

COUNTRY PRACTICE IN ENERGY STATISTICS

Topic/Statistics: Coal Statistics

Institution/Organization: Federal State Statistics Service (Rosstat)

Country: Russian Federation

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Abstract

Write a short abstract of the statistics, and try to limit it to one page. The purpose of the abstract is to give the reader a general overview of the statistics/topic. It should therefore include a brief overview of the background and the purpose of the statistics, the population, the sample (if relevant), the main data sources, and the main users of the statistics. The abstract should also mention what is the most important contribution or issue addressed in the country practice (e.g. the practice deals with challenges of using administrative data, using of estimation, quality control, etc.). If there are other elements that are considered important, please feel free to include them in the abstract.

Keep in mind that all relevant aspects of the statistical production will be covered in more detail under the different chapters in the template. Therefore, the abstract should be short and focused on the key elements. What the most important elements are can vary from statistics to statistics, but as a help to write an abstract you can use the table below. The table can either replace a text or can be filled out in addition to writing a short text.

The procedure of formation of coal statistics

Russian energy statistics is a system of statistical surveys of business units engaged in production, transformation, supply and consumption of energy resources. Most of these observations are conducted by the Federal Service of State Statistics (Rosstat), but the number of observations are realised by other federal government agencies and enterprises of the fuel and energy complex.

Currently data collection and development of statistics information on coal mining by State statistical authorities is realised in two ways: both on the current and annual bases.

Data collection on full circle of enterprises and the annual statistics is realised by using of statistical forms and necessary adjustments on small business.

Respondents will submit the annual mode information about the consumption of coal and coal products to statistical offices.

Several statistical surveys are carried out by other state agencies on contractual basis. They are involved in the Federal plan of statistical works, these observations forms are confirmed by Rosstat.

In these forms includes indicators of process sides of mining and beneficiation of coal, preparation process of coal mining in mines and mining plants, the quality of mining coal, except the total volume index of enrichment and production of coal. For example, the amounting of development workings in mines and overburden mining in mining plants, production of mining machines, ash contents of produced coal, preparation product release, mining losses etc.

There are also statistical surveys conducted by major corporations and state agencies which are not included in the Federal plan of statistical work, they don't have any status of official statistical information, but they are used in current and analytical work of conformed corporations and state agencies. Coal mining organisations produce the daily, monthly and quarterly accounts about the production and supply of coal delivering, about mining face work, development workings, overburden mining, about residues of coal and enrichment product, about shipment of coal, about coal conversion on coal-preparation plant.

All this information is used to calculate the balance of the annual production and consumption of the main types of energy sources in the Russian Federation (TEB).

Key elements

Key elements	
Name of the statistics	Statistics of coal

Background and purpose of the statistics	Complete and comprehensive status characteristic of production and consumption of coal which is necessary for the development of economical and social policy, strategies, decisions of government and business entities, research activities planning, public information, statistical data transmission to international organizations and other categories of internal and external users
Population, sample and data sources	The sources for the formation information on statistics of coal are the forms of federal statistical observation of the production, shipment, residues and consumptions of coal
Main users	President of the Russian Federation, the Government of the Russian Federation, federal bodies of state power, bodies of state power of subjects of the Russian Federation, local governments and other users
Important contribution or issue addressed	
Other remarks	

1. General information

1.1. Name of the statistics/topic

The statistics/topic could either be a specific energy statistics (e.g. electricity production) or a topic within energy statistics (e.g. energy balances). For more information, please see Section III of the Instructions.

Statistics of coal

1.2. History and purpose

State when the statistics were first published.

Statistics were first published in 1951

Describe briefly the main purpose of producing the statistics and why it is relevant.

Complete and detailed characteristic of production and consumption of coal which is necessary for economic and social policy, strategies, decisions of authorities and economic entities, research planning, informing the public, transferring the statistical data to international organisations and internal and external users

1.3. Reference period

State the time period the data are collected for.

The data are formed for the current month, for the period and for the year

1.4. Frequency

Specify how often the statistics are disseminated (e.g. annually, monthly, quarterly, etc.). If the statistics are not produced at regular intervals, state at what times they have been produced in the past and the main reasons behind the irregularities.

