# COUNTRY PRACTICE IN ENERGY STATISTICS

**Topic/Statistics: EP 8-01** 

Institution/Organization: Czech Statistical Office (CzSO)

Country: Czech Republic

Date: March 2012

### **CONTENTS**

Al	ostract	3
1.	General information	5
	1.1. Name of the statistics/topic	
	1.2. History and purpose.	
	1.3. Reference period.	
	1.4. Frequency	
	1.5. Dissemination	
	1.6. Regional level	
	1.7. Main users	
	1.8. Responsible authority	
	1.9. Legal basis and legally binding commitments	
	1.10. Resource requirements	
	1.11. International reporting	7
2.	Statistical concepts, methodology, variables and classifications	7
	2.3. Measurement units	
	2.4. Classification scheme	
	2.5. Data sources	
	2.6. Population	
	2.7. Sampling frame and sample characteristics.	
	2.8. Collection method	
	2.9. Survey participation/response rate.	
3.	The statistical production process	
	3.1. Data capture and storage	
	3.2. Data editing	
	3.3. Imputation	
	3.4. Grossing up procedures	
	3.5. Analytical methods	12
4.	Dissemination	12
	4.1. Publications and additional documentation	12
	4.2. Revisions	12
	4.3. Microdata	13
	4.4. Confidentiality	13
5.	Quality	14
	5.1. Relevance	
	5.2. Accuracy	
	5.3. Timeliness and punctuality	
	5.4. Accessibility	
	5.5. Comparability	
	5.6. Coherence and consistency	
6.	Future plans	16
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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.

Annual Statistical Survey on Energy Processes at Fuels Transformation (for fuels upgrading)
By this statistical survey there are ascertained information on Energy Processes at Fuels
Transformation (for fuels upgrading). The result of these energy processes is a change of use value of the passing through energy matters. In these processed there is balanced on the one hand input to the processes and on the other hand production and losses.

In addition to this there are surveyed fuels and energy working consumption for respective energy processes.

This satistical survey is performed annualy. Found information is utilized for the Czech Republic State Energy Balance compilation, for energy situation assessment and for international organizations requirements. Statistical survey started in1993.

Generally, electricity and heat generation is part of these processes – but this issue is independently dealt with by means of the Annual Statistical Form for Survey on Generation and Distribution of Electricity and Heat (EP10-01).

	Key elements					
Name of the statistics	Annual Statistical Survey on Energy Processes at Fuels Transformation (for fuels upgrading)					
Background and purpose of the statistics	To ascertain information on energy balance of fuels production (briquettes, coke, energo-gas, blast furnace gas, gas works gas, liquid fuels) for international organizations requirements and for the State Energy Balance compilation					
Population, sample and data sources	There are reporting economic subjects, selected from RES (Business Register – which is maintained by the CzSO), with activity related to production of briquettes (brown coal briquetting), coke (high-temperature carbonization in coking plants), gasification under pressure of coal,					

	production of metals (blast furnace gas production in blast furnaces), crude oil processing (liquid fuels production from crude oil) and further (blast-furnace gas production in blast furnaces and producers of gas works gas at gasification in industrial generating stations).					
Main users	After processing of the ascertained data into the energy balance the main users are state administration and commercial sphere in the CR and international organizations (IEA, Eurostat, UN, OECD)					
Important contribution or issue addressed	For compilation of the energy balance and for needs of international statistics (Regulation No 1099/2008/EC) the surveyed data are fundamental.					
Other remarks	Name of the questionnaire/statistical form:  Annual Statistical Form on Energy Processes at Fuels Transformation (for fuels upgrading) (EP 8-01)					

#### 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.

Annual Statistical Survey on Energy Processes at Fuels Transformation (for fuels upgrading)

#### 1.2. History and purpose

State when the statistics were first published.

The survey results were published for the first time in 1993.

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

This statistical survey plays an important role in safeguarding the tasks of international statistics and for the CR Energy Balance compilation.

#### 1.3. Reference period

State the time period the data are collected for.

