NATUR VÅRDS VERKET

SWEDISH ENVIRONMENTAL PROTECTION AGENCY

Photo: Staffan Ågren

YOUR RIGHT TO ENVIRONMENTAL INFORMATION

The Swedish PRTR

Why a Pollutant Release and Transfer Register (PRTR)?

In order to impact the environment around you, you have to have knowledge about the state of the environment. The Swedish PRTR provides information on the amount of pollutants that are released to the environment around you and throughout Sweden. You can use this information as support when you want to impact different actors in issues concerning the environment. In this way, you can contribute to reducing pollution of our environment.

YOUR INVOLVEMENT MATTERS

The first UN conference on human environment was held in Stockholm in 1972. The Stockholm Conference contributed to adding focus on the environment in international politics, and helped clear the path for the UN Conference on Environment and Development in Rio de Janeiro in 1992. During the Rio Conference, the Rio Declaration was adopted. The Declaration's 10th principle states that environmental issues are best handled with the participation of all concerned citizens at the relevant level. This became the starting point of the Aarhus Convention. It was decided that The United Nations Economic Commission for Europe (UNECE) were to provide a secretariat for the Convention, which was adopted at the environmental minister meeting in Aarhus in June 1998. It entered into force in 2001 and both Sweden and the EU became parties to the Convention in 2005.

YOUR RIGHTS REGARDING ENVIRONMENTAL ISSUES

The overall objective of the Aarhus Convention is that each and every one of current and future generations has the right to live in an environment adequate to his or her health and well-being. All states that are parties to the Convention are to guarantee the concerned public, such as private persons and non-governmental environmental organisations, the right of access to information, participation in decision-making and access to justice in environ-mental matters. The Convention rests on these three pillars.

The Convention builds on the insight that environmental work has to be rooted in the public and that the public's impact on authorities and decision-makers can have positive effects on the work on environmental issues. This, in turn, requires the public to have knowledge about the environmental status and to have channels to participate in decisions that affects the environment. All states that are parties to the Convention are therefore to introduce a national system for reporting of releases of pollutants to a register, which is accessible to the public. The implementation of the register is regulated in the Protocol on Pollutant Release and Transfer Register (PRTR).

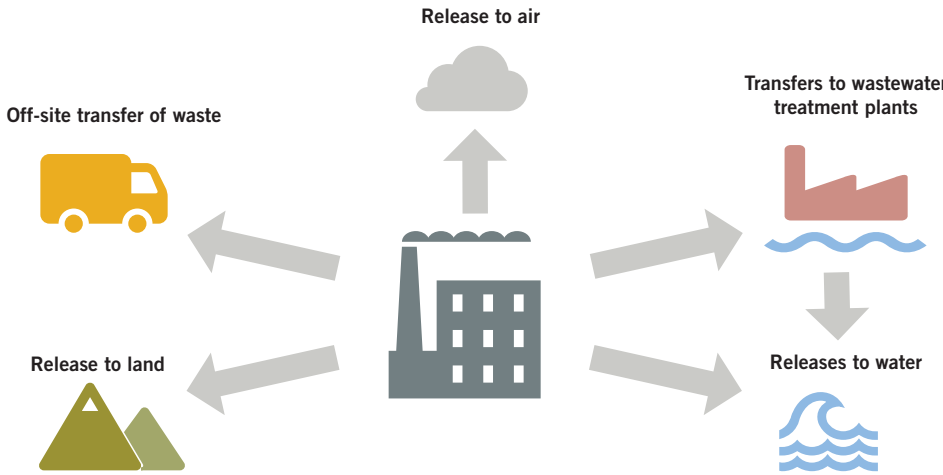
The three pillars of the Aarhus Convention summarise its objective to give the public opportunity to act in regards to environmental issues. Image: IVL Swedish Environmental Research Institute

"Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."

Source: Principle 10 of the Rio declaration, UNEP 1992.

The overall objective of the Protocol on PRTRs is to facilitate public participation in decision-making concerning the environment and to contribute to reducing pollution of the environment. The Protocol was ratified in 2003 in Kiev and entered into force in 2009.

The register is required to contain information on releases of pollutants to air, water and land, transfers of pollutants in wastewater destined for wastewater treatment and off-site transfers of waste.



