



<http://www.mclimelaw.com/wp-content/uploads/2011/04/water-drop-w1.jpg>



# POLLUTANT RELEASE AND TRANSFER REGISTERS: AN EFFICIENT TOOL FOR SUSTAINABLE WATER MANAGEMENT

## “NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS”

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SIDE EVENT, “ENVIRONMENT FOR EUROPE”, 7TH  
MINISTERIAL CONFERENCE

<http://kmsdstp.com/webfiles/14/drop11.jpg>



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## “NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS”



1. INTERNATIONAL PROVISIONS RELATED TO WATER
2. INTEGRATED WATER RESOURCES MANAGEMENT
3. SUSTAINABLE WATER RESOURCES MANAGEMENT IN LIGHT OF THE AARHUS CONVENTION AND THE PRTR PROTOCOL
4. EXPERIENCES OF PUBLIC PARTICIPATION IN PRTR PROMOTION, DEVELOPMENT AND MODIFICATION
5. SUSTAINABLE WATER RESOURCES MANAGEMENT ACROSS THE UNECE REGION
6. INFORMATION ABOUT WATER-RELATED ECOSYSTEMS
7. MULTILATERAL ENVIRONMENTAL AGREEMENTS AS TOOLS AND STIMULATORS FOR SUSTAINABLE WATER RESOURCES MANAGEMENT
8. NGOS ROLE IN IN DEVELOPING AND IMPLEMENTING PRTRS FOR SUSTAINABLE WATER RESOURCES MANAGEMENT





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## 1. INTERNATIONAL PROVISIONS RELATED TO WATER



<http://thelandscapeguru.files.wordpress.com/2011/05/water-drop.jpg>



<http://www.waterencyclopedia.com>



<http://www.optimumchoices.com/images/water-bottle.jpg>

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## 1.1. MILLENNIUM DEVELOPMENT GOALS (UNITED NATIONS MILLENNIUM DECLARATION 2000)

- Goal 7- Ensure environmental sustainability:
  - ✓ By 2015, integrate the principles of sustainable development into country policies and programmes, reverse loss of environmental resources.
  - ✓ By 2015, reduce by half the proportion of people without sustainable access to safe drinking water.



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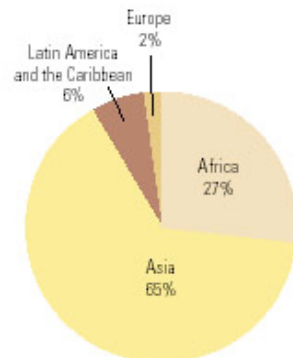


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## 1.2. WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT (JOHANNESBURG 2002)

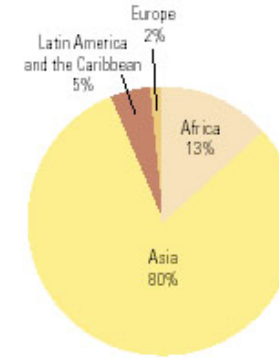
- To halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water (as outlined in the Millennium Declaration) and the proportion of people who do not have access to basic sanitation.
- To develop integrated water resources management and water efficiency plans.

Water supply, distribution of unserved populations



Total unserved: 1.1 billion

Sanitation, distribution of unserved populations



Total unserved: 2.4 billion



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### 1.3. AGENDA 21, UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) (RIO DE JANEIRO, 1992)

Chapter 18: Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources.



[http://farm4.static.flickr.com/3410/3621612844\\_0827a152d3.jpg](http://farm4.static.flickr.com/3410/3621612844_0827a152d3.jpg)



[http://demo-memris.icimod.org/bagmati/images\\_bagmati/River/WasteWaterManagement.jpg](http://demo-memris.icimod.org/bagmati/images_bagmati/River/WasteWaterManagement.jpg)



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## 2. INTEGRATED WATER RESOURCES MANAGEMENT

- Increasing water management problems have called upon new approaches.
- The United Nations Conference on Environment and Development (UNCED) called for effective implementation and coordination mechanisms to promote Integrated Water Resources Management (IWRM) **based on public participation.**
- The Second World Water Forum (the Hague, 2000) formulated global and regional vision of the problem and developed basis for implementation of Integrated Water Resources Management.







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Integrated Water Resources Management (IWRM) strategies are based on the Dublin Principles presented at the World Summit in Rio de Janeiro in 1992:

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management **should be based on a participatory approach**, involving users, planners and policy-makers at all levels.
3. Women play a central part in the provision, management, and safeguarding of water.
4. Water has an economic value in all its competing uses and should be recognized as an economic good.

Integrated water resources management is based on the equitable and efficient management and sustainable use of water.