The data are disseminated with monthly periodicity

1.5. Dissemination

Describe how the statistics are published (e.g. printed publications, online publications, online databases, etc.). If applicable, include the web address to the main website of the statistics.

Statistical data are published in official publications: "Russia in figures" (in Russian and English), "Belarus' and Russia", "Statistical Yearbook of Russia", "Industry of Russia", "Russia and countries members of the European Union", "Russia and countries of the world", "Regions of Russia. Social and economic indicators and main characteristics of subjects of the Russian Federation", "Current statistical Survey", "Russia and CIS Countries", in the monthly report "Social and economic Situation in Russia", and also posted on the official website of Federal State Statistics Service (www.gks.ru) under the heading "Databases" sub-heading "CSDB"

1.6. Regional level

State the lowest geographical level (e.g. administrative regions, municipalities, etc.) for which the statistics are made available to the public.

Statistical information on coal is available on the level of the federal subject of the Russian Federation

1.7. Main users

Identify the key users of the data and the main applications. Include both internal and external users, and if possible try to distinguish between end users and others.

The main users of statistics on coal are the Federal State government authorities, bodies of state power of subject of the Russian Federation and local governments, ministries, agencies, research institutes and educational institutions, population etc.

1.8. Responsible authority

Write the name of the institution and department/office with the main responsibility for disseminating the statistics (e.g.: Statistics Norway, Department of Economics, Energy and the Environment).

Rosstat, Department of enterprise statistics

1.9. Legal basis and legally binding commitments

State the national legal basis for the data collection. Include a complete reference to the constitutional basis, and web address to an electronic version (e.g.: The Statistics Act of 16 June 1989 No. 54, §§2-2 and 2-3, http://www.ssb.no/english/about_ssb/statlaw/forskrift_en.html).

2007 Federal Law on “Official statistical accounting and state statistics system in the Russian Federation”

If the data collection is not based on a legal basis, give a short description of other agreements or volunteer arrangements.

If applicable, give reference to national and international commitments that are legally binding (e.g. EU statistical legal acts).

1.10. Resource requirements

Specify how the production of the statistics is financed (e.g. over the ordinary budget, project based support, financial support from other institutions or organization). If applicable, state the contracting entity (e.g.: Ministry, EU Commission, OECD). A contracting entity is any entity which is ordering a survey or the compilation of a statistics, and paying for it

Funding for monitoring the statistics on coal is realised at the expense of federal budget funds within Federal plan of statistical work approved by the Government of the Russian Federation

Specify the resource requirements for producing the statistics (e.g. man-labour days, number of workers involved in the statistical production process of the statistics/topic in question).

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1.11. International reporting

List any international organizations and names of reporting schemes that the statistics are reported to. If available, also include the website where the reported data are published (e.g. International Energy Agency, Monthly Oil Statistics, UNSD, etc.).

International Energy Agency, the UN Statistics Division, APEC

2. Statistical concepts, methodology, variables and classifications

2.1. Scope

Describe the scope of the statistics (e.g. the statistics cover supply and use of all energy products in Norway, classified according to International Standard Industrial Classification of All Economic Activities – ISIC).

Statistics of coal is covering production and consumption on Russian classification OKPD based on harmonization with the statistical classification of products by Activity in European Economic Community (CPA 2002)

2.2. Definitions of main concepts and variables

Describe the main concepts (e.g.: territory principle, resident principle, net calorific value, gross calorific value).

Statistic on coal is based on respondents' reporting of all economic activities, producing and using coal in their activities

Describe the main variables (e.g. how are the different energy products defined in the statistics? How are production, intermediate consumption, final consumption, transformation, feed stock, the energy sector, etc. defined?).

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2.3. Measurement units

Describe in what unit the data is collected (e.g. physical unit (m³, metric tons), monetary unit (basic prices, market prices)). Describe in what unit the data is presented. Describe if the calorific values are collected (e.g. on a net vs. gross basis) and how they are used.

If applicable, describe the density of the energy product(s) and the estimated *thermal efficiency coefficients* of different energy products and consumer groups or by appliance. Thermal efficiency coefficient indicates the share of the energy products which is actually usable for end consumption. Descriptions of density and thermal efficiency coefficient could alternatively be put in an annex.

