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ГЛОБАЛЬНЕ ПОТЕПЛІННЯ МІЖ НАУКОЮ І ПОЛІТИКОЮ

Протягом останніх трьох десятиліть, наукова теорія глобального потепління стала політичною ідеологією. Значні політичні компоненти можна побачити як в передумовах, і (особливо) в наслідках. Але спостерігається вже принаймні десятиліття і негати-візм: науково-дослідні програми глобального потепління сумнівні щодо методології та етики досліджень. Як виклик до всіх тенденцій "теорія глобального потепління" вже стала "теорією глобальної зміни клімату". Чи правда, що глобальне потепління це ідеологія підготовки глобального керівництва над суворо лімітованою кількістю людей?

Ключові слова. Глобальне потепління, глобальна зміна клімату, теорія, ідеологія, політика.

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ГЛОБАЛЬНОЕ ПОТЕПЛЕНИЕ МЕЖДУ НАУКОЙ И ПОЛИТИКОЙ

В течение последних трех десятилетий, научная теория глобального потепления стала политической идеологией. Значительные политические компоненты можно увидеть как в предпосылках, и (особенно) в последствиях. Но наблюдается уже по крайней мере десятилетие и негати-визм: научно-исследовательские программы глобального потепления сомнительные по методологии и этике исследований. Как вызов всем тенденциям "теория глобального потепления" уже стала "теорией глобального изменения климата". Правда ли, что глобальное потепление это идеология подготовки глобального руководства над строго лимитированным количеством людей?

Ключевые слова. Глобальное потепление, глобальное изменение климата, теория, идеология, политика.

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ESTIMATION OF THE INFORMATION SYSTEM DATA COLLECTION EFFICIENCY IN ENERGY COMPLEX

The paper highlights shortcomings of current information system of energy statistics in Ukraine. The study describes the mechanism of automated statistical data collection in energy complex and estimates introduction efficiency of such system. Developed information system of energy statistics makes it possible to form the statistical report by different profiles in energy.

Keywords: State Committee of Statistics of Ukraine; energy complex.

Introduction. Information system of the State Committee of Statistics of Ukraine, particularly energy statistics can be characterized as not fully automated. That is

why it is important to create and implement the mechanism for statistical data which come from respondents

and as a result to avoid a lot of intermediate stages of information processing.

According to the law of Ukraine "On State Statistics" information system of the state statistics is a complex of technical, soft, communicational and other tools which ensure the process of collecting, accumulation, processing, distribution, saving, protection and usage of statistical information [6].

The state statistics of Ukraine consists of the following elements:

- Central body of executive authority which implements the state politics in statistics sphere;
- Functional bodies of the state statistics are enterprises, institutions and organizations which are governed by the central body, which implements the state politics in statistic sphere.

For understanding that many stages of statistical information processing are performed manually, there is a list of work stages of the State Committee of Statistics of Ukraine:

1. The State Committee of Statistics develops and distributes blank accountability forms (monthly, quarterly, annually and operational).

2. The Regional Committee of Statistics distributes the forms to enterprises and to the district units of Statistics. District (city) unit of statistics is small organizational subdivisions, responsible for data collection. City administration of statistics gathers information only from industrial, construction and other companies.

3. Gathered data is aggregated on computer using spreadsheets.

4. Aggregated and consolidated into the spreadsheets, data is sent to the regional department of statistics as well as to the local governing body. Only 30% of gathered information is sent to the regional level [1].

Problems. So the aim of the State Committee of Statistics of Ukraine should be automation of the state statistical activity in energy complex, to be more precise, creation of automated process of data collecting and processing which come directly from statistical unit. Such information system will allow to decrease the complexity of the process of statistical data collecting by eliminating many stages of data processing and to shorten the duration of this process.

Literature review. During the last few years there are a lot of normative documents at the international and state level which regulate the order of collection and processing of statistical information due to the need of information system improvement of the state statistics.

Particularly there was a review of the System of Environmental Economic Accounting (SEEA) which was initiated by the United Nations Statistics Division (UNSD) with the purpose to raise SEEA up to the level of the international statistical standard. Reviewed SEEA is based on its predecessors – SEEA-2003, SEEA-1993 [3].

Energy is defined as a priority branch for SEEA usage. There were also developed the "International Recommendations for Energy Statistics" (IRES). IRES were developed by Statistical Division of the United Nations Organization (UNO) by the cooperation with Oslo Group on statistics and energy and Intersecretarial working group on statistics and energy. A draft of IRES was created in New York on February 22-25, 2011 [3].

The international recommendations for statistics in energy sphere provide data with a full set of recommendations starting from the basic idea, definitions and classifications for data sources, strategy of data collection, energy balances, and quality of data and statistics distribution.

SEEA – Energy enlarges and defines concretely instructions included in IRES. As a result of studies in Ukraine which are purely theoretical in the field of collecting and processing of statistical information, the amount and quality

of bills and normative legal acts are increasing steadily. A lot of normative acts appeared in Ukraine during 2011-2013 years. Particularly Methodological Regulations on organization of the state statistical surveys in the field of energy and forms of the state statistical observations were approved.