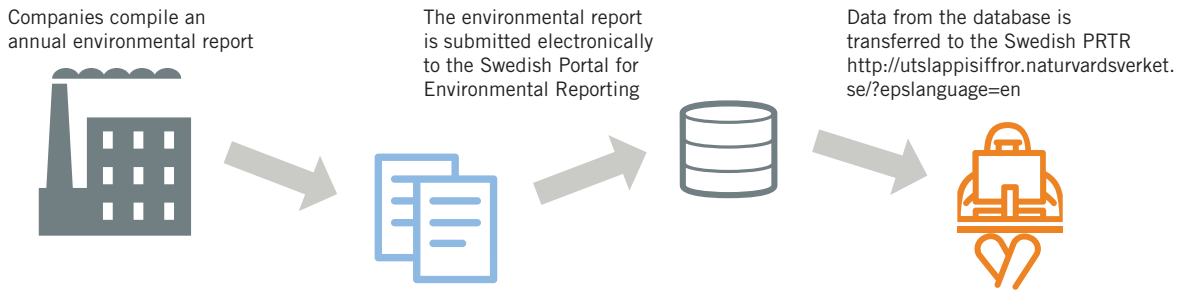
The Protocol on PRTRs provides a framework for national PRTRs that include releases to air, water and land, transfers of polluted water to wastewater treatment plants and off-site transfers of waste for further treatment or landfill.
Image: IVL Swedish Environmental Research Institute.

The Swedish Pollutant Release and Transfer Register

Sweden ratified the Protocol on PRTRs in 2008 and has created a national pollutant release and transfer register that is accessible for everybody to take part of. The Swedish Environmental Protection Agency is responsible for the register and you can find it through their website or directly at http://utslappisiffror.naturvardsverket.se/?epslanguage=en (in English).

The Swedish PRTR system is integrated with the system of environmental reporting, which means that the information that is requested by the Protocol on PRTRs is obtained from the companies' annual environmental reports, which are submitted to the Swedish Portal for Environmental Reporting. Companies report annual releases to air and water, transfers of pollutants through wastewater and off-site transfers of wastes, if the threshold values are exceeded. Data from the portal are transferred to the Swedish PRTR.

On the Swedish PRTR you can find information on about 1200 companies throughout the country that are active within the nine industrial sectors covered by the Protocol on PRTRs and the E-PRTR Regulation (EG/166/2006). You can search for information in the register and on maps and read about the pollutants. You can also export release data to Excel and look at interactive charts showing how the releases have changed over time from 2007 onwards.



The Swedish PRTR is based on the companies' environmental reports and is published online for public access.
Image: IVL Swedish Environmental Research Institute

Brief facts about the Swedish PRTR

- The Swedish PRTR is accessible to everybody at http://utslappisiffror.naturvardsverket.se/?epslanguage=en
- The Swedish PRTR has been created in order for you to find information on release sources in your proximity and throughout the country. Therefore, you can impact and participate in decisions that concern the environment.
- Besides informing the public, the information can be used by for example decision-makers, researchers and the commercial sector.
- On the Swedish PRTR you can see how much is released of a certain pollutant into the environment and where the releases occur.
- The content and the format of the register are regulated by the Protocol on PRTRs, which is a protocol under the Aarhus Convention.
- 34 states, and the EU, have ratified the Convention (as of October 2016).
- Sweden contributes knowledge and experiences on creating a PRTR to countries that are not as far along in the process.

What is released and how much?