Metric ton

2.4. Classification scheme

Include references to relevant international and national standard classifications. If national, give a brief description of the standards. If available, include web addresses to the electronic version of the standards).

Statistics on coal is formed using Russian Classification of products by Economic Activities (OKPD) harmonized with the Statistical classification of products in the European Economic Community (CPA 2002), as well as Russian Classification of Economic Activities (OKVED) that is based on the Statistical Classification of Economic Activities in the European economic Community (NACE Rev.1.1)

2.5. Data sources

Give an overview of the different data sources used in the collection and compilation of the statistics/topic (e.g. household survey, enterprise/establishment survey, administrative data/registers, foreign trade statistics, production statistics and other primary/secondary data sources).

Examples of administrative sources/registers are: business register for enterprises and establishments, population register, land register, housing and building registers, tax registers, international trade registers, etc.

The data sources to generate the information on coal statistics are the reports of entities operating on the territory of the Russian Federation according to the forms of federal statistical observation and Statistical register's data while selecting respondents for sample surveys

2.6. Population

Describe the entire group of units which is the focus of the statistics (the population).

Accounting unit (enterprises and organisations)

Specify the following statistical units:

- Reporting unit
- Observational unit
- Analytical unit

Examples of different kind of statistical units include: enterprise, enterprise group, kind-of-activity unit (KAU), local unit, establishment, homogeneous unit of production.

In most cases the reporting unit, observational unit and analytical unit are identical, but there are examples where this is not the case. In electricity statistics, you may find that energy companies (the reporting unit) provide data about different consumers like the individual household or manufacturing company (the observational unit). The analytical unit may be a group of energy consumers, defined by the ISIC.

2.7. Sampling frame and sample characteristics

Describe the type of *sampling frame* used in the collection and compilation of the statistics (e.g. list, area or multiple frames). A sampling frame is the source material or device from which a sample is drawn. Note that the sampling frame might differ from the population.

Data collection based on continuous monitoring of legal persons which are not related to small entrepreneurship, further adjustment is conducted using information on small business and individual entrepreneurs

For each survey(s) used for the compilation of the statistics, specify the *sampling design* (e.g. random, stratified, etc.). Describe the routines employed for updating the sample. Include information about the sample size, and discuss to what extent the sample covers the population (e.g. energy consumption in the sample compared to total energy use by the population).

Note that chapter 2.7: *Sample frame and sample characteristics* may overlap with chapter 3.4: *Grossing up procedures*.

Adjustment is carried out using sample surveys of small entrepreneurship and by special software programmes based on a multivariate stratified random sampling with the simple estimate of the average performance group. Sample size in every subject of the Russian Federation is determined on a fact that the coefficient value of variation estimates on the basis of location “revenue” shall not exceed 5%. Totally in Russia the numbers of sample units are generally not exceed 20% of the total population of all small entrepreneurship which are conformed of the world statistical practice.

2.8. Collection method

For each survey used for the compilation of the statistics/topic, describe how the data are collected (e.g. face-to-face, telephone, self-administered, paper and internet-based questionnaires, or administrative data and registers).

Coal statistics is based on reports according to the forms of federal statistical observation

2.9. Survey participation/response rate

For each survey used for the compilation of the statistics/topic, specify the average response rate, or refer to response rates for specific surveys conducted.

According to the 2007 Federal Law on “Official statistical accounting and state statistics system in the Russian Federation” respondents are required to provide the primary statistical data to the subject of official statistical accounting that are necessary for the formation of official statistical information and according to the 2001 Code of Administrative Violations they are responsible for the presentation of statistical information

3. The statistical production process

3.1. Data capture and storage

Describe how the data is captured and stored (e.g. if the respondent replies using Internet-based questionnaire, the received data are electronically transferred to the production database. Paper questionnaire responses are keyed manually to the production database).

Reporting forms of federal statistical observation collect information in paper and electronic forms, the received data are loaded into the database and data warehouse

3.2. Data editing

Describe the regular routines employed for detecting and correcting errors. This may include:

- Manual routines for detecting and correcting errors
- Automatic error-detection (and correction)
- Micro- and macro editing procedures
- Data validation procedures
- Outlier identification
- Processes and sources used for quality controls

The process of data editing provides automatic detection of errors and mechanical procedures to correct it

3.3. Imputation

Describe the principles for imputation and the assumptions that these principles are based on. Note that this chapter may overlap with chapter 3.2: *Data editing* and chapter 5.2: *Accuracy*

3.4. Grossing up procedures

Describe how the population is divided into strata and what statistical models the estimations in the strata are based on. Describe how sub-indices are combined into aggregate indices and how uncertainty is estimated.

