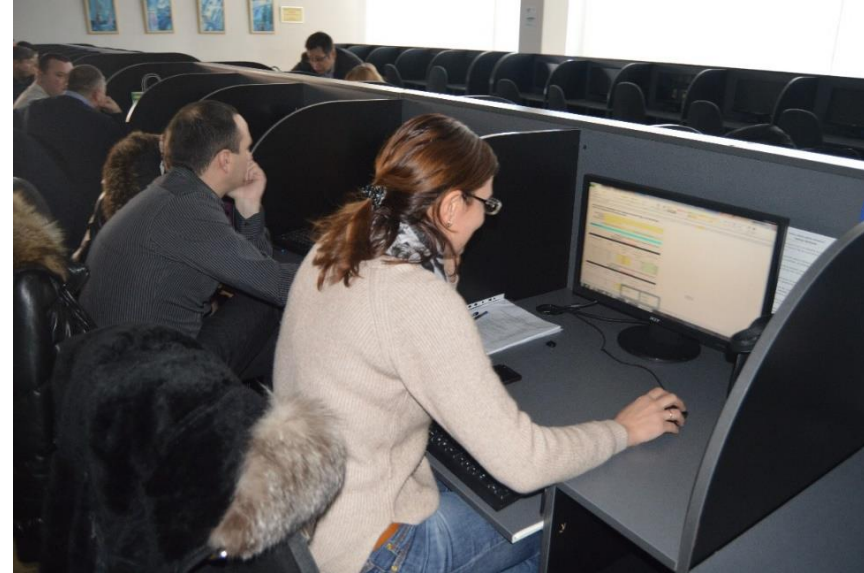
23 and 25
January 2018

- Training workshop with sector 8 (4 half day workshops)
 - Meet process Milk process Beverage
 - Grain process and bakeries



31 January 2018

- Training workshop with representatives of metallurgic industry – sector 2



POPs related issues

Old POPs

Pesticides

- **Aldrin**
 - Prohibited since soviet times
- **Chlordane**
- **DDT**
 - Prohibited since soviet times
- **Dieldrin**
 - Prohibited since soviet times
- **Endrin**
- **Heptachlor**
 - Prohibited since soviet times
- **Hexachlorobenzene**
- **Mirex**
- **Toxaphene**
 - Prohibited since soviet times

Industrial chemicals

- Hexachlorobenzene
- Polychlorinated biphenyls (PCBs)

By-products

- Hexachlorobenzene
- Polychlorinated dibenzo-p-dioxins
- Polychlorinated dibenzofurans (PCDD/PCDF)
- PCBs