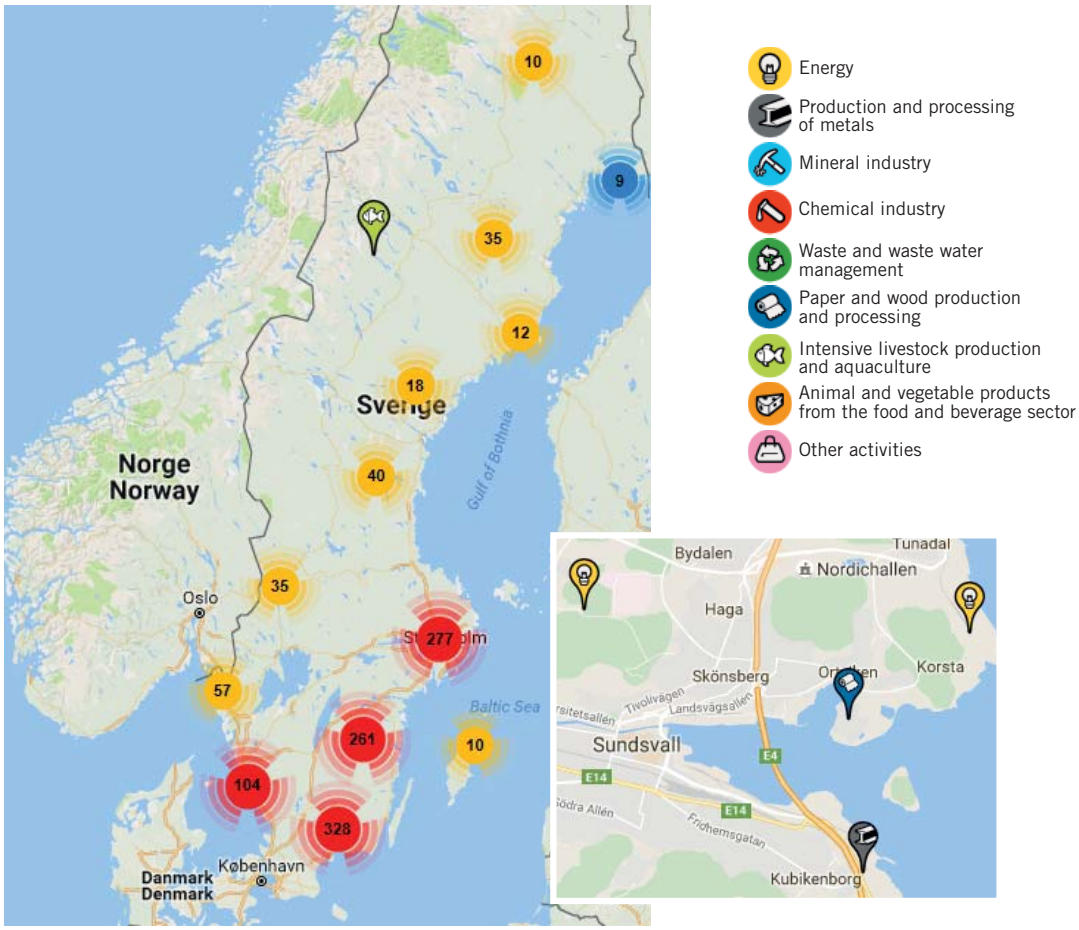
91 different substances are to be reported but all substances are not released by all companies and, in addition, only releases that exceed a certain threshold have to be reported. This means that all releases are not included in the Swedish PRTR.

65 out of the 91 substances are classified as hazardous (e.g. metals, organic solvents, pesticides, additives and industrial chemicals). Out of these hazardous substances, 25 are prohibited since many years, which means that these substances are not allowed to be used in Sweden. The remaining 26 substances are not classified has hazardous, for example greenhouse gases, nutrients, chlorides, fluorides and PM10. You can read more about the substances on the Swedish PRTR.

Treated and transferred amounts of waste are reported divided into three categories: hazardous waste for treatment outside of Sweden, hazardous waste for treatment within Sweden and non-hazardous waste.

Companies use different methods to know how much of a pollutant is released. Some releases are measured continuously, others are measured under shorter periods of time or calculated.

The companies are themselves responsible for thequality of reported data but the information is also reviewed after it is reported. In addition to the review that the supervisory authority performs, the Swedish Environmental Protection Agency is responsible for a general review of data.

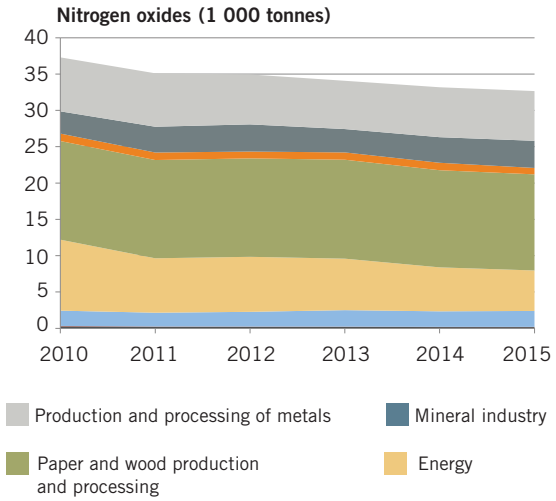


The interactive map on the Swedish PRTR shows all industrial facilities that reports to the register. The coloured dots (red, yellow or blue) indicate the number of companies in the area. As you zoom in on the map, the companies' geographical location is shown in more detail as well as to which industrial sector it belongs. Source: http://utslappisiffror.naturvardsverket.se/en/Search-in-map/.

