

**Committee on statistics**  
**Ministry of national economy of the Republic of Kazakhstan**

## Work on implementation of system of environmental economic accounting in Kazakhstan

Geneva 2016

1



## International Standards

			
Environmental indicators for the EUCCA region (UNECE)	Basic principles of development of environmental statistics (UNSC)	System of Environmental-Economic Accounting (UN)	Green Growth Indicators (OECD)

← →

2




## Phases in implementation of SEEA in Kazakhstan

### First phase

Creation of national institutional mechanism for strategy of SEEA implementation

3



## Phases in implementation of SEEA in Kazakhstan

### First phase

Interdepartmental working group on implementation of SEEA in Kazakhstan was created.

On January 2014 first meeting of the Working group was held, which considered Central framework of SEEA and phases of implementation of SEEA.

4




## Phases of implementation of SEEA in Kazakhstan

### First phase

Organizations represented in the Working group on environmental accounting:

- Ministry of Agriculture of the Republic of Kazakhstan;
- Ministry for Investment and development of the Republic of Kazakhstan;
- Committee on construction, housing and communal services and land management under the Ministry of national economy of the Republic of Kazakhstan;
- Environmental union of associations and enterprises of Kazakhstan “Tabigat”;
- JSC«KazAgroInnovation»;
- JSC «Zhasyl Damu»;
- JSC «Green Academy»;
- Al-Farabi Kazakh National University;
- Nazarbayev University.

5




## Phases of implementation of SEEA in Kazakhstan

### First phase

The main function of the Working Group:

- 1) discussion on issues of organization and control of the statistical data collection needed for the construction of the System of environmental-economic accounting;
- 2) formulation of suggestions and recommendations on accounts construction of the System of environmental-economic accounting;
- 3) the division of competences in terms of constructing tables of accounts between state bodies.


6



## Phases of implementation of SEEA in Kazakhstan

**Second phase**  
Self assessment

7



## Phases of implementation of SEEA in Kazakhstan


**Second phase**

Spend an overall assessment of data sources, including determination of the circle of relevant data providers, periodicity and methods of data collection

*Result:*

- Environmental statistical data of CS MNE RK – environmental accounting in sphere of expenses for environmental protection, accounts of the emissions into the atmosphere and management of waste accounts.
- Detailed financial tables resources-usage of SNA – physical tables resources-usage broken down for the flow of energy, solid waste and air emissions.
- Energy statistics – accounts of physical flows of energy and air emissions.
- Administrative sources – accounts of waste and air emissions.


8



## Phases of implementation of SEEA in Kazakhstan

**Third phase**  
Evaluation of basic data

9




## Phases of implementation of SEEA in Kazakhstan

**Third phase**

Accent on those elements of environmental accounting for which is possible to use the existing basic environmental and economic data:

- expenses on environmental protection;
- air emissions by types of economical activity;
- production of waste by types of economical activity and waste treatment;
- energy accounts on physical energy flows by types of economical activity;
- taxes and payments directly related to environmental protection broken down by types of economical activity;
- material flows in economy-wide;
- discharges into water resources.

10




## Phases of implementation of SEEA in Kazakhstan

### Forth phase

Plan for the development of environmental accounting  
(priority set of accounts and assessment of status of the required information sources)

11




## Phases of implementation of SEEA in Kazakhstan

### Forth phase

*Development of national implementation plan of SEEA  
(initial stage)*

Conducting in-depth analysis of data quality and completeness and then development of a strategic implementation plan of SEEA including a plan for improving the production process.

12



## Phases of implementation of SEEA in Kazakhstan

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**Forth phase**


***In the short term (2016-2017):***

- account of energy resources flow in physical expression, hybrid energy tables;
- account of air emissions;
- account of solid waste;
- account on environmental protection expenditure.


***In the medium term (2016-2021):***


- accounting assets for mineral and energy resources;
- accounting assets for water resources in physical expression;
- account of material flows on the scale of economy;
- sector of environmental goods and services;
- account of water resources flows in physical expression;
- account of discharges into the water.

13




## KAZSTAT Project







Statistics Finland




Environmental expenditures




Waste



Air emissions accounts



Environmental taxes



*Simplified hybrid tables in the format of the European Union*

14



## The work on the “KAZSTAT” project

Interaction with the Central Statistical Office of Finland

### International experts:

**Leo Koltolla** – Senior consultant, Department of economic statistics and environmental statistics.

**Yucca Muukkonen** – Senior specialist, Division of environmental statistics and energy.

### Events:

4 – Advisory missions

1 – Study trip

15



## The work on the “KAZSTAT” project

The main objective of the mission consisted in the formation of environmental accounting in Kazakhstan on the basis of the UN SEEA framework structure and considering the experience of the application of SEEA in the European Union.


It is emphasized on:

- expenses on environment,
- waste,
- accounts of air emissions,
- environmental taxes,
- environmental goods and services.