New POPs

Pesticides

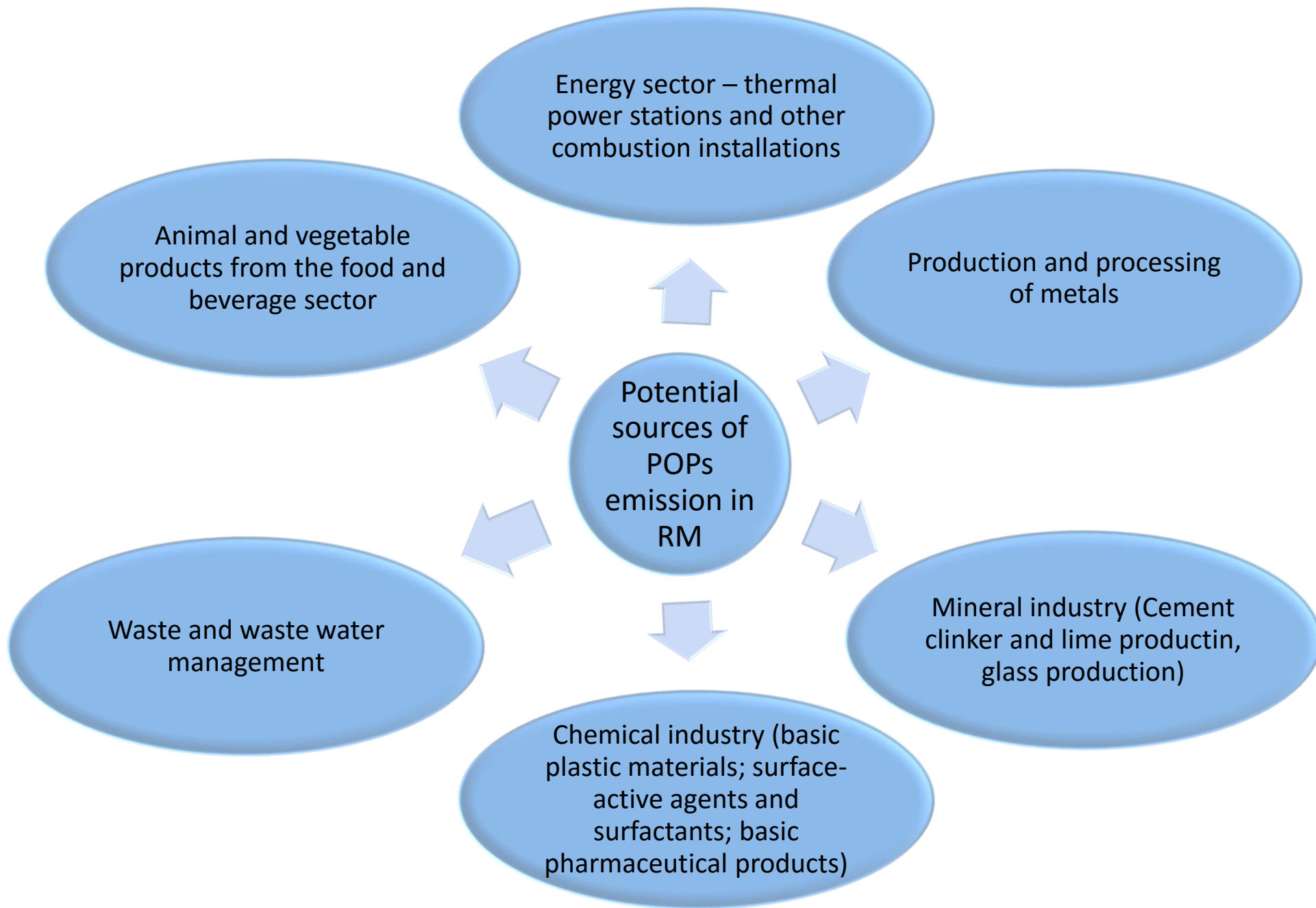
- **Chlordecone**
 - Amendment to Annex A accepted by RM in 2013
- **Lindane**
 - Amendment to Annex A accepted by RM in 2013
- **Alpha hexachlorocyclohexane**
 - Amendment to Annex A accepted by RM in 2013
- **Beta hexachlorocyclohexane**
 - Amendment to Annex A accepted by RM in 2013
- **Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride**
- **Pentachlorobenzene**