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.

Annually

#### 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.

Processed and elaborated data are published in the form of data sets on the Internet websites and also in the regular annual CzSO publication: Statistical Yearbook of the Czech Republic 2011

http://czso.cz/csu/2011edicniplan.nsf/engpubl/8110-11-eng r 2011

http://www.czso.cz/csu/2011edicniplan.nsf/engp/8106-11

http://czso.cz/eng/redakce.nsf/i/statistical yearbooks of the czech republic

#### 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.

Czech Republic

#### 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 are state administration and commercial sphere in the CR and international organizations

State organizations – Ministry of Industry and Trade, Ministry of Environment,

Czech Hydrometeorological Institute and state administration, etc.

International organizations – UN, Eurostat, IEA/OECD, etc.

Other - research institutions, commercial sphere

#### 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).

Czech Statistical Office

Industrial, Construction and Energy Statistics Department

**Energy Statistics Unit** 

#### 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, <a href="http://www.ssb.no/english/about\_ssb/statlaw/forskrift\_en.html">http://www.ssb.no/english/about\_ssb/statlaw/forskrift\_en.html</a>).

National law: Act No.89/1995 Coll. on the State Statistical Service (15.6.1995), as amended <a href="http://czso.cz/eng/redakce.nsf/i/full\_wording\_of\_act\_no\_89\_1995">http://czso.cz/eng/redakce.nsf/i/full\_wording\_of\_act\_no\_89\_1995</a> coll on the state statistical service

and

Decree No. 306/2010 Coll. on the Programme of Statistical Surveys for 2011

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).

Regulation No 1099/2008/EC and

Regulation (EU) No 844/2010 amending Regulation (EC) No 1099/2008 of the European Parliament and of the Council on energy statistics, as regards the establishment of a set of annual nuclear statistics and the adaptation of the methodological references according to NACE Rev. 2

#### 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

State budget

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).

200 man-labour days, about 7 workers annually

#### 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.).

IEA/OECD, Eurostat, UNECE – Annual Questionnaires (basis for the Coal, Electricity and Oil questionnaires)

https://www.energydatacenter.org

http://epp.eurostat.ec.europa.eu/statistics explained/index.php/Main Page

http://www.iea.org/stats/index.asp

### 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).

There are reporting economic subjects, selected from RES (Business Register – which is maintained by the CzSO), with activity related to production of briquettes (brown coal briquetting), coke (high-temperature carbonization in coking plants), gasification under pressure of coal, production of metals (blast furnace gas production in blast furnaces), crude oil processing (liquid fuels production from crude oil) and further (blast-furnace gas production in blast furnaces and producers of gas works gas at gasification in industrial generating stations)

### 2.2. Definitions of main concepts and variables

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

Territory principle (the CR), natural units are converted to energy units by means of net calorific value.

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?).

Main variables are described in the Regulation No 1099/2008/EC and Regulation (EU) No 844/2010

Items of energy balance of fuels production (fuels input, produced energy and non-energy products, total output (production) from energy process, working consumption of fuels and energy)

Common surveyed balance items (measured physical units):

