

ON THE PROBLEMS OF STATISTICAL DATA PROVISION FOR GREENHOUSE GAS EMISSIONS CALCULATIONS

1. The regulatory basis for the implementation of the national commitments on the Kyoto Protocol

Slide 2 enumerates the regulatory-legislative acts on the establishment and operation of the Russian System for the Estimation and Reporting on the Anthropogenic Emissions and Removals of the Greenhouse Gases under the Kyoto Protocol to the UNFCCC.

The national commitments of the Russian Federation on the Kyoto Protocol are implemented in accordance with the legal frameworks formed by the Federal Law of the Russian Federation “On the Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change” № 128-Ф3 of November 4, 2004 as well as the other regulatory documents developed and approved by the Government of the Russian Federation.

In accordance with the Federal Law № 128-Ф3 of November 4, 2004, the Russian Federation ratified the Kyoto Protocol to the United Nations Framework Convention on Climate Change (December 11, 1997), which was signed on behalf of the Russian Federation in New-York on March 11, 1999.

The Decree of the Government of the Russian Federation (№ 275-p, of February 20, 2006)

Identified the Ministry of the Natural Resources of the Russian Federation as the entity responsible for establishment and maintenance the national registry for accurate accounting, issuance, holding, transfer, acquisition, cancellation and retirement of emission reduction and other units in accordance with the provisions of the Kyoto Protocol to the UNFCCC

- Authorized the Ministry of Natural Resources in cooperation with the Ministry of Economic Development and Trade and in agreement with other concerned executive bodies of the government to elaborate and approve the procedure for establishment and maintenance of the National Registry of Emission Reduction Units.

The Decree of the Government of the Russian Federation (№ 278-p, of March 01, 2006)

- Identified the arrangements on the establishment of the National System for Estimation and Reporting on the Anthropogenic Emissions and Removals of the Greenhouse Gases under the Kyoto Protocol to the UNFCCC;

- Authorized Federal Service for Hydrometeorology and Environmental Monitoring (*Roshydromet*) as the entity responsible for the functioning of the National System and

submission of the national greenhouse gas inventory and other relevant information to the UNFCCC and Kyoto Protocol Secretariat;

- Assigned the *Roshydromet* to develop the list of statistical information and activity data, which result in anthropogenic emissions from sources and removals by sinks of the greenhouse gases;

- Assigned the *Rosstat*, Ministry of Economic Development and Trade, Ministry of Natural Resources, Ministry of Regional Development, Federal Service for Technological Control and Ministry of Agriculture to ensure annual provision to *Roshydromet* of the activity data and other relevant information necessary for estimation of anthropogenic emissions from sources and removals by sinks of the greenhouse gases.

The regulatory frameworks for the implementation of the Kyoto Protocol also include the legislative acts by *Roshydromet* and other executive governmental bodies.

2. The functioning of the Russian System for the Estimation and Reporting on the Anthropogenic Emissions and Removals of the Greenhouse Gases under the Kyoto Protocol to the UNFCCC.

In accordance with the Decree of the Government of the Russian Federation, the *Roshydromet* ensures the functioning of the National System and submission of the National Greenhouse Gas Inventory and other relevant information to the UNFCCC and Kyoto Protocol Secretariat.

The *Roshydromet* elaborated and approved the Procedure of establishment and functioning of the National System for the Estimation of the Anthropogenic Greenhouse Gas Emissions and Removals together with the **list of state statistical reporting data** and other activity data, which result in anthropogenic emissions and removals of the greenhouse gases (the Order of the *Roshydromet* № 141 of June 30, 2006)

Slide 3 presents the functional scheme of the national system.

The *Roshydromet* in cooperation with the other participants of the national system develop the National Communication and the National Inventory of the Anthropogenic Greenhouse Gas Emissions from Sources and Removals by Sinks.

The estimation of anthropogenic greenhouse gas emissions from sources and removals by sinks is carried out by the *Roshydromet* on the basis of state statistical reporting and other data.