3.5. Analytical methods

Give a description of any analytical methods used to adjust the data (e.g.: seasonal adjustment and temperature adjustment). A more detailed description of the analytical method can also be included as an annex.

4. Dissemination

4.1. Publications and additional documentation

Describe the form of dissemination of the statistics/topics in question (e.g. printed publications, website, etc.). Please provide relevant website link(s) if available.

Statistical data are published in official publications: «Russia in figures» (in Russian and English), «Belarus and Russia», «Russian Statistical Yearbook», «Industry of Russia», «Russia and member countries of the European Union », «Russia and the countries of the world », «Regions of Russia - social and economic indicators and the main characteristics of the Russian Federation», «Statistical Review», «Russia and the Commonwealth of Independent States», ", in the monthly report «Socio-economic Situation

in Russia», and also posted on the official website of Federal State Statistics Service (www.gks.ru) under the heading "Business" sub-heading "industrial production"

Give a complete reference to publicly available statistics databases where data from the statistics can be extracted. Include web addresses if available online.

Link to the Central Statistics Database
[# 1](http://www.gks.ru/dbscripts/Cbsd/DBInet.cgi)

Indicate whether you charge users for access to the statistics at any level of aggregation.

The information in the Central Statistical Database is freely available and is provided at no charge

4.2. Revisions

Describe the current revision policies. E.g.: Is historical data revised when new methodology, new definitions, new classifications etc. are taken into use? Is the data continuously revised, or is the data revised at certain points in times (e.g. every third year, annually, etc.)?

The Information is subject to review in the event of a new methodology

If applicable, describe any major conceptual or methodological revisions that have been carried out for this statistic/topic in the past.

Revisions of statistical data are carried out according to the Regulations of the development and publication of data on products of mining, manufacturing, production and distribution of electricity, gas and water supply, approved by the Federal State Statistics Service and the Ministry of Economic Development of the Russian Federation of 05.06.2009

4.3. Microdata

Describe how microdata are stored.

Microdata are stored in the territorial bodies of state statistics at the regional level

Specify if microdata are available for scientific and/or public use. If so, describe under what conditions these are made available.

According to the 2007 Federal Law on "Official statistical accounting and state statistics system in the Russian Federation" the primary statistical data are confidential and not disseminated, and used only for the purpose of forming aggregated statistical information

4.4. Confidentiality

Describe the legal authority that regulates confidentiality, and what restrictions are applied to the publication of the statistics.

According to the 2007 Federal Law on "Official statistical accounting and state statistics system in the Russian Federation" the primary statistical data are confidential and not disseminated and used only for the purpose of forming aggregated statistical information

When providing statistical information on the subject of Russian Federation in which production is carried out only by one manufacturer, the data are not published and are substituted by a sign «...».

Describe the criteria used to suppress sensitive data in statistical tables (cell suppression).

Describe how confidential data are handled.

Describe any confidentiality standards that go beyond what is legally required.

5. Quality

5.1. Relevance

State to which degree the statistical information meet the real needs of clients/users.

Indicators of federal statistical observation forms meet the needs of federal agencies of executive power as agreed with them systematically

5.2. Accuracy

State the closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

Measurement and processing errors

Discuss the measurement and processing errors that are relevant for the statistics. Try as far as possible to give an estimation of the size and scope of the errors.

Non-response errors

State the size of the unit non-response and the item non-response, distributed by important variables in the population (e.g. region, industry). Consider if the non-response errors are systematic, and if so, describe the methods used to correct it. Indicate whether the effects of correcting non-response errors on the results have been analysed, and, if so, describe them.

Sampling errors

Discuss the size of the sampling errors. Compare the population and sample with regards to important properties (e.g. coefficient of variance).

Other sources of error

Discuss other sources of errors that might be relevant for the statistics. E.g.: Model assumption errors, coverage errors

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5.3. Timeliness and punctuality

Specify the time between the end of the reference period and publication.