Coking Coal	(metric ton, GJ)
Other Bituminous Coal	(metric ton, GJ)
Coke Oven Coke and Semi.Coke of Coal	(metric ton, GJ)
Blast Furnace Gas	(1000 m3, GJ)
Coke Oven Gas	(1000 m3, GJ)
Oxygen Steel Furnace Gas	(1000 m3, GJ)
High-temperature Crude Tar	(metric ton, GJ)
Brown Coal	(metric ton, GJ)
Lignite	(metric ton, GJ)
Brown Coal – Separated	(metric ton, GJ)
Benzene (from Hard Coal)	(metric ton, GJ)
Brown Coal Briquettes (BKB)	(metric ton, GJ)
Energo-Gas	(metric ton, GJ)
Gas Works Gas	(1000 m3, GJ)
Other Gaseous Fuels (from Brown Coal)	(1000  m3, GJ)
Low-temperature Crude Tar	(metric ton, GJ)
Other Liquid Fuels (from Brown Coal)	(metric ton, GJ)
Other Solid Fuels (from Brown Coal)	(metric ton, GJ)
Other Liquid Fuels	(metric ton, GJ)
Natural Gas (Associated Gas)	(1000 m3, GJ)
Other Gaseous Fuels	(1000 m3, GJ)
Crude Oil	(metric ton, GJ)
Refinery Feedstocks	(metric ton, GJ)
Refinery Gas	(metric ton, GJ)
LPG	(metric ton, GJ)
Naphtha	(metric ton, GJ)
Motor Gasoline	(metric ton, GJ)
Aviation Gasoline	(metric ton, GJ)
Kerosene Type Jet Fuel	(metric ton, GJ)
Other Kerosene	(metric ton, GJ)
Diesel Oil/Transport Diesel	(metric ton, GJ)
Heating and Other Gasoil	(metric ton, GJ)
Fuel Oil-Low Sulphur (< 1% S)	(metric ton, GJ)
Fuel Oil-High Sulphur (>= 1% S)	(metric ton, GJ)
White Spirit and SBP	(metric ton, GJ)
Petroleum Coke	(metric ton, GJ)
Other Products	(metric ton, GJ)

#### 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.

Data are reported in natural and energy unit (GJ), solid and liquid fuels in metric tons, gaseous fuels in thousands m<sup>3</sup>. Energy unit is GJ, calorific values are reported in international annual questionnaires.

#### 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).

CZ NACE, practically identical with NACE Rev.2 (2008) and set of national classifications (for ex. of selected measurement units, fuels and energy classification, state of economic activity etc.)

#### 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.

#### **Business Register**

Sample survey of economic subjects selected according to their activity from RES (Business Register – which is maintained by the CzSO).

(File of reporting units cannot be precisely parametrically defined due to the fact that the statistical form is submitted only by reporting units whose activities fall into production of briquettes (brown coal briquetting), coke (high-temperature carbonization in coking plants), gasification under pressure of coal, production of metals (blast furnace gas production in blast furnaces), crude oil processing (liquid fuels production from crude oil) and further (blast-furnace gas production in blast furnaces and producers of gas works gas at gasification in industrial generating stations).

#### 2.6. Population

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

Respondents are economic subjects with activity related to production of briquettes (brown coal briquetting), coke (high-temperature carbonization in coking plants), gasification under pressure of coal, production of metals (blast furnace gas production in blast furnaces), crude oil processing (liquid fuels production from crude oil) and further (blast-furnace gas production in blast furnaces and producers of gas works gas at gasification in industrial generating stations).

Sample size: about 10 units (enterprises, companies).

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.

Reporting unit = enterprise (characterized by its identification number – IČO)

#### 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.

Sampling frame is the Business Register

Blanket survey (acc. to the Decree No. 306/2010 Coll. on the Programme of Statistical Surveys for 2011, census).

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.

Sample survey of economic subjects selected according to their activity.

(File of reporting units cannot be precisely parametrically defined due to the fact that the statistical form is submitted only by reporting units whose activities fall into production of briquettes (brown coal briquetting), coke (high-temperature carbonization in coking plants), gasification under pressure of coal, production of metals (blast furnace gas production in blast furnaces), crude oil processing (liquid fuels production from crude oil) and further (blast-furnace gas production in blast furnaces and producers of gas works gas at gasification in industrial generating stations).

Sample size: about 10 units (enterprises, companies).

#### 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).

Paper and internet-based questionnaires (Respondents can choose Paper statistical form or Electronic statistical form.)

#### 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.

Response rate is 100 % (in 2010)

## 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).

Paper statistical forms are keyed manually, these data together with data from electronic forms are transferred to the production database.

#### 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

Processing of final data set/file is subject to the checks at processing, final expert check and possible consultation with respondents.

Validation procedures (extreme values identification and examination) include expert check, data comparison with last year data.