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## 3. SUSTAINABLE WATER RESOURCES MANAGEMENT IN LIGHT OF THE AARHUS CONVENTION AND THE PRTR PROTOCOL





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### 3.1. THE VALUE OF THE AARHUS CONVENTION AND THE PRTR PROTOCOL

- The Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters and the Protocol on Pollutant Release and Transfer Registers (PRTR Protocol) are open for cooperation with other international processes.
- The value of the PRTR Protocol lies in its multidisciplinary approach that makes it a useful and efficient tool for achieving goals in many areas of environmental protection, including chemical management, climate change and **water resources management**.
- It is necessary to look towards broader implementation of the PRTR Protocol in a bigger number of countries.
- The PRTR Protocol is an international achievement on public access to information about release of hazardous toxic waste into the environment. In practice, it provides citizens with the possibility to access information about main sources of pollution in the region through Internet.





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## 3.2. THE PRTR PROTOCOL AND INTERNATIONAL PROCESSES



- The year 2010 marked the end of the seven-year preparatory process and the new stage began dedicated to practical implementation and broadening of the geographical scope of the PRTR Protocol.
- The First Meeting of the Parties decided to look into further development of synergies between the Protocol, the Aarhus Convention and other relevant Multilateral Environmental Agreements. Representatives from various international processes and forums have been participating in working meetings.
- There are a number of positive examples of application of Aarhus principles:
  - ✓ Cartagena Protocol
  - ✓ Montreal Protocol



[http://www.astronoo.com/images/images\\_volcans/caldersCraterLakeOregon.jpg](http://www.astronoo.com/images/images_volcans/caldersCraterLakeOregon.jpg)





### 3.3. PUBLIC PARTICIPATION IN THE PRTR PROTOCOL

- Article 4 of the PRTR Protocol – General obligation with respect to public participation:

*In accordance with this Protocol, each Party shall establish and maintain a publicly accessible national pollutant release and transfer register that: (...) (i) allows for public participation in its development and modification...*

- The public plays an important role in:

1. Development of PRTR
2. Modification of PRTR



- Possibility for participation from the earliest stage of PRTR development.



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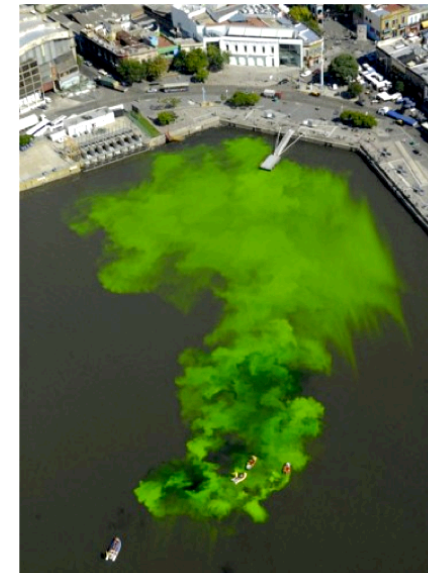
### 4. EXPERIENCES OF PUBLIC PARTICIPATION IN PRTR PROMOTION, DEVELOPMENT AND MODIFICATION



<http://www.caoutourdeleau.com/wp-content/uploads/2011/08/Water-pollution.jpg>



<http://www.atonabee.com/images/stream%204.jpg>



<http://greenviv.org/wp-content/uploads/2010/03/046545/a6nachofo-dyed-green-by-nicolas-urbans-1-365x500.jpg>



# POLLUTANT RELEASE AND TRANSFER REGISTERS: AN EFFICIENT TOOL FOR SUSTAINABLE WATER MANAGEMENT “NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS”



## 4.1. ROLE OF THE EUROPEAN ECO FORUM IN THE PROCESS OF PRTR PROMOTION, DEVELOPMENT AND IMPLEMENTATION

- The European ECO Forum NGOs and citizens' organisations have been actively participating in development and implementation of the PRTR Protocol. Educational seminars, information and lobbying campaigns have been organized in many countries of the UNECE region. A number of projects have been carried out to develop registers.
- In 2003 a first sub-regional electronic PRTR was created in Volgograd region (Russian Federation). In 2008, on the basis of this experience a software called «DEMO PRTR» was developed to guide NGOs in the process of PRTR development .
- The software was successfully applied in Kazakhstan. A pilot PRTR of Eastern Kazakhstan region was put in place by efforts of NGOs.