Results. State information system of statistics in energy complex is information system which includes statistics data in energy complex.

In Russian Federation the decision about creation of the similar system was adopted in 2009 and Minenergo was responsible for the development. But in Russian Federation there is more functional system – information system of energy complex. The difference is that it will include information about the state and forecast of energy complex development.

The main law that regulates relations as a result of creation, usage, improvement of the state information system of energy statistics in Russian Federation is the law "On the state information system of energy complex" which was adopted in November 2011. And putting into operation is planned for 2015 year [2].

The idea of collecting data from the first hand source was discussed in Russian Federation but after the analysis of necessary expenses there was decided to integrate data from the already exist at the enterprises information system [2].

Data collecting in Russian Federation was planned with a help of special program and technical tools – complex of information technologies, including program tools of information system of energy complex (software for PC and data base) and technical tools of information system of energy complex [4].

In the information system of statistics of energy complex of Ukraine collecting of statistical data is planned to perform via web-application and doesn't need the installation of extra software. Therefore, expenses for putting into operation this system are minimum.

Information system of statistics of energy complex is assigned for automation of the process of collecting, saving of statistical data of energy complex and for the access to this data.

The main principles of functioning of future information system of statistics of energy complex are the following:

1. Fullness, validity and providing information on time to include into the information system.
2. One-time of collecting information.
3. Interaction of information system of statistics of energy complex with the other state information system, particularly with the State Register of Enterprises and Individual Entrepreneurs.
4. Information security.
5. Accessibility and no fees for use of the information system by the subject of this system.

The basis for information system functioning should be the law of Ukraine which regulates relations between the subjects of this information system, particularly collecting of information, processing, access, storage, providing and distribution of information. This law should be concentrated on support and improvement of the system of interagency information cooperation in the field of energy complex.

The main points that should be regulated by the law are the following:

- legal basis of the establishment, functioning, improvement of the information system;
- subjects of the information system;
- main requirements for the information system;
- government authority in the development, operation and improvement of the information system;
- rules for collecting, storage, processing, distribution of the information.

Experience of Russian Federation can be used during the creation of such a law, a model can be the law "On the State Information System of Energy Complex".

The subjects of the information system of energy sector are:

- Public authorities (The State Committee of Statistics of Ukraine and the Ministry of Energy and Coal Industry of Ukraine).

- Legal entities, separate units of legal entity, individual entrepreneurs who have at least one kind of activity related to the energy sector.

Mechanism of functioning of the information system of energy sector is represented at picture 1.

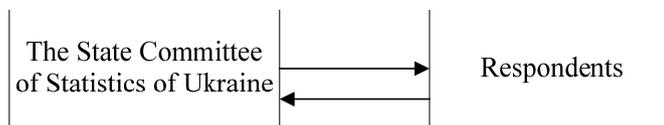


Fig. 1. Mechanism of Functioning of the Information System of Energy Sector

Source: composed by authors' calculations

Some of functions of the State Statistic Service of Ukraine:

- Ensuring of development and implementation of consistent technological approaches to collecting, processing and distribution of statistical information on the basis of consistent methodology and modern information technologies;
- Ensuring of functioning and development of integrated information and analytical system of the state statistics.

So, development and implementation of an automated system of energy sector is a function of the State Statistics Committee of Ukraine. But such development is possible only with the involvement of experts.

The process of using the information system by the respondents is performed via several stages:

1. Registration of the legal entity / individual entrepreneur and each separate unit.

1.1. Receiving of the login and password to log into the information system in the State Statistics Committee of Ukraine. There is a need to obtain a login and password by the authorized person only, to limit the possibility of registration of the unauthorized persons.

1.2. Edit of details of the subjects. Initial data entry will be unnecessary since the moment data is imported from the state register of enterprises and individual entrepreneurs.

2. Filling of forms of the state statistical surveys.

Each entity in its personal account will have a number of forms need to be filled.

Each form is opened for filling on a certain day. For example, if a report should be filled on the results of the year, a form is open since January 1st and active for filling by the deadline. So the form can be "open" or "closed".

Each "open" form can have a status "Report is in the process of filling" or "Report is sent". That is each report can be filled by parts. Partially filled report can be saved and can have a status "Report is in the process of filling". And after the report is done, click "Send" and it will change its status to "Report is sent". It is not allowed to make any changes after the report is sent.

During the form filling there is the process of the preliminary checking of data on appropriateness. In case of conflicts a user will be sent a notification. So mechanism of filling the form is identical to the paper form filling but significantly reduces time for filling and processing data.

When you log into the system it is advisable to implement a dynamic password, so after the main password is entered, there will be sent a message that include a dynamic password.

According to the Article 14 of the law of Ukraine "On the State Statistics" main rights and duties of the respondents are:

- The respondents have a right to know what initial data about them is collected during the process of statisti-

cal surveys, for what purpose, how, by whom, and for what purpose will be used.