#### 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

No

#### 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.

No

#### 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.

Analytical methods used to adjust the data are not used.

#### 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.

On website www.czso.cz

Only website and electronic publications (electronic data sets):

Statistical Yearbook of the Czech Republic, Energy Balance, etc.

http://czso.cz/csu/2011edicniplan.nsf/engpubl/8110-11-eng r 2011

http://www.czso.cz/csu/2011edicniplan.nsf/engp/8106-11

http://czso.cz/eng/redakce.nsf/i/statistical yearbooks of the czech republic

Publicly accessible current release calendar = CzSO Catalogue of Products

http://www.czso.cz/eng/redakce.nsf/i/catalogue\_of\_products

Publications contain methodological explanations.

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

It is possible to see other adjusted outputs:

Public Database:

http://vdb.czso.cz/vdbvo/en/maklist.jsp?kapitola\_id=34&expand=1&

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

Access to CzSO electronically published data is free of charge, only a special user's requirement which must be processed is charged.

#### 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.)?

Historical data are not revised.

Reference year data are considered to be preliminary, last reference year data are revised and are considered to be definitive.

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

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#### 4.3. Microdata

Describe how microdata are stored.

Microdata are stored in the production database (non public internal net).

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

Microdata are not available. If it is necessary to work with them for scientific or other reasons, user can obtain micro data, but he has to take the pledge of secrecy and follow procedures according to the statistical law.

#### 4.4. Confidentiality

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

The Office for Personal Data Protection (Act No. 101/2000 Coll., on the Protection of Personal Data and on Amendment to Some Acts)

Act No.89/1995 Coll., on the State Statistical Service, as amended and

Internal regulation on individual data treatment

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

Individual (personal) statistical data cannot be published. According to the internal regulation the CzSO can publish only sum of individual data of few respondents.

Describe how confidential data are handled.

Confidential data cannot be published without respondent agreement. Statisticians, who work with statistical data, have to take the pledge of secrecy.

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.

Data quality is sufficient for given objective, covering and accomplishment of all obligations on national and international level.

#### 5.2. Accuracy

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

Accuracy is sufficient for given objective.

#### 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.

Statistical differences meet the norm. Ascertained faults are corrected continuously. Processing of final data set/file is subject to the checks at processing, final expert check and possible consultation with respondents.

#### 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.

Unit non-response is 0% (in 2010)

#### Sampling errors

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

No

#### Other sources of error

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

Main sources of errors:

- respondents' errors
- changes in Business Register (cessation of a firm, merger and demerger of companies etc.)
- errors at feeding data for processing

#### 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).

Preliminary data are published 8 months after the end of the reference year, definitive data 12 months after preliminary data. Publication day of issue is set according to the Publication Catalogue of Products.

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.

Timetable is always being kept.

#### 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)?

On websites www.czso.cz

publicly accessible current release calendar = CzSO Catalogue of Products

http://www.czso.cz/eng/redakce.nsf/i/catalogue of products

Publications contain methodological explanations.

#### 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.

Statistical data are comparable over time, no breaks.

#### 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.

CzSO Energy statistics is based on international methodology.

Processed outputs are comparable according to the IEA/Eurostat/UN methodology.

#### 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.

No

#### 5.6. Coherence and consistency

Discuss the coherence/consistency between preliminary and final figures.

All data are consistent.

Usually no substantial differences occur.

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?

This statistical survey exists only with annual periodicity

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

No

### 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.?

Future activities depend on finance sources. In the next future we do not suppose any changes or extension. We suggest direct cooperation with reporting companies (to solve all differences continuously).