<http://www.westfield.ma.edu>







## POLLUTANT RELEASE AND TRANSFER REGISTERS: AN EFFICIENT TOOL FOR SUSTAINABLE WATER MANAGEMENT “NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS”



### 4.2. CASE STUDY- EXPERIENCE OF KAZAKHSTAN NGOS IN PRTR DEVELOPMENT

- A number of projects promoting implementation of the Aarhus Convention and PRTR Protocol have been carried out in Kazakhstan. The first projects were aimed at institutional development of governmental and public organisations. These projects were based on UNITAR and UNECE guidance documents.
- The project “Strengthening public participation through promotion of the PRTR Protocol and creation of a pilot Pollutant Release and Transfer Register in Ust-Kamenagorsk” was carried out in 2009.
- The first pilot Pollutant Release and Transfer Register (PRTR) was created in Kazakhstan on the basis of the statistical reporting by enterprises of Eastern Kazakhstan region where environmental pollution problems are very serious. This was the first experience of that kind in the country.
- The pilot PRTR was created on the basis of criteria closely corresponding to the requirements of the PRTR Protocol. The pilot Pollutant Release and Transfer Register included reference information on enterprises-pollutants.



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### 4.2. CASE STUDY- EXPERIENCE OF KAZAKHSTAN NGOS IN PRTR DEVELOPMENT

- The pilot Pollutant Release and Transfer Register (PRTR) of Eastern Kazakhstan region is available in English, Kazakh and Russian languages.
- “DEMO PRTR” created by the European ECO Forum was adapted and used in the software part of the electronic register.
- Analysis of regulatory/legislative and institutional capacity and study of existing reporting from enterprises was carried out within the frames of the project. Testing of PRTR system also took place.
- Further recommendations for creation of a comprehensive national PRTR (including proposals for legislative/regulatory changes) were developed on the basis of the outcomes of the pilot PRTR project.
- Web-site [kz-prtr.org](http://kz-prtr.org) is accessible to all stakeholders in electronic format.

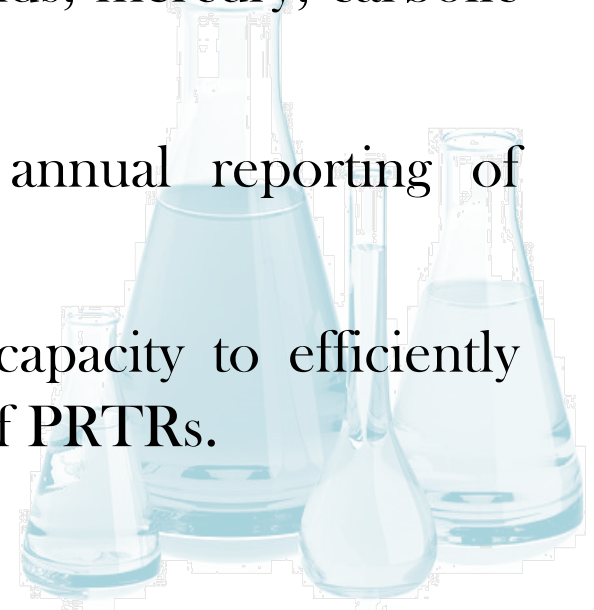




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### 4.3. CASE STUDY- EXPERIENCE OF RUSSIAN NGOS IN PRTR MODIFICATION

- NGOs in Volgograd work towards disclosing data on pollution.
- Pollutant Release and Transfer Register in Volgograd provides additional data on release of chlorine , fluororganic compounds, mercury, carbolic acid, lead, vinylchloride and other toxic chemicals.
- This data allowed to disclose irregularities in annual reporting of enterprises about hazardous wastes.
- Such experience demonstrates that NGOs have capacity to efficiently participate in both development and modification of PRTRs.







## 5. SUSTAINABLE WATER RESOURCES MANAGEMENT ACROSS THE UNECE REGION

- Many countries of the UNECE region are facing serious problems related to water resources that complicate their sustainable management. Although, a substantive part of the region has reach water stocks, lack of water and droughts touch many regions, especially in South Europe and Central Asia.
- Besides, these regions suffers from floods devastating for populations and economy. According to forecasts, climate change will worsen the situation. Many regions will suffer from frequent and severe droughts and floods.
- 120 millions of people from the region do not have access to safe drinking water and appropriate sanitation. Populations living in rural parts of Eastern Europe, Caucasus and Central Asia suffer from lack of water and its quality.



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### 6. INFORMATION ABOUT WATER-RELATED ECOSYSTEMS

- There is a growing public understanding about the necessity to carry out systematic monitoring of environmental problems and providing access to environmental information. This is an inherent part of environmental policy. During last 20 years the amount of water-related information grew at the European and Pan-European levels. A number of countries have been preparing reports and reviews, carrying out statistical analysis and evaluations of water resources and water-related ecosystems.
- However, creation of modern comprehensive and publicly accessible databases is an uneasy task for certain countries. The main difficulty is that such information contains a lot of statistical figures limited in access.
- In order to be able to efficiently take part in decision-making, the public needs more information about hazardous substances, effects of lack of water and droughts on human health and the environment, mechanisms of sustainable water management, etc.
- A commonly agreed approach and close cooperation among stakeholders and countries are necessary to improve the situation.
- In recent years countries have been more active in opening access to data in electronic format.