Every year the *Rosstat*, Federal Agency for Property Cadastre, Federal Forestry Agency, Ministry of Regional Development, Federal Agency for the Technological Control, Ministry of Transport and Ministry of Agriculture send to the *Roshydromet* the official statistical data and other information for the preparation of the greenhouse gas inventory.

***Rosstat* is the major provider of the official statistical data.**

Rosstat also undertakes quality assurance of the statistical data used by the *Roshydromet* for preparation of the national greenhouse gas inventory and national communication.

The Ministry of Economic Development and Trade, Ministry of Natural Resources, Ministry of Regional Development, Federal Service for Technological Control, Ministry of Agriculture and Ministry of Transport prepare and send to the *Roshydromet* reports on policies and measures in energy, agriculture, transport as well as specific data within their responsibility.

Every year by March 1, the *Roshydromet* submits for approval by the Government of the Russian Federation the National Greenhouse Gas Inventory of the Anthropogenic Emissions from Sources and Removals by Sinks, agreed with the concerned federal executive bodies. Every year the inventory includes the estimates for the years from 1990 to one but last year to the year of the submission.

After the approval by the Government of the Russian Federation, the *Roshydromet* submits the inventory to the UNFCCC Secretariat on behalf of the Russian Federation.

3. The role of the Federal State Statistics Service (*Rosstat*) in the functional operation of the national system for the estimation of anthropogenic greenhouse gas emissions from sources and removals by sinks

As noted above, the *Rosstat* is the major provider of official statistical data.

The statistical activities in the Russian Federation are organized in accordance with the Federal Law “On Official Statistical Accounting and State Statistics System in the Russian Federation”, № 282-ФЗ of November 29, 2007

Slide 4 shows the basic responsibilities of the *Rosstat*

Thus, the *Rosstat*

- Forms and publishes official statistical information on social, demography and environmental situation in the country;
- Guides the activities of ministries and agencies on development of state statistic resources and data;
- Provides for quality of initial statistical data and undertakes quality control of basic statistical data used by the *Roshydromet* for greenhouse gas anthropogenic emissions estimation;
- Develops a Federal Plan of statistical works on inter-agency basis.

The *Rosstat* develops official methodology for statistical activities and operation compliant with the international statistical standards, primarily with provisions of the SNA-93 SNS. This allows for comparability of the statistical data.

The Slide 5 presents the scheme of information flows within the *Rosstat*.

The “**bottom-up**” **approach** is used for statistical data collection:

The enterprises report to the territorial *Rosstat* bodies in accordance with the forms of the federal statistical observation.

The territorial *Rosstat* bodies undertake collection, integrity and quality control of the information, process and archive it along with ensuring the storage and protection of confidential information. The *Rosstat* territorial bodies also perform the aggregation of the information to the level of the subject of the Russian Federation and send it to the *Rosstat* Main Processing Center.

The Main Processing Center of the *Rosstat* undertakes collection and processing of the information from the territorial bodies of the *Rosstat*, implements control, archiving, storage and protection of confidential information. The aggregated information is sent to *Rosstat* for publication in statistical reports and provision to:

- The President of the Russian Federation, Federal Assembly of the Russian Federation, the Government of the Russian Federation;

.- *Roshydromet*, Ministry of Industry and Energy, Ministry of Natural Resources, Ministry of Agriculture, Ministry for Economic Development and Trade, and other government bodies;

- International organizations;

- other users.