#### **Annexes**

Time schedule (a time schedule for the different phases of the statistical production process):

- 1. Creation of respondents set, statistical forms dissemination to respondent units till February 2, 2012
- 2. Filled out reports delivery from reporting unit to the CzSO till February 20, 2012
- 3. Check of incoming reports, corrections, output processing 1<sup>st</sup> set of output tables till May 3, 2012
- 4. Examination of the 1<sup>st</sup> output, next improvement of accuracy, new output processing 2<sup>nd</sup> set of output tables till May 9, 2012
- 5. Processing of electronic data set on the basis of the set of the 2<sup>nd</sup> output tables till September 17, 2012
- 6. Elaboration of the annual international questionnaires till November 30, 2012
- 7. Continuous data corrections and their improvement of accuracy till February 2013

To the Annual Statistical Form on Energy Processes at Fuels Transformation (for fuels upgrading) (EP 8-01) there is elaborated "The Technical Project on Data Collection, Processing and Presentation in the CzSO Competence" which is annually updated. It consists of 45 text and table pages and is the CzSO internal document.

The timetable is sheduled continuously for the whole year when data collection for last period, their processing together with dissemination and survey preparation for next period (for current and future year/period respectively) is running at the same time.

Output data sets (the same references as already stated above):

http://czso.cz/csu/2011edicniplan.nsf/engpubl/8110-11-eng\_r\_2011 http://www.czso.cz/csu/2011edicniplan.nsf/engp/8106-11 http://vdb.czso.cz/vdbvo/en/maklist.jsp?kapitola\_id=34&expand=1& http://czso.cz/eng/redakce.nsf/i/statistical\_yearbooks\_of\_the\_czech\_republic

#### **Questionnaires (statistical form)**

Annual Statistical Survey on Energy Processes at Fuels Transformation (for fuels upgrading) using Annual Statistical Form on Energy Processes at Fuels Transformation (for fuels upgrading) (EP 8-01) (see the complete questionnaire(s)/survey form(s) used bellow)



## Roční výkaz o energetických pochodech zušlechťování paliv

**EP 8-01** 

Registrováno ČSÚ ČV 51/11 ze dne 24. 5.2010 IKF 463011

za rok 2011

Výkaz je součástí Programu statistických zjišťování na rok 2011. Podle zákona č. 88/1995 Sb., o státní statistické službě, ve znění pozdějších předpisů, je zpravodajská jednotka povinna poskytnout všechny požadované údaje. Ochrana důvěrnosti údajů je zaručena zákonem. Děkujeme za spolupráci.

Vyplněný výkaz doručte do 20. 2. 2012 Krajská správa ČSÚ v Praze, Na padesátém 81, 100 82 Praha 10

Formuláře výkazů, elektronický sběr dat, registry, číselníky a aktuální statistické informace na: www.vykazy.cz

ıčo			Číslo Číslo Počet pochodu výkazu výkazů				Název energetického pochodu				
zev a sídlo	(adresa	) zpravo	dajsk	é jednotl	y:	17	IAN	VEAR			
	-										
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Císlo pochodu - dvoumístné číslo a název energetického pochodu

Společné vysvětlivky: Výkaz se předkládá za jednotlivý energetický pochod. Sledované energetické pochody:

Číslo	Název
en. pochodu	
01	Briketování hnědého uhlí
02	Vysokoteplotní karbonizace v koksovnách
03	Tlakové zplynování uhlí
06	Výroba kapalných paliv z ropy
08	Vysokopecní proces
09	Výroby generátorového plynu v průmyslových generátorech

K o m e n t á ř. zpravodajská jednotka uvede vysvětlení logických nesrovnalostí nebo mimořádného vývoje ve vykazovaných datech, které vyplývají z organizačních změn nebo jiných okolnosti (pokud vymezený prostor nepostačuje, pokračujte na samostatném listě).

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036 Vsazené palivo	Měřicí jed. naturální t, tis. m³	Čís. řád.	Statistické číslo	Množství v jednotkách		
96036			paliva	naturálních	GJ	
Název paliva	а	b	1	2	3	
MEAN		01				
V/1.1R		02				
THETT		03				
		04				
		05				
/700		06				
IZUK .	140	07				
		08				
		09				
1.100,00.00	1-	10				
Kontrolní součet (ř.01 až 10) [1]		99	X			

<sup>[1]</sup> Kontrolní součet v ř.99, sl.3 má význam skutečného součtu -vsázka celkem.