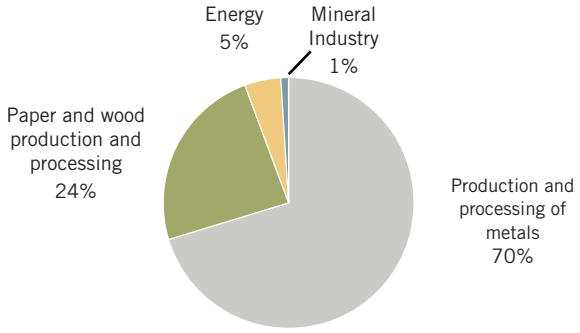
Where do the released pollutants come from?

In addition to releases from a certain company, you can also see the total amount of a certain pollutant that is reported by all companies within an industrial sector. In the example below, you can for example see that paper and wood production and processing and production and processing of metals contribute the most to releases of nitrogen oxides to air. The releases have decreased visibly since 2010. In 2015, the largest releases of nitrogen oxides occurred in Norrbotten county. In this county releases from metal production and the pulp and paper industry dominate.

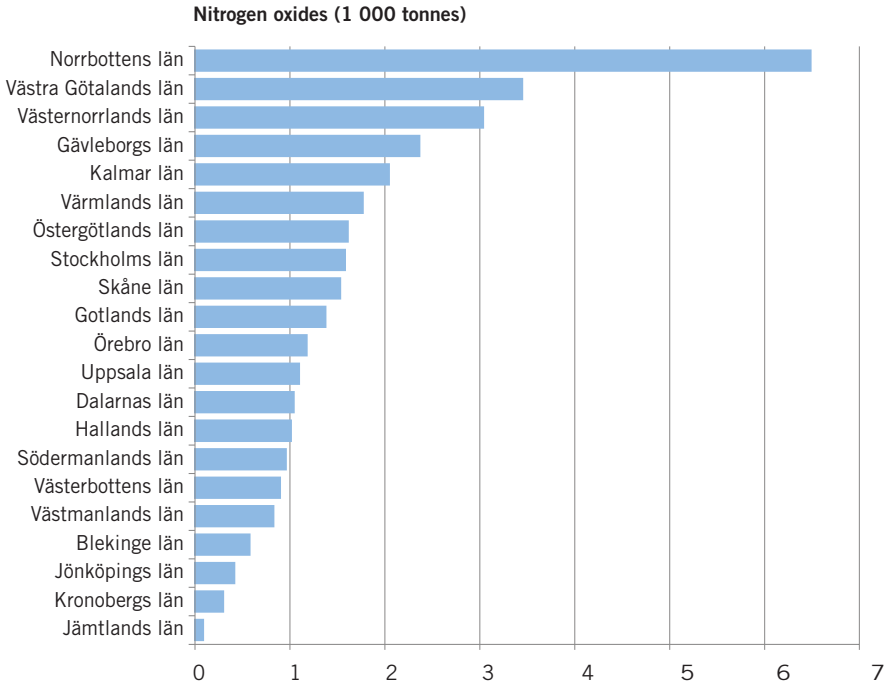
Reported releases of nitrogen oxides to air by sector