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### 7. MULTILATERAL ENVIRONMENTAL AGREEMENTS AS TOOLS AND STIMULATORS FOR SUSTAINABLE WATER RESOURCES MANAGEMENT

- Multilateral Environmental Agreements (MEAS) such as the UNECE Water Convention, the Aarhus Convention and related documents that have been joined by most countries of the UNECE region can stimulate sustainable water management.
- A number of guiding principles and documents developed within the framework of MEAS may be used as efficient mechanisms by NGOs and governments for development of water policy.
- The Kiev Protocol is aimed at reduction of pollution and waste by creation of national registers. While requiring enterprises to annually report pollutant release and transfers it stimulates reduction of environmental pollution, promotes introduction of cleaner technologies and thereby a healthier society and ecosystems.



## 8. NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS FOR SUSTAINABLE WATER RESOURCES MANAGEMENT

- Countries, which are parties to the Aarhus Convention have already established legislative/regulatory basis necessary to comply with the provisions of the PRTR Protocol.
- The Protocol contains articles on public participation, access to information and access to justice.
- They present an opportunity for NGOs to influence sustainable water resources management in a number of ways:







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## “NGOS ROLE IN DEVELOPING AND IMPLEMENTING PRTRS”



### 8.1. NGOS ROLE IN PRTR DEVELOPMENT

- NGOs participation in coordinating and working groups for PRTR development
- Development of PRTRs by NGOs
- NGOs involvement in establishment of legal/regulatory basis for PRTRs



[http://www.jmc04k.com/blog/deadfish\\_small.jpg](http://www.jmc04k.com/blog/deadfish_small.jpg)



[http://img.ezinemark.com/imagemanager2/files\\_uploaded/disease/event\\_2009/Thi\\_vai.jpg](http://img.ezinemark.com/imagemanager2/files_uploaded/disease/event_2009/Thi_vai.jpg)



## 8.2. NGOS ROLE IN ORGANISATION OF “PRTR EVENTS”

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- Preparation of analytical overviews based on PRTR data aimed at improving water quality, dissemination of positive and negative examples of sustainable water resources management in light of the Aarhus Convention and the PRTR Protocol,
- Creation of experts databases for information and consultation services and information sharing about alternative farming (soil preservation, prevention of nitrate pollution, etc.),
- Creation of databases on alternative technologies for more efficient use of water resources (reclaimed and recycled water in industry and agriculture, reduction of household water consumption, etc.), providing information for industry and local communities,
- Organisation of seminars, educational courses on water, sanitation and health for employees, local population and vulnerable groups,



<http://jwestmore.com>



## 8.2. NGOS ROLE IN ORGANISATION OF «PRTR EVENTS»

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- Awareness-raising campaigns:
  - ✓ Raising awareness of local population about current and future problems related to water in different economic sectors,
  - ✓ WHO Guidelines for the Safe Use of Wastewater, Excreta and Greywater,
  - ✓ Adjusting agriculture to local climate and water availability, including crops with reduced water use,
  - ✓ Alternative energy-saving, innovative and cost-effective technologies of water use, adapted to local conditions,
- Databases and websites,
- Actions to put pressure on enterprises to reduce pollution,



<http://www.scholarsandrogues.com>



## 8.2. NGOS ROLE IN ORGANISATION OF «PRTR EVENTS»

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- Initiating projects in different areas related to water (health, agriculture, energy, urban development),
- Participation in coalitions with the aim to reform water policy (farmers involvement in water-conservation policies, introduction of water-saving irrigation practices, rejection of water consuming crops in dry areas, use of less polluting fertilizers in water catchment areas and where possible repeated use of purified water),
- Cooperating with water users in development of plans and programmes on water resources and basins management including recovery of rivers, wetlands and lakes,
- Contributing to development of water resources management plans for rivers, lakes and ground waters, action plans taking into account current and future needs in water.





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## CONCLUSIONS

- PRTR Protocol is open for cooperation with other processes and may be an efficient tool for sustainable water resources management.
- NGO experience can play an important role in PRTR development and implementation for sustainable water resources management.
- Therefore, it is necessary to ensure:
  - ✓ Broad public participation in managing, planning and using water resources
  - ✓ Adequate public awareness raising, openness and transparency.



THANK YOU