Formed a hybrid tables in European Union format which represent economic and environmental indicators in a simplified form of the implementation of the theoretical structure of environmental accounting.

16







## OECD

As part of the Agreement between the Government of Kazakhstan and OECD on the implementation of the Project “Introduction of the System of Environmental-Economic Accounting”


**20-23 June 2016**




• Energy resources flow accounts




• Air emissions accounts




• Solid waste accounts



• Environmental expenditures accounts




• Water resources stock accounts



• Mineral and energy stock accounts


17




## OECD

[www.stat.gov.kz](http://www.stat.gov.kz)


### Air emissions account



18




## Management of greenhouse gas emissions in the Republic of Kazakhstan



**ЖАСЫЛ ДАМУ**  
акционерное общество

The report on the greenhouse gas inventory


National Inventory of sources of emissions and removals of greenhouse gases




Министерство энергетики  
Республики  
Казахстан


The order of the inventory of greenhouse gases and ozone-depleting substances


Астана 2016[www.stat.gov.kz](http://www.stat.gov.kz)





## Sources of greenhouse gas emissions in the Republic of Kazakhstan (National Inventory of greenhouse gas emissions)


 • Energy activities

 • Industrial processes


 • The use of solvents and other products

 • Agriculture

 • Land use, land use change and forestry

 • Отходы

Астана 2016[www.stat.gov.kz](http://www.stat.gov.kz)




## Information sources

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- National statistical supervision "The report on the air quality" (code 2-TP (air))
- National statistical supervision "The Diary of account of daily expenditure" (code D -003)
- National statistical supervision "of expenditures and revenues Journal of Accounting" (index D -005)
- Fuel and energy balance
- National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the 1990-2013 biennium. (JSC "Zhasyl Damu")
- Guidelines for National Greenhouse Gas Inventories of the IPCC 2006


Астана 2016
[www.stat.gov.kz](http://www.stat.gov.kz)



[www.stat.gov.kz](http://www.stat.gov.kz)

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## Flow accounts of SEEA energy





## Basic standards


**System of  
Environmental-Economic  
Accounting 2012  
Central Framework**



**International Recommendations for  
Energy Statistics (IRES)  
(White cover publication)**




23




## Overview of Data Sources

**Fuel and energy balance  
Republic of Kazakhstan**



**Supply-Use Tables SNA**




Таблицы «Ресурсы - Использование» Республики Казахстан за 2014 год


1 серия  
Национальные  
счета

2014 год

**Environmental protection and  
sustainable development of  
Kazakhstan**




24




## Overview of Data Sources

### Administrative sources



**КОМИТЕТ ГЕОЛОГИИ  
И НЕДРОПОЛЬЗОВАНИЯ**  
МИНИСТЕРСТВА ПРОМЫШЛЕННОСТИ И НОВЫХ ТЕХНОЛОГИЙ  
РЕСПУБЛИКИ КАЗАХСТАН




**Министерство энергетики  
Республики  
Казахстан**

**Stocks of essential minerals:**  
coal, oil, natural gas

**The report on hazardous wastes in Kazakhstan:**  
the amount of waste generated in the company during the reporting year

25



## Classifications used

### General Classification of Economic Activities

Section	Divisions	Description
A	01-03	Agriculture, forestry and fishing
B	05-09	Mining and quarrying
C	10-33	Manufacturing
D	35	Electricity, gas, steam and air conditioning supply
E	36-39	Water supply; sewerage, waste management and remediation activities
F	41-43	Construction
G	45-47	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	49-53	Transportation and storage
I	55-56	Accommodation and food service activities
J	58-63	Information and communication
K	64-66	Financial and insurance activities
L	68	Real estate activities
M	69-75	Professional, scientific and technical activities
N	77-82	Administrative and support service activities
O	84	Public administration and defence; compulsory social security
P	85	Education
Q	86-88	Human health and social work activities
R	90-93	Arts, entertainment and recreation
S	94-96	Other service activities
T	97-98	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	99	Activities of extraterritorial organizations and bodies

<http://unstats.un.org/unsd/cr/registry/regdntransfer.asp?f=195>

### Statistical classifier of energy products

	Name	units
A	COAL PRODUCTION	Ton (Metric)
B	PEAT PRODUCTS	Ton (Metric)
C	UNCONVENTIONAL OIL PRODUCTION	Ton (Metric)
D	PRODUCTION FROM NATURAL GAS	Thousand meters cubic
E	OIL PRODUCTION	Ton (Metric)
F	BIOFUELS	Ton (Metric)
G	WASTE AND OTHER FUELS UNSPECIFIED	Ton (Metric)
H	ELECTRIC AND THERMAL ENERGY	One thousand gigacalories

*SIEC-Standard International Energy Classification of Goods*  
*IRES-International Recommendations for Energy Statistics*

<http://unstats.un.org/unsd/energy/ires/default.htm>

26



**THANK YOU FOR  
ATTENTION!**

27