Releases of nitrogen oxides in Norrbotten county in 2015



Source: http://utslappisiffror.naturvardsverket.se/?epslanguage=en



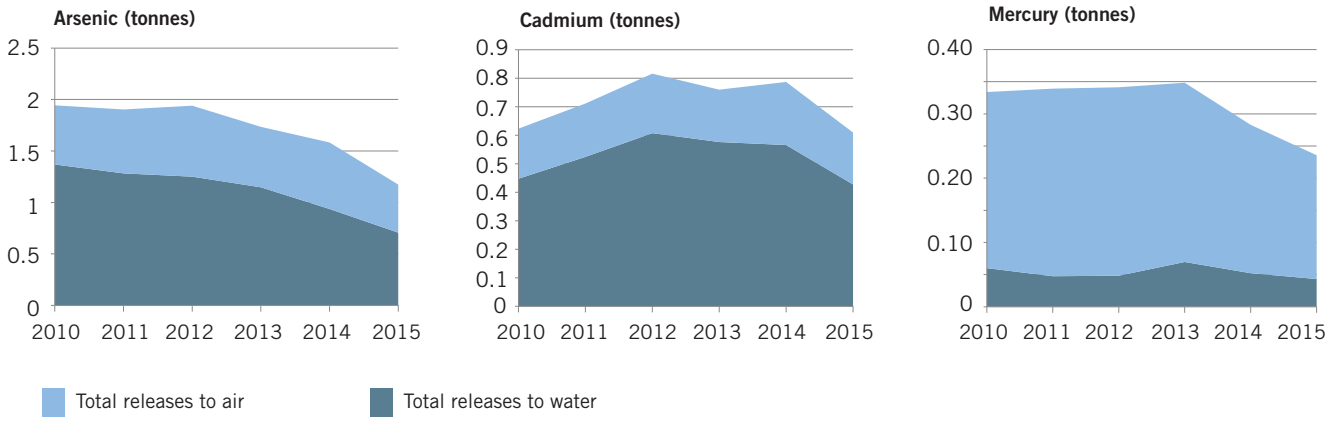
Releases of nitrogen oxides to air by county, 2015. Source: http://utslappisiffror.naturvardsverket.se/?epslanguage=en

Photo: Ingrid Mawdsley, IVL Svenska Miljöinstitutet

How are the pollutants released to the environment?

Air pollutants, such as the acidifying gases nitrogen oxides and sulphur dioxide are only released to air. Other pollutants, such as heavy metals, can be released to both air and water. Pollutants that are released to air can end up on land or in the water via rain or dry precipitation. Companies state in their report in which way the pollutant first is released to the environment.

The Swedish PRTR show for example releases of heavy metals from those companies that report their releases to the register. Arsenic and cadmium are mainly released directly to water but also in significant amounts to air. Mercury, however, is mainly released to air. Those releases that are shown here are those that companies report to the register and do not include releases from diffuse sources, such as



Total releases of the heavy metals arsenic, cadmium and mercury to air and water.
Source: http://utslappisiffror.naturvardsverket.se/?epslanguage=en.

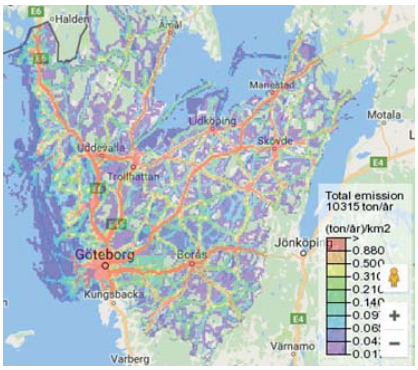
There are also other types of sources releasing pollutants

Those releases that companies report to the register only make up a part of total pollutants released to the environment in Sweden. There are many other activities and companies that are not covered by the environmental reporting system. Releases from these activities and companies are defined as diffuse releases and are also to be included in the register. Diffuse sources cover:

- Companies whose capacity is less than the given capacity threshold.
- Companies and activities for which there are no reporting requirements.

Example of diffuse release sources are road traffic, shipping, agriculture, solvent use, fuel consumption within households and small industrial units. Information on diffuse releases in the Swedish PRTR is based on available information in the reporting according to other multilateral environmental agreements.

Information presented in the Swedish PRTR on diffuse releases to air is obtained from the Swedish emission inventory that is used for annual reporting to the Convention on Climate Change (UNFCCC) and the Convention on Long-Range Transboundary Air Pollution (CLRTAP). Releases are calculated and distributed geographically using for example calculation models. Below, you can for example see the releases of nitrogen oxides from the traffic in Västra Götaland county.