If the statistics are published both as preliminary and final figures, specify the time between publication of preliminary and final figures. You should also point out whether the publication date is set according to certain rules (e.g. advance release calendar, a specific day or prior to other publications).

<p>Terms of formation of official statistical information are regulated by Annual production plan of Rosstat, terms of providing it to users and publications are regulated by Federal plan of statistical works (plan approved by the Government of the Russian Federation. These terms are obligatory for both respondents and subjects of official statistical accounting.</p>

Point out if there have been any major discrepancies between the planned publication date and the actual publication date in recent years. If so, state the length of this discrepancy and its cause.

<p>The maximum period of delay of planned publication shall be not more than a month and it is due to objective reasons.</p>

5.4. Accessibility

Describe how easily accessible the statistics are. In particular, is there an advance release calendar to inform the users about when and where the data will be available and how to access them?

Are metadata and other user support services easily available? Are there particular groups that don't have access to the published statistics (e.g.: visually disadvantaged)?

<p>Plan to release official statistical publications available on the official website of Rosstat in the section «Publication» with the indication of frequency and timing of their release.</p>

5.5. Comparability

Discuss the comparability of the statistics over time, geographical areas and other domains.

Comparability over time

Discuss comparability over time and include information about whether there have been any breaks in the time series of the statistics and why. Also describe any major changes in the statistical methodology that may have had an impact on comparability over time.

<p>There have been no breaks in the time series in coal statistics because of transition from OKP to OKPD classifications</p>

Comparability over region

Discuss comparability over geographical areas, and include information about whether the statistics are comparable to relevant statistics published by other countries and/or international organisations.

This question is required more precise definition

Comparability over other domains

Discuss comparability over domains, and include information about whether the statistics are comparable between different industries, different types of households etc.

Data is comparable

5.6. Coherence and consistency

Discuss the coherence/consistency between preliminary and final figures.

Preliminary (monthly) sdata are specified according to the total annual figures

Discuss the coherence/consistency between monthly, quarterly or yearly statistics within the same subject area. Can the results of different frequencies for the same reference period be combined in a reliable manner?

Discuss the coherence/consistency with other related statistics (also those produced by other institutions/organisations on the same subject).

Consistency of statistical information with other statistics of Rosstat is not required since official statistics formed by the subjects of official statistical accounting according to the Federal plan of statistical works provides that there were no duplications of information.

6. Future plans

Are there any current or emerging issues that will need to be addressed in the future? These could include gaps in collection, timeliness issues, data quality concerns, funding risks, confidentiality concerns, simplifications to reduce respondents' burden etc.?

Improvement of the indicators and the methodology of official statistical information is regular work of Rosstat

Annexes

Illustrations and flowcharts

Illustrations and flowcharts are useful to summarize information and to get a better overview of the statistical production process. Illustrations and flowcharts can either be placed in annexes or be included under relevant paragraphs in the template.

E.g.:

- A conceptual flowchart which illustrates the flow of data in the production of the statistics.
- A flowchart which illustrates the main tasks in the production process and the dependency between them.

Time schedule

Include a time schedule for the different phases of the statistical production process. The statistical production process *may* be divided into the following phases. Phase 1-3 may only be relevant for when a new statistics/survey is set up.

1. **Clarify needs** (e.g. map users needs, identify data sources)
2. **Plan and design** (e.g. plan and design population, sample size, how to analyze and edit data)
3. **Build** (e.g. build and maintain production system, test production system)
4. **Collect** (e.g. Establish a frame, draw the sample, collect data)
5. **Edit** (e.g. identify and code micro data, edit data, imputation)
6. **Analyse** (e.g. quality evaluation, interpret, analyse)
7. **Disseminate** (e.g. publish data, user contact)

Questionnaires

Include the complete questionnaire(s)/survey form(s) used

Example of publication tables

Include an example of a typical table published for the statistics. Include web addresses if available online.

Detailed description on analytical methods

If relevant, a detailed description of analytical methods used in the statistical production (like seasonal adjustment, temperature adjustment etc.) may be described in an annex. A short description can also be included in chapter 3.5: Analytical methods or under other suitable chapters.