- Respondents are required without any fee (the exception is selective surveys of individuals or a group of individuals, for which, individuals receive monetary compensation for time spent) sufficiently, according to a form, provided for statistical reporting within a set deadlines send accurate information as well as with limited access and accounting.

- Structure, volume and methodology of calculation, addresses and terms of providing statistical information are mentioned in statistical documentation and are mandatory for all respondents and can't be changed without an appropriate permission of the state statistics [5].

There will be 3 types of users in the information system:

1. Respondents,
2. Users of the public authorities:
 - 2.1. The State Statistics Committee of Ukraine,
 - 2.2. The Ministry of Energy and Coal Industry of Ukraine.
3. End users.

Administrators of the information system will be moved to a separate group.

So each login is assigned to a particular group. Depending on a group membership, a user has a defined function of information system. There is no necessity for registration for the end users.

Respondents of Information system of statistics of energy complex are:

- transactors who have at least one kind of activity refer to section "B" of Classification of Economic Activities;
- transactors who have at least one kind of activity refer to section "D" of Classification of Economic Activities (without group 35.3 "delivery of steam, hot water and conditioned air")

Let's define functions for the respondents are:

- filling of forms of the state statistical surveys;
- generation of the reports for your own company based on forms of the state statistical surveys (comparative statements per years, reports based on calculated rate).

Features of information system for users of the State Statistics Committee:

- generation of summarized reports based on data received from respondents;
- generation of report on the level of filling of reports by the respondents by deferent criteria;
- adjustment of the level of the reports specification that can be generated by the end users.

Features of information system for users of the Ministry of Energy and Coal Industry of Ukraine:

- generation of summarized reports by different criteria based on data from respondents;
- generation of report on the level of filling of reports by the respondents by different criteria.

Features of information system for the end users:

- familiarization with summarized reports (with fixed criteria);
- generation of summarized reports on different criteria based on data received from respondents.

Capability of administration:

- support of productivity of information system;
- technical task performance, given by users of the Ministry of Energy and Coal Industry of Ukraine and by users of the State Statistics Committee of Ukraine.

Information system of statistics of energy sector will be available on a web site. Each representative of the government (The State Statistics Committee of Ukraine and the Ministry of Energy and Coal Industry of Ukraine) and a respondent needs to log into the system. After logging, each group will have its own system interface.

Table 1 gives the list of sections for each group of users.

Table 1. Sections of the portal for each group of users

Group of Users	Section	Features
Users of the State Statistics Service	Personal account	Personal data edit
		Password change
	Management of forms of the state statistics surveys	Form status change: active, not active
		Determination of the start and end day for reporting (filling of form)
Respondents	Generation of reports per respondents (according to database Register of statistical units)	
Reporting of respondents	Generation of summarized reports by deferent criteria based on data received from respondents Generation of report on the level of filling of reports by the respondents by deferent criteria	
Users of the Ministry of Energy and Coal Industry of Ukraine	Personal account	Personal data edit
		Password change
	Respondents	Generation of reports per respondents (according to database Register of statistical units)
		Generation of summarized reports by deferent criteria based on data received from respondents
Reporting of respondents	Generation of report on the level of filling of reports by the respondents by deferent criteria	
		Generation of report on the level of filling of reports by the respondents by deferent criteria
Respondents	Personal account	Password change
	Information regarding the company	Data review imported from Register of statistical units
	Forms of the state statistics surveys	Filling of forms of the state statistics surveys
	Reports of fuel and energy complex	Generation of report on the level of filling of reports by the respondents by deferent criteria
End users	Reports of fuel and energy complex	Generation of report on the level of filling of reports by the respondents by deferent criteria

Conclusion. Creation of the information system of energy statistics will allow to improve the quality, efficiency and effectiveness of public administration in the field of energy. Summary of data coming from the respondents will be available to end-users on the Internet in the public domain (without registration).

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ОЦІНКА ЕФЕКТИВНОСТІ ЗБОРУ СТАТИСТИЧНИХ ДАНИХ В ЕНЕРГЕТИЧНІЙ ГАЛУЗІ

В статті сформульовані недоліки існуючої інформаційної системи енергетичної статистики в Україні. Описаний механізм автоматизованого збору статистичних даних в енергетиці та оцінена ефективність системи, що впроваджується. Розроблена система дозволяє автоматично формувати статистичні звіти в енергетичній галузі в різних розрізах.

Ключові слова: Державна служба статистики України, енергетичний комплекс.

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ОЦЕНКА ЭФФЕКТИВНОСТИ СБОРА СТАТИСТИЧЕСКИХ ДАННЫХ В ЭНЕРГЕТИЧЕСКОЙ ОТРАСЛИ

В статье приведены недостатки существующей информационной системы энергетической статистики в Украине. Описан механизм автоматизированного сбора статистических данных в энергетике и оценена эффективность внедрения такой системы. Разработанная система позволяет автоматически формировать статистические отчеты по энергетической отрасли в разных разрезах.

Ключевые слова: Государственная служба статистики Украины; энергетический комплекс.