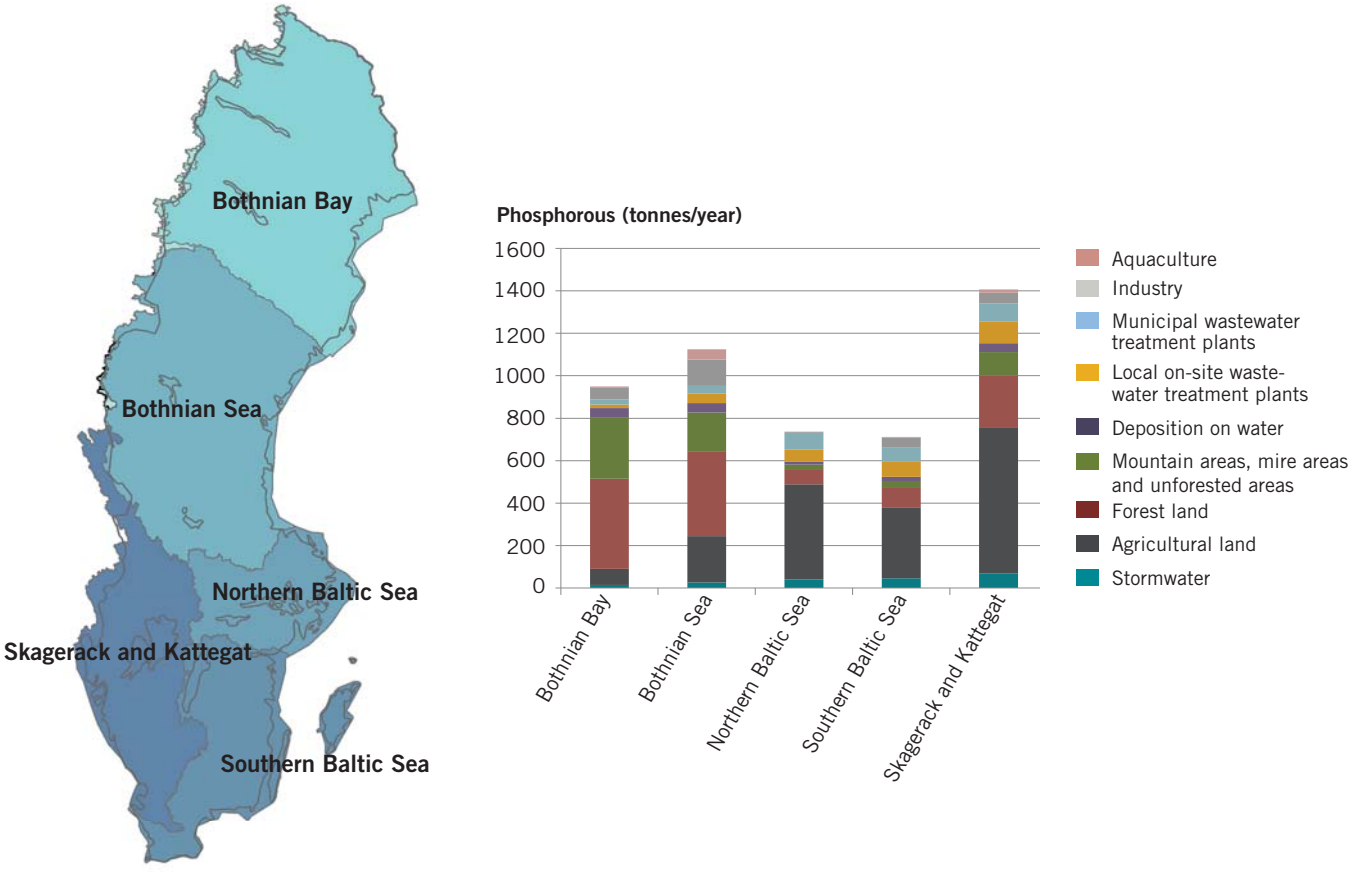
Releases of nitrogen oxides from the traffic in Västra Götaland county. The largest releases occur along the main roads. Source: http://utslappisiffror.naturvardsverket.se/?epslanguage=en.

Photo: IVL

Diffuse sources dominate releases of nutrients to water

On the Swedish PRTR there are charts showing total releases of nutrients and certain heavy metals to water, both from companies required to report releases and from diffuse sources. The diffuse sources are important for total releases of phosphorous to water. Releases from forest and agricultural land contribute the most to total releases. This information is used for reporting to the European Environmental Agency (EEA), the Helsinki commission (HELCOM) and for the in-depth evaluation of the national environmental quality objective Zero eutrophication.