037 Využitelné produkty	Měřicí jed naturální	Čís. řád.	Statistické číslo paliva	Množství v jednotkách	
7 Využitelné produkty z energetického pochodu 98037	t, tis. m <sup>3</sup>			naturálních	GJ
Název paliva	a	ь	1	2	3
VITAB		01			
V/LIK		02			
There		03			
		04			
		05			
700	. 1/7	06			
// UK	-V/	07			
	7,5	08			
		09			
1.7		10			
WALL	3 3	11			
YEVIN		12			
		13			
		14			
ITAB	W5	15			
Kontrolní součet (ř.01 až 15) [1]	117	99	X		

<sup>[1]</sup> Kontrolní součet v ř.99, sl. 3 má význam skutečného součtu - využitelné produkty z energetického pochodu celkem.

038 Provozovací spotřeba	Měřicí jed. naturální t, tis. m³	Čís. řád.	Statistické číslo paliva	Množství v jednotkách		
paliv 96038				naturálních	GJ	
Název paliva	а	ь	1	2	3	
1.000		01		1.0		
VZTIV		02				
YZVIV		03				
	8	04				
		05			·	
Kontrolní součet (ř.01 až 05) [1]	117	99	X			

[1] Kontrolní součet v ř.99, sl.3 má význam skutečného součtu - provozovací spotřeba paliv.

039 Provozovací spotřeba energie	Čís.	Množství v jednotkách		
96039	řád.	MW.h	GJ	
Druh energie	a	1	2	
Teplo dodané do energetického pochodu odjinud	01	X		
Teplo z odpadního tepla téhož pochodu	02	X		
Odpadní teplo získané z daného energetického pochodu [1]	03	x		
Elektřina	04			
Kontrolní součet (ř.01 až 04) [2]	99			

[1] Uvede se se znaménkem mínus.
 [2] Kontrolní součet v ř.99, sl.2 má význam skutečného součtu - provozovací spotřeba tepla a elektřiny.

#### Metodické vysvětlivky (proti minulému roku obsahují změny - vyznačeny kurzívou)

036

V oddíle se vykazují paliva, která přímo vstupují do energetického pochodu a zpracovávají se za účelem změny jejich užitných vlastností. Do vsázky se započítávají i ztráty hmotnosti a jakosti vsazeného paliva vzniklé při manipulaci a skladování. sl.1: Statistické číslo paliva. Názvy a statistická čísla bilančních položek vsázky jsou uvedena u vysvětlivek k oddílu 037.

sl.2: Množství paliva vsazeného do energetického pochodu v naturální jednotce, tj. v tunách u tuhých a kapalných paliv a v tis. m³ u plynných paliv (propan-butan v tunách).

sl.3: Množství paliva ze sl.2 přepočtené na jednotky energetického obsahu GJ podle výhřevnosti.

038

V oddíle se vykáže veškerá spotřeba paliv přímo vynaložená na provoz energetického pochodu. Vysvětlivky k jednotlivým sloupcům oddílu jsou shodné s oddílem 036.

039

Veškerá spotřeba elektrické a tepelné energie přímo vynaložená na provoz energetického pochodu, tj. na získání využitých produktů energetického pochodu.

ř.01: Teplo dodané do energetického pochodu odjinud.

ř.01: Teplo odane do energetického pochodu odjihud.
ř.02: Odpadní (druhotné) teplo získané z tohoto energetického pochodu (včetně tepla v pochodu opět spotřebovaného) a včetně zplyňující se vodní páry. Vyplňuje se pouze údaj v GJ ve sl.2.
ř.03: Odpadní (druhotné) teplo získané z tohoto energetického pochodu <u>a dodané mimo tento energetický pochod</u>. Tento údaj (ř.03, sl.2) se označí znaměnkem "minus". Provozovací spotřeba tepla v tomto energetickém pochodu je pak definována jako součet ř.01 + ř.02 + ř.03 ve sl.2 (kde údaj na ř.03, sl.2 je menší nebo roven nule).

