Introduction of SEEA
Methodology in Russia

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Plan

- 1. Legal background for improvement of environmental statistics in Russia
- 2. Research programme
- 3. Sources of data and implementation
- 4. Communication and dissemination

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1. Legal background for improvement of environmental statistics in Russia

- Government decision #1911-p, October 2012:
 - introduction of monetary measures of *natural resources*,
 - measurement of *resource productivity (RP)*.
- Key natural assets to be considered:
 - mineral and energy resources,
 - land (including agricultural land),
 - water resources,
 - natural aquatic resources,
 - timber resources,
 - biological resources.

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1. Legal background for improvement of environmental statistics in Russia

The Plan stipulates that beginning with the data of 2018:

- SNA balance sheet will include natural resources on annual basis
- Indicators of natural resources productivity will be published on regular (annual) basis

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2. Research programme

Research programme started in 2013.

At the first stage (2013 – 2015) methodology of evaluation was developed for:

mineral and energy resources 2013
water resources 2013
biological resources 2014
timber resources 2014
land 2014
natural aquatic resources 2015

Rosstat is responsible for development of the evaluation methodology of. The whole set of research was completed in time.

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2. Research programme

At the second stage (2016 – 2018) it was planned to develop:

- 1) methodology of compilation *SEEA asset accounts,* particularly for *fossil mineral and energy resources* (the work was completed in November 2017);
- 2) methodology for *resource productivity indicators* research is going on now, planned to finish in July 2018.

The third stage (2018-2019)

It will be devoted to development of the concept and composition of the Russian SEEA and a plan of its implementation which should be presented to the government consideration.

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2. Research programme

Partner government institutions are responsible for practical evaluation of natural resources:



- Ministry of Natural Resources and Environment of the Russian Federation (http://www.mnr.gov.ru/)
 - The Federal Subsoil Resources Management Agency (http://www.rosnedra.gov.ru/)
 - The Federal Water Resources Agency (http://voda.mnr.gov.ru/)
 - The Federal Forestry Agency (http://www.rosleshoz.gov.ru/)



 Ministry of Agriculture of the Russian Federation (http://www.mcx.ru/)



- Ministry of Economic Development of the Russian Federation (http://economy.gov.ru/minec/main)
 - The Federal Service for state registration, cadastre and cartography (https://rosreestr.ru/site/)

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3. Sources of data and implementation

<u>Governmental agencies</u> responsible for natural resources assessment have to work out appropriate <u>calculation algorithms and survey</u> forms in cooperation with Rosstat. These algorithms are developed on the basis of the evaluation methodology prepared at the first stage of the research programme.

Physical assets accounts are better supplied with data which are mostly provided by <u>administrative data bases</u> of different governmental agencies.

For example physical account for *mineral and energy* resources is based mostly on data of the <u>State Balance of</u> fossil mineral reserves.

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3. Sources of data and implementation

State Balance of fossil mineral reserves

For each resource/deposit:

Location

Geological and technical characteristics

Exploitation details

Reserves (geological and exploitation) at 01.01 Year_{t-1}: ABC₁,

 $C_2^{(*)}$

Extractions in the Year_{t-1}

Change in reserves ABC₁ in the Year_{t-1}:

- discoveries
- reappraisals
- other

Reserves (geological and exploitation) at 01.01 Year_t: A, B, C₁, C₂

 $(\mbox{^{\circ}})$ A, B - equal to "On Production", C $_1$ - to "Approved for Development", C $_2$ - "Justified for Development" sub-class of UNFC

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3. Sources of data and implementation

All deposits are registered in the *State Cadastre* of deposits and occurrences of minerals.

The State Balance is compiled and updated on the basis of state statistical observation (it includes 7 different surveys), geological information, derived by the users of deposits, and results of state expertise of mineral reserves.

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3. Sources of data and implementation

To obtain <u>monetary evaluation</u> of natural resources organisation of <u>special statistical observation</u> is necessary.

The first experience:

Form 1-RSPI of the State statistical observation designed in February 2017 and tested on a sample.

Updated and improved form was approved in December 2017 and circulated for collection of 2017 data.



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3. Sources of data and implementation

The form is filled by each mineral developer (legal entity and individual entrepreneur) separately for each kind of fossil mineral or energy resource:

- Oil;
- Natural gas;
- Gold (alluvial);
- Gold (lode deposits);
- Copper;
- Iron ore;
- Coal;
- Brown coal;
- Diamonds (gravel deposits);
- Diamonds (bedrock deposits).

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3. Sources of data and implementation

This survey obtains data on the physical volume of resource extraction and value of inputs and receipts for each deposit which are used in resource rent calculation.

Resource rent is calculated as a net cash flow:

$$RR_t = R_t - O_t - K_t + T_t,$$

 R_t – receipts, O_t – operational costs, K_t – capital costs, T_t – tax on mineral extraction and similar charges.

Value of the asset is calculated using NPV formula:

$$V_{t} = \sum_{\tau=1}^{N_{t}} \frac{RR_{t+\tau}}{(1+r_{t})^{\tau}}$$

<u>Similar approach</u> will be used in evaluation procedures of other natural resources.

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4. Communication and dissemination

Main efforts in *implementation of SEEA* in Russia are concentrated on:

1. <u>Dissemination of SEEA methodology</u>, availability of information on SEEA for research community and governmental institutions connected to environmental issues.



In 2017 a working group composed of Rosstat specialists and representatives of all the interested institutions revised the translation of SEEA CF 2012 into Russian.



Russian terminology of the manual was harmonised with the notions used in the legislation and reconciled with all the main institutions engaged in environmental issues.

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4. Communication and dissemination

2. <u>Introduction</u> elements of <u>SEEA methodology</u> into solution of current environmental problems.

Evaluation of natural resources and measuring of natural resource productivity in Russia is being done on the basis of SEEA methodology.

3. <u>Research initiative</u> to design the future SEEA for Russia including feasibility study.

Rosstat starts the project to work out SEEA implementation plan at the 3rd stage of the research programme (see slide 7).

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Thank you!

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