The Swedish PRTR shows releases of for example phosphorous to water divided by Sweden's five water districts and by sector. Here you can see that the largest releases occur in Skagerack and Kattegat water district despite the fact that the district's surface is smaller than both the Bothnian Bay and the Bothnian Sea water district. Releases from agricultural and forest land together contributed 61 percent of releases from all districts in 2014.



Releases of phosphorous to water in the five water districts of Sweden and by sector in 2014. The chart shows compiled releases of phosphorous as they first are released to the environment and not what ends up in the sea after transport through lakes and rivers. Source: Map from IVL and data from http://utslappisiffror.naturvardsverket.se/?epslanguage=en

PRTRs around the globe

International cooperation is very important for the implementation of the Protocol on PRTRs. The Protocol requires the parties to share their experiences and knowledge about PRTRs in order to help countries that are not as far along in the process of implementing a PRTR.

The knowledge transfer occurs foremost at international meetings or seminars, but also through bilateral collaborations. Sweden is since many years highly engaged in the international work on the Protocol on PRTRs and for the period 2015-2017, the chairperson of the Protocol is from Sweden.

Globally, the Protocol on PRTRs is only one of several active reporting systems. Examples of regions and countries, in addition to Europe, that have well-developed reporting systems are Northern America, Australia and Japan. In recent years, the coordination of the different systems has been identified as particular important for the purpose of data comparability.

There are several other organisations besides the UNECE that function as important actors in the cooperation process, for example:

- OECD (The Organisation for Economic Co-operation and Development), whose work on PRTR aims to promote knowledge transfer and develop new methods to calculate releases.
- International PRTR Coordinating Group, whose foremost objective it is to promote capacity building of PRTR systems in developing countries and transition economies through intergovernmental coordination.
- UNITAR (United Nations Institute for Training and Research) has a PRTR programme, which objective it is to help countries with format and implementation of national registers through involving different target groups.

Photo: UN head quarter in Geneva, housing the secretariat of the Protocol on PRTRs./Tina Skårman, IVL Swedish Environmental Research Institute.

You can find more information on international work on PRTR at:

- The European Pollutant Release and Transfer Register: http://prtr.ec.europa.eu
- The UNECE PRTR protocol: http://www.unece.org/env/pp/prtr.html
- International PRTR Coordinating Group: http://www.unece.org/env/pp/prtr/intlcgimages/about.html
- OECD Working group on PRTRs: http://www.oecd.org/chemicalsafety/pollutant-release-transfer-register/
- UNITAR PRTR programme: http://unitar.org/cwm/portfolio-projects/pollutant-release-and-transfer-registers

Connections to other initiatives

Due to requirements of the Protocol on PRTRs on a well-functioning reporting mechanism, there is a clear connection to other international agreements that request information on releases from point sources. Examples of these agreements are the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention on Mercury.

In September 2015 the 2030 Agenda for Sustainable Development was ratified by the 193 member states of the UN. The Agenda points out three dimensions of sustainable development: social, economic and environmental, and, in addition, important aspects in regards to peace, equity and effective institutions.

The Agenda comprises 17 Sustainable Development Goals with related indicators. The Protocol on PRTRs relates to several of these goals, either directly in those cases where the goal includes an aspect of public participation, or by facilitating evaluation of the goals using information from the PRTR. The links to the Sustainable Development Goals Good health and well-being (3), Clean water and sanitation (6), Industry, innovation and infrastructure (9), Responsible consumption and production (12) and Peace, justice and strong institutions (16) are especially strong.

The 17 Sustainable Development Goals of the UN. The Protocol on PRTRs relates to several of the goals and improves the possibilities to fulfil the goals. Image: The UN development programme, UNDP. http://www.un.org/sustainabledevelopment/news/communications-material/

"Your right to environmental information – the Swedish PRTR" is published by the Swedish Environmental Protection Agency with the objective to inform about the background to the Swedish PRTR, what information can be found there and examples of what the information can be used for.

The Swedish PRTR gives you access to data on releases from over 1 200 companies as well as Sweden's collected releases from for example the traffic and agriculture. You can see on the map where the releases occur and download data in order to make your own analyses and compilations.

Take advantage of your right to information and use your knowledge to influence issues that concern the environment.
Visit the Swedish PRTR: http://utslappisiffror.naturvardsverket.se/?epslanguage=en

Photo: Staffan Ågren

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