ř.04: Provozovací spotřeba elektrické energie, ve sl.1 v MW.h (tis. kW.h), ve sl.2 přepočtená na GJ pomocí koeficientu 3,6, kterým se údaj ve sl.1 vynásobí.

037

V oddíle se vykazují všechny využitelné energetické a neenergetické produkty z energetického pochodu. Produkty nijak nevyužité se nezahrnují do výtěžků, projeví se však ve ztrátách. Rozdíl mezi vsázkou celkem a využitelnými produkty v GJ představuje ztráty v energetickém pochodu. <u>Údaje o využitelných produktech musí být shodné s údaji o výrobě shodných druhů paliv vykázaných na výkaze EP 7-01.</u> Vysvětlivky k jednotlivým sloupcům oddílu jsou shodné s oddílem 038.

Bilanční položky vsázky (oddíl 036) a využitelných produktů z energetického pochodu (oddíl 037) jsou pro jednotlivé pochody zpravidla tyto:

Pochod 01 - Briketování hnědého uhlí

Oddil 036 Hnědé uhlí (číslo paliva 200) Lignit (201)

Oddíl 037 Hnědouhelné brikety (210)

Ostatní tuhá paliva (z hnědého uhlí) (290)

Pochod 02 - Vysokoteplotní karbonizace v koksovnách

Oddil 036

Oddil 037, 038

koksovnach Černé uhlí vhodné pro koksování (102) Černé uhlí energetické (103) Koks a polokoks černouhelný – metalurgický, z báňských koksoven (11001) Koks a polokoks černouhelný – metalurgický, z hutních koksoven (11002) Koks a polokoks černouhelný – plynárenský, otopový tříděný (11003) Koks a polokoks černouhelný – prach (11004)

Vysokopecní plyn (120) Vysokopechi pyli (120) Koksárenský plyn (121) Černouhelný surový dehet (125) Benzol (benzen) (z černého uhlí) (140) Ostatní produkty (390)

Ostatní plynná paliva (450)

Pochod 03 - Tlakové zplynování uhlí

Hnědé uhlí (200) Energoplyn (220) Oddil 036 Oddil 037, 038

Ostatní plynná paliva (z hnědého uhlí) (230) Hnědouhelný surový dehet (240) Ostatní kapalná paliva (z hnědého uhlí) (250)

Zemní plyn naftový (401)

Pochod 06 - Výroba kapalných paliv z ropy Oddíl 036 Ropa surová (300)

Rafinérské poloprodukty (302) Ostatní kapalná palíva (395) Rafinérský plyn (301) Zkapalněný ropný plyn (LPG, propan-butan) (310) Primární benzin (NAPHTA) (315)

Oddil 037, 038

Motorový benzin (320)

Letecký benzin (325) Letecký petrolej (330) Ostatní petrolej (335) Motorová nafta (345)

Topný a ostatní plynový olej (350) Topný olej nízkosirný (do 1% hm.síry) (355) Topný olej vysokosirný (nad 1% hm.síry) (360) Lakový a technický benzin (365) Ropný koks (385)

Ostatní produkty (390) Ostatní kapalná paliva (395)

Pochod 08 - Vysokopecní proces Oddíl 036

Koks a polokoks černouhelný (110)

Hnědouhelný surový dehet (240) Topný olej vysokosirný (nad 1% hm.síry) (380)

Oddil 037, 038 Vysokopecní plyn (120)

Pochod 09 - výroba generátorového plynu v průmyslových generátorech Oddíi 036 Hnědé uhlí (200)

Lignit (201)

Oddil 037, 038 Generátorový plyn (225)

Hnědouhelný surový dehet (240)

Bilanční položky se vykazují v měrné jednotce tuna, plynné látky (paliva) v tis. m³ (ZP při 15°C, 101, 325 kPa) s výjimkou propan-butanu, který se bilancuje v tunách.