Slides 6 and 7 show statistical data, which are compiled and submitted to the *Roshydromet* by the *Rosstat* on the annual basis:

Fuel and energy data

- The Fuel and Energy Balance
- Production in fuel and energy sectors; basic products output

Other industrial data

(production)

- Ferrous metallurgy
- Non-ferrous metallurgy

- Chemical and petrochemical industry
- Manufacturing and metal processing
- Forest, wood processing and pulp and paper industry
- Construction industry

Transport

- Cargo turnover (by transport type)
- Pipeline transport data (oil, gas and oil products)

Agriculture

- Agriculture production
- Agricultural crop areas
- Fertilizer input and chemical land reclamation
- Agricultural livestock and poultry population by type and by holding category
- Consumption of food products

Forestry

- Forest restoration
- Development of protection shelter belts (erosion-, pasture- and field protection)
- Forest fire data

The provision information and data for calculation of greenhouse gas emission performed by the other executive power bodies in accordance with their competence as shown on **Slide 8**.

The Agencies

List of indicators by kind of activities

- Federal Real Estate
Cadastre Agency

Land use

- Land distribution by categories

- Federal Forestry Agency

Forestry

- State forest fund data
- Main cuts data
- Management and selective cuts data

- Federal Service for **Waste**
ecological, technological and nuclear control Industrial and municipal waste formation, utilization, sanitation and storage

Slide 9 official statistical publications of the *Rosstat*:

- Official statistical publications include **20-23 issues per year**;
- Periodic publications (information and analytical materials annually published as **20-25 various statistical journals, reports and bulletins**);
- Electronic copies of publications are available through Internet Rosstat web-site **www.gks.ru** all is free

Slide 10 shows the Rosstat Internet website.

4. Reporting to the UNFCCC Secretariat

Slide 11 presents official submissions of the Russian Federation to the UNFCCC Secretariat in accordance with requirements of the Kyoto Protocol:

- Four National Communications and The Report on Demonstrable Progress (The Fourth National Communication was submitted on October 12, 2006)
- National Inventory Report 1990-2004. (January 8, 2007)
- National inventory tables including those of Common Reporting Format for 1990-2004 and 1990-2005 (2007)
- Initial Report on the Assigned Amount (February 20, 2007)

All official submissions are available from the UNFCCC Secretariat website and the Roshydromet ([http:// www.meteorf.ru](http://www.meteorf.ru)) website.

The independent reviews of the official submissions of the Russian Federation coordinated by the UNFCCC Secretariat indicated that Russian Federation has no problems with its commitments under the Kyoto Protocol.

5. The difficulties in provision of statistical data for greenhouse gas emission calculation

The domestic (in-country) problems to be solved.

Slide 12 presents the data, necessary for the preparation of the greenhouse gas inventory for the key categories, which are, however, currently not available in the national statistics in required level of breakdown:

For example these are:

- Number probe oil and gas wells,
- Total length of medium and low pressure gas distribution network,
- Fuel used for international aviation and marine bunkers,
- Distribution of solid and liquid municipal waste by type.

With the aim to ensure completeness and quality of the national greenhouse gas inventory in accordance with provisions of the UNFCCC and the Kyoto Protocol, the Roshydromet in agreement with other government executive bodies concerned prepares consolidated proposals on:

The improvement of the list of statistical indicators and other activity data for the estimation of anthropogenic greenhouse gas emission and removals referred to in the Order of Roshydromet № 141 of June 30, 2006;

- Develops the proposals on the enhancement of the state system of statistical reporting and submits to the Rosstat draft formulas for statistical data collection for their subsequent consideration and improvement.

In developing the greenhouse gas emission inventory in accordance with the IPCC methodology, the Russian Federation encounters the following difficulties, common for all countries (**Slide 13**). **They are caused by:**

- ❑ The difference between the classification by kind of activities and production types in the IPCC methodology and those used by the UN Statistics Division and Eurostat for economic activity data collection. In particular, this refers to energy and extraction industries, agriculture and land use
- ❑ The structural differences between the IPCC and IEA methodologies for greenhouse gas emission calculations as well as the approaches for fuel and energy balance construction.

The latter requires specific conversion factors for enhancement of calculation results.

- ❑ Absence of List of fluorine containing products, which should be used in data collection on production, export and import for calculation of emissions of HFCs, PFCs, and SF6.

The decision of the above mentioned problems will increase quality of national cadastres of emissions and their methodological comparability.