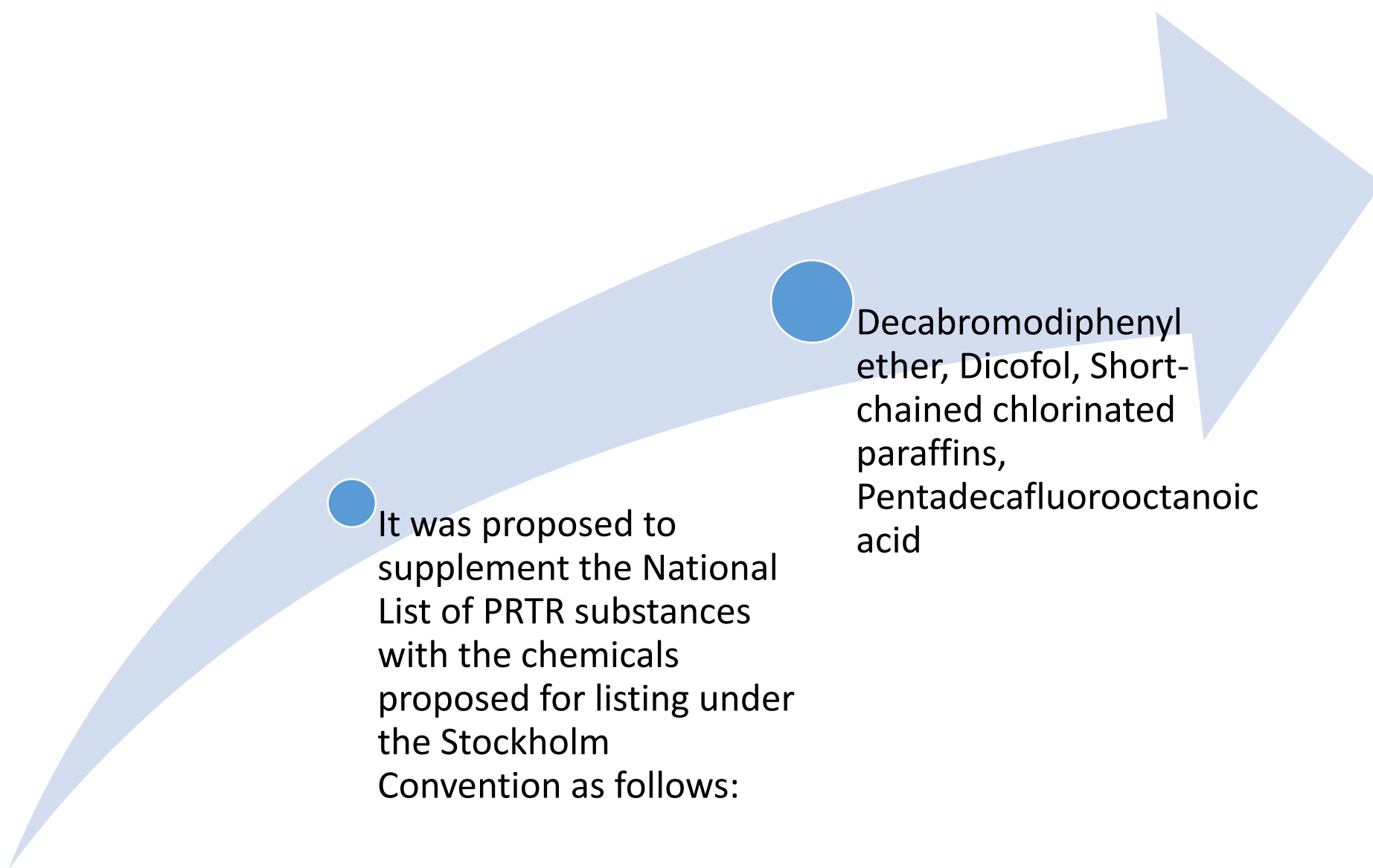
Industrial chemicals

- Commercial pentabromodiphenyl ether
- Commercial octabromodiphenyl ether
- Hexabromobiphenyl
- Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride

By-products

- Alpha hexachlorocyclohexane (by product of lindane)
- Beta hexachlorocyclohexane (by product of lindane)
- Pentachlorobenzene





It was proposed to supplement the National List of PRTR substances with the chemicals proposed for listing under the Stockholm Convention as follows:

Decabromodiphenyl ether, Dicofol, Short-chained chlorinated paraffins, Pentadecafluorooctanoic acid

Next steps

Approval of the legal framework

Develop and approve the Guidelines for facilitating the implementation of PRTR

Finalize the development of PRTR software and conduct its piloting and testing

Prepare the annual reporting to PRTR

Issues for discussion



Approaches in calculation the emissions to soil



Diffuse sources



Allocation of releases to sectors in accordance with EMEP